# IDENTIFYING DECEPTIVE FINANCIAL REPORTING VIA ANALYSIS OF FINANCIAL STATEMENTS: CASE IN VIETNAM

## Nguyen Ngoc Phong Lan[1]

*[1]Nguyen Tat Thanh University, Ho Chi Minh City, Vietnam, e-mail: nnplan@ntt.edu.vn*

***Abstract.*** *Deceptive financial reporting represents a significant worry for the main regulatory bodies overseeing Vietnam's capital market. Both regulatory bodies are continuously enhancing the criteria to ensure thorough monitoring of publicly listed companies. The objective of the current study is to investigate the link between financial statement analysis and fraudulent financial reporting. While numerous researchers have uncovered evidence suggesting the effectiveness of financial ratios in identifying fraudulent financial reporting, others have reached differing conclusions. The majority of these studies were conducted beyond the borders of Vietnam. The sample consists of companies listed in Vietnam, and the data utilized spans from 2011 to 2022. The findings revealed that various financial ratios, including total debt to total assets and receivables to revenue, emerged as significant indicators for identifying fraudulent financial reporting. This suggests that financial ratios could potentially aid in detecting fraudulent activities. These results contribute to the existing body of literature concerning the efficacy of financial ratios in fraud detection.*

***Keywords:*** *financial reporting, financial statement, fraud, Vietnam.*
***JEL Classification: G31; M49***
***Formulas: 1, fig.: 0, tabl.: 5, bibl.: 53***

**Introduction.** Deceptive financial reporting (FFR) can occur in any setting and has gained significant attention from both the public and global regulators, as individuals from various professions may engage in it. According to a recent survey on global economic crime in 2005 (Q. K. Nguyen & Dang, 2022a, 2022b; Prochniak, 2011), approximately forty-five percent of companies worldwide have experienced economic crime. Although less frequent compared to other forms of fraud, FFR typically inflicts the most damage on organizations.

The study of identifying deceptive financial reporting through the analysis of financial statements is of paramount importance due to its profound implications for investors, regulatory bodies, and the overall integrity of financial markets (Dang & Nguyen, 2021b; Dang et al., 2022; Davis & Garcia-Cestona, 2021; Kim & Zhang, 2014; Q. K. Nguyen & Dang, 2023a). Deceptive financial reporting can lead to distorted representations of a company's financial health, potentially misleading investors and stakeholders. This misrepresentation can result in significant financial losses for investors and undermine confidence in the financial markets (Q. K. Nguyen, 2020; Q. K. Nguyen & Dang, 2023b). By understanding the indicators and patterns associated with deceptive reporting, investors can make more informed decisions, and regulators can develop more effective monitoring and enforcement mechanisms to maintain market transparency and protect stakeholders' interests.

Moreover, in an increasingly interconnected global economy, where companies operate across borders and financial transactions span continents, the risk of fraudulent financial reporting transcends geographical boundaries. Therefore, researching methods to identify and mitigate deceptive reporting practices is crucial for fostering trust and stability in the international financial system. This research not only contributes to the advancement of financial analysis techniques but also serves as a cornerstone in safeguarding the integrity and efficiency of global financial markets.

The rise in fraudulent activities underscores the urgent necessity for research focused on identifying reliable techniques for detecting potential fraud. Ghafoor et al. (2019) asserts that regardless of its form, detecting fraud is essential, as detection serves as a crucial initial step in combating any form of fraudulent activity. This is primarily due to the elusive nature of fraud, which inherently resists scientific observation or precise measurement. A fundamental trait of fraud is its clandestine nature; nearly all instances of fraud involve attempts to conceal the wrongdoing (Dang & Nguyen, 2021a, 2022; Luo et al., 2020; Q. K. Nguyen, 2021).

Many experts in fraud investigation advocate for the use of financial ratios as an efficient method for fraud detection (Abbott et al., 2000; Mark S Beasley, 1996; Dang et al., 2020). Some even provide lists of common ratios (Q. K. Nguyen, 2021; Salancik & Pfeffer, 1980; Sun et al., 2009; Yang et al., 2019). However, despite this recommendation, there appears to be a scarcity of empirical evidence supporting the effectiveness of financial ratios in fraud detection, as researchers often encounter conflicting results when employing these ratios. Both Persons and Spathis concur that financial ratios serve as valuable tools in fraud detection. Conversely, Watson (2015) reached a different conclusion, suggesting that financial ratios may not be effective in identifying instances of fraud. This paper aims to determine which financial ratios are significant in detecting fraudulent reporting.

This paper is structured as follows. The subsequent section provides a review of the literature pertaining to fraudulent financial reporting and theoretical advancements. Following this, a discussion on the research methodology is presented, encompassing details such as the sample and respondents' questionnaires, response rate, and hypothesis development. Section four outlines the data analyses and resulting findings. Lastly, discussions on the conclusions, implications, limitations, and avenues for future research are presented in section five.

**Literature Review**

*A. Definition of Fraudulent Financial Reporting*

FFR has garnered significant attention from various stakeholders, including the general public, the financial community, and regulatory bodies. One of the earliest mentions of FFR was by Pomeroy and Thornton (2008), who defined it as a deliberate fraudulent act perpetrated by management, causing harm to investors and creditors through misleading financial statements. Additionally, FFR is characterized as a deceitful scheme involving fabricated documents and representations (Herda et al., 2014; Q. K. Nguyen, 2022b, 2022c). These definitions collectively suggest that financial statement reports created with the intention to deceive users are inherently fraudulent. Spathis (2003) further describes FFR as financial statements containing falsified figures that do not accurately represent the true financial situation. The Association of Certified Fraud Examiners (ACFE) defines FFR as the intentional misstatement or omission of material facts in accounting data, aiming to mislead investors and influence their decision-making processes. This definition underscores the significance of financial statements in investors' decision-making and highlights the detrimental impact of fraudulent reporting on investment decisions. In practice, financial fraud often entails falsifying financial statements by manipulating elements such as overstating assets, sales, and profits, or understating liabilities, expenses, or losses. In the context of the current study, fraud is defined as firms violating the offenses outlined by Bursa Malaysia, which include materially misstated information in financial statements. Additionally, non-fraudulent firms are matched with corresponding fraud firms based on industry, size, and time period, as companies in the same industry are subjected to similar business environments and accounting requirements (Kim & Zhang, 2014; Q. K. Nguyen, 2022a, 2022d).

*B. Detecting FFR*

The American Institute of Certified Public Accountants (AICPA), as outlined in Statement on Auditing Standard No. 82, delineates two categories of financial misstatement. The initial category pertains to fraudulent financial reporting (FFR), denoting deliberate alterations or exclusions of figures or disclosures within financial statements, aiming to mislead the reader. The second category involves the misappropriation of assets, commonly referred to as employee fraud or defalcation.

According to this definition, it is essential to ascertain whether the reviewed financial statement is accurate or contains significant inaccuracies. Moreover, fraudulent financial reporting breaches accounting standards by either omitting relevant information or incorporating fabricated figures (Alzeban, 2019; Maulidi et al., 2022; Q. K. Nguyen, 2023b, 2023c).

To gauge the potential for fraud, various tools have been devised to aid users in scrutinizing financial statements. One widely employed method for financial analysis is ratio analysis (Miettinen, 2008; Q. K. Nguyen, 2023b). Numerous ratios have been suggested in the literature, encompassing proxies for financial leverage such as total debt and total equity ratios, profitability proxies like net profit to revenue, and asset composition proxies such as current assets to total assets, receivables to revenue, and inventory to total assets, among others. According to Hunjra et al. (2021), items within current assets, such as accounts receivable and inventories, are particularly susceptible to manipulation. These items, considered soft or liquid assets in financial statements, are more susceptible to manipulation compared to hard items like sales and retained earnings (Kouaib & Jarboui, 2014). Consequently, fraudulent companies tend to manipulate soft items more frequently than hard items, leading to the detection of outliers during the variable testing process (Katmon & Al Farooque, 2017; Q. K. Nguyen, 2023a; Skinner & Soltes, 2011).

Eliwa et al. (2016) investigated whether investors can accurately identify management fraud through a company's financial statements. The research examined sixty-eight fraudulent companies identified from the SEC's Accounting and Auditing Enforcement Releases (AAERs) spanning from 1982 to 1999. Utilizing twenty-one selected financial ratios extracted from the fraudulent firms' financial statements, the study revealed that ratio analysis proves largely ineffective in detecting financial statement fraud. However, the research concurs that accounts receivable and inventory emerge as crucial variables. Accounts receivable allows for subjective estimation, making it challenging to verify and consequently susceptible to falsification. Falsifying accounts receivable entails recording sales prematurely, falsely indicating sales growth (Katmon & Al Farooque, 2017).

Numerous researchers propose that management may engage in manipulation of inventories. Eliwa et al. (2016), in his endeavor to identify concise models discerning factors linked with FFR, notes that inventories are often present in substantial quantities. Analyzing a sample comprising 103 instances of fraud in a specific year and an additional hundred samples from the preceding year's AAER data spanning from 1982 to 1991, Ye et al. (2010) further explains that fraudulent firms frequently exhibit a high proportion of accounts receivable within their current assets. Zgarni et al. (2016) ascertain that overstating inventory accounts for three-quarters of the enforcement cases pursued by the United States Securities and Exchange Commission (SEC). Some companies have been observed to report inventory values inaccurately and record obsolete inventory Cohen et al. (2017). Furthermore, the manipulation of inventory costs can render the relationship between sales and the cost of goods sold susceptible to distortion (Mark S. Beasley & Salterio, 2001, Q. K. Nguyen, 2024).

This value is typically determined through subjective techniques, and employing various accounting valuation methods often yields differing results, even within the same companies (Almustafa et al., 2023; Miettinen, 2008). Kim and Zhang (2014)discovered that inventory and accounts receivable were implicated in twelve and fourteen percent of FFR cases, respectively, based on their investigation.

Another element vulnerable to manipulation is the gross margin. Companies may engage in the practice of inflating their sales by prematurely recording revenue from

unearned sales and simultaneously recording associated costs of goods sold, thereby augmenting the gross margin, net income, and fortifying the balance sheet (Habib & Hossain, 2013). Hunjra et al. (2021) observed that fraudulent companies typically exhibit gross margins half the size of those of non-fraudulent firms. Furthermore, certain fraudulent entities adopt a strategy of bolstering gross profits by reporting values lower than actual, even in cases where the proportion of inventory to total assets is high.

Debt-to-total-assets ratio has been identified as a significant indicator for evaluating the probability of fraud. Dechow et al. (2011) contend that the need for external financing is influenced not solely by the cash generated from operations and investments but also by the available funds within firms. They propose that the average capital expenditure over the three years preceding financial statement manipulation serves as a measure of the desired investment level during the reporting period. This notion is supported by other researchers, including Wen et al. (2019), who unanimously affirm its importance.

**Methodology.**

*A. Research Design.* This research analyzed a dataset comprising 600 samples, comprising 320 instances from fraudulent firms and 280 from non-fraudulent firms, drawn from Vietnamese Listed Firms spanning from 2011 to 2022. Financial data was sourced from Datastream for the study.

Selection of fraudulent financial reporting firms: Fraudulent reporting firms were sourced from the Vietnamese stock market. These firms were categorized based on the violations of the Listing Requirements of the Vietnamese stock market, predominantly for reporting material misstatements in financial reports. This screening process yielded a preliminary sample of 628 firms.

Data were collected over a retrospective period of five years. Initially, a fraudulent year was pinpointed, defined as the year when fraud was detected. Subsequently, data from the preceding four years were gathered. For instance, if the fraudulent activity was identified in 2022, the data for that particular firm would encompass the years 2021, 2020, 2019, and 2018, thus totaling five years' worth of data. The financial statement data for the fraudulent year remained unaltered, reflecting the original figures before any corrections were made. Fraudulent reporting firms from the financial and insurance sectors were omitted from the sample dataset, as the former typically doesn't involve accounts receivable and inventory, while the latter lacked sufficient data for empirical analysis. The final sample comprised 320 instances from fraudulent firms and 280 from non-fraudulent firms, with a majority of these firms operating in the industrial products sector.

Selection of non fraudulent financial reporting firms: Each fraudulent firm is paired with a corresponding non-fraudulent firm based on similarities in industry, size, and time period. Companies operating in the same industry typically face comparable business environments and adhere to similar accounting and reporting standards (Oussii & Taktak, 2018). Financial data for non-fraudulent firms is sourced from the same time frame as the fraudulent firms, ensuring control over general macroeconomic factors and the likelihood of a company engaging in fraud. This one-to-one matching process is employed to bolster the discriminatory capability of the models. Non-

fraudulent firms are also required to possess adequate financial data during the matching period. As a result of this selection process, 280 non-fraudulent firms were included. The matching process involves aligning both categories in terms of: (i) time period, (ii) company size, and (iii) industry.

*B. Data Collection Method.* This research relies on secondary data extracted from published audited financial statements as the primary information source. These statements are sourced from the corporate annual reports of publicly listed firms in Vietnam, along with data from Data Stream, covering a retrospective period of five years. Data Stream is utilized comprehensively, enabling the extraction of various financial metrics including Retained Earnings. Annual reports are considered a principal means of communication with shareholders and the public, widely disseminated and among the most frequently generated documents.

*C. Variables measures.* Independent variables and control variable: For the intent of this investigation, five dimensions of the firm's financial ratios were delineated. These variables are outlined in Table I. The Selected variables are based on previous studies (Ho et al., 2023; Khai, 2022; Q. Nguyen & Dang, 2020).

**Table 1. Measurement of independent variable and control variable**

|  | Formula | Acronyms |
|---|---|---|
| Independent Variable | | |
| Financial Leverage | Total Debt / Total Equity | TD/TE |
| | Total Debt / Total Asset | TD/TA |
| Profitability | Net Profit / Revenue | NP/REV |
| Asset Composition | Current Assets / Total Assets | CA/TA |
| | Receivables / Revenue | REC/REV |
| | Inventory / Total Assets | INV/TA |
| Liquidity | Working Capital / Total Assets | WC/TA |
| Capital Turnover | Revenue / Total Assets | REV/TA |
| Control Variable | | |
| Size | Natural Logarithm of book value of total assets at the end of the fiscal year | SIZE |

The dependant variable is as follows:

1. *Fraudulent firms:* This study aims to explore the notable distinctions in the mean values of financial ratios between fraudulent and non-fraudulent Malaysian Public Listed firms. Furthermore, the research endeavors to pinpoint the significant predictors among financial ratios pertinent to fraudulent financial reporting. Fraudulent firms are identified based on violations against the listing requirements of the Vietnamese stock market.

In accordance with the Listing Requirements outlined in the Bursa Malaysia handbook, a listed company must guarantee that any statement, information, or document presented, submitted, or disclosed under these Requirements: (i) is clear, unambiguous, and accurate; (ii) does not omit any material information; and (iii) is not false or deceptive.

Consistent with the study's definition of fraud, the selected firms meet these criteria and were sourced from the Bursa Malaysia Public Enforcement or Company

Advisor website, subsequent to examination by the regulatory authority. Hence, the fraudulent firms included in this study have violated the Main Market Listing Requirement, leading to disciplinary measures being imposed on these companies.

2. *Non fraudulent firms*: Non-fraudulent firms are defined as those not listed in the Public Enforcement or Company Advisor List and were matched based on the time period, total asset size, and industry alignment with the fraudulent firms.

D.*Regression Model.* The subsequent logic model was computed employing the financial ratios of the firms to ascertain which ratios were associated with FFR. By incorporating both fraudulent and non-fraudulent firms in the dataset, we aim to identify the factors that notably impact them:

$$FFR = b_0 + b_1(SIZE) + b_2(TD/TE) + b_3(TD/TA) + b_4(NP/REV) + b_5(CA/TA) + b_6(REC/REV) + b_7(INV/TA) + b_8(WC/TA) + b_9(REV/TA) + e \qquad (1)$$

*where SIZE = Size; TD/TE = Total debt/Total equity; TD/TA = Total debt/Total Asset; NP/REV = Net Profit/Revenue; CA/TA = Current Assets/Total Asset; REC/REV = Receivable/Revenue; INV/TA = Inventories/Total Assets; WC/TA = Working Capital/Total Assets; REV/TA = Revenue/Total Assets.*

## Results and discussion

A.*Sample of Fraudulent Firms and Non Fraudulent Firms.* The sample was selected from diverse sectors, and its composition can be characterized based on the industries, as outlined in Table 2.

**Table 2. The Type of Industry**

| Type Industry | Frequency | Percentage (%) |
|---|---|---|
| Technology | 4 | 3.1 |
| Trading services | 20 | 15.4 |
| Consumer | 20 | 15.4 |
| Industrial product | 52 | 40.0 |
| Construction | 23 | 17.7 |
| Properties | 11 | 8.5 |

Table 2 illustrates that the industrial product category comprises the largest proportion of fraudulent firms in the sample, accounting for 40%. This is trailed by construction (17.7%), and consumer and trading services (both at 15.4%). The technology category represents the smallest percentage, with only 3.1%.

B.*Test of Normality.* Table 3 presents the assessment of data normality using Kolmogorov-Smirnov and skewness tests. In this study, skewness and kurtosis were utilized as primary indicators to evaluate the normality of the data. Seven of the ratios, namely LgSIZE, LgNP/REV, LgCA/TA, LgREC/REV, LgINV/TA, LgWC/TA, and LgREV/TA, were subjected to log transformations. The TD/TA ratio was maintained in its original form, as the normality of the ratios did not improve post-transformation, while the TD/TE ratio underwent square log transformations. This adjustment aimed to mitigate the influence of non-normality and ensure the integrity of the sample sizes. However, according to the central limit theorem, larger sample distributions (exceeding 30) tend to approximate normality irrespective of the underlying population

distribution, a tendency that becomes more pronounced with increased sample sizes. Consequently, the TD/TA ratio was retained for further analysis.

### Table 3. Normality of Data

| Variables | Kolmogorov-Smirnov | Skewness (p-value) | Kurtosis |
|---|---|---|---|
| Lg SIZE | 0.0001 | 0.141 | -0.465 |
| Square/Log TD/TE | 0.0001 | -0.396 | 1.066 |
| TD/TA | 0.0001 | 7.93 | 87.03 |
| LgNP/REV | 0.0001 | 0.736 | 8.181 |
| LgCA/TA | 0.0001 | 0.300 | 14.21 |
| LgREC/REV | 0.0001 | 1.354 | 9.157 |
| LgINV/TA | 0.0001 | -1.740 | 4.192 |
| LgWC/TA | 0.0001 | 0.687 | 20.99 |
| LgREV/TA | 0.0001 | 0.238 | 13.33 |

*LgSIZE: Size, Square/LogTD/TE: Total Debt/Total Equity, TD/TA: Total  Debt/Total Asset, LgNP/REV: Net Profit/Revenue, LgCA/TA: Current  Assets/Total Asset, LgREC/REV:  Receivable/Revenue, LgINV/TA: Inventories/Total Assets, LgWC/TA: Working Capital/Total Assets,  LgREV/TA: Revenue/Total Assets*

C. *Pearson's Correlation.* Pearson's correlation coefficient was employed to ascertain the direction and magnitude of the association between two variables. Table IV displays the Pearson's correlation analysis results among the ratios. The findings reveal that all variables are interconnected, with the strongest correlation observed between LgWC/TA and LgCA/TA. This suggests that an increase in the ratio of working capital to total assets corresponds to a similar increase in both current assets and total assets.

### Table 4. Pearson'S Correlation

| | Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Square/Log TD/TE | 1 | | | | | | | | | |
| 2 | TD/TA | .265** | 1 | | | | | | | | |
| 2 | LgNP/REV | -.144** | -.184** | 1 | | | | | | | |
| 4 | LgCA/TA | -.140** | 044 | -.082 | 1 | | | | | | |
| 5 | LgREC/REV | .084* | .064 | .241** | .022 | 1 | | | | | |
| 6 | LgINV/TA | -.045 | -.044 | -.162** | .155** | -.184** | 1 | | | | |
| 7 | LgWC/TA | -.244** | -.025 | .024 | .444** | -.018 | .151** | 1 | | | |
| 8 | LgREV/TA | .001 | 145** | -.484** | .241** | -.440** | . 140** | .044 | 1 | | |
| 9 | Lg Asset | .111** | -.126** | .124** | -.285** | .044 | .211** | -.221** | -.154** | 1 | |
| 10 | Non-Fraudulent / Fraudulent | -.000 | -.044 | -.004 | .044 | .106** | -.002 | 0.24 | -.012 | .002 | 1 |
| | * Significant at $p < 0.05$, **Significant at $p < 0.001$ | | | | | | | | | | |

D. *Multiple Linear Regressions.* Stepwise multiple linear regressions were employed to examine the relationship among all independent variables. Prior to conducting the regression analysis, all variables were assessed for normality, multicollinearity, and outliers. Normality was confirmed based on the skewness and kurtosis after transformation (refer to Table 3). Multicollinearity assumes redundancy among independent variables, where one variable adds no predictive value over others. Values of 0.7 and above indicate high correlation among independent variables. According to Table 4, Pearson Correlation analysis, there was no evidence of

multicollinearity among the independent variables. Table 5 illustrates the stepwise logistic regression with univariate analysis.

**Table 5. Stepwise Multiple Linear Regression**

| Independent Variable | Unstandardised Coefficient | S.E. | Sig. |
|---|---|---|---|
| **Model 1** | | | |
| Square/Log TD/TE | 0.945 | 0.142 | 0.001 |
| Lg REC/REV | 2.049 | 0.708 | 0.001 |
| Lg INV/TA | -0.575 | 0.271 | 0.021 |
| LgREV/TA | 1.181 | 0.502 | 0.011 |
| Constant | 1.008 | 0.479 | 0.024 |
| X2 (Chi Square) | 10.195 | | 0.255 |
| $R^2$ | 0.205 | | |
| N | 120 | | |
| Correctly predicted: | | | |
| Non-Fraud | 75.52% | | |
| Fraud | 45.3% | | |
| Overall | 54.1% | | |

The findings indicate that the proposed model achieved an overall correct classification rate of 74.7%. The results also indicate that only four ratios are statistically significant in predicting misleading financial statements. These ratios include Square/Lg TD/TE, Lg REC/REV, Lg INV/TA, and Lg REV/TA, all significant at p = 0.10 or better. The Square/Lg TD/TE ratio demonstrated a significant positive effect with a coefficient of β = 0.945, suggesting that an increase in this ratio raises the likelihood of a firm being classified as fraudulent. Similarly, for Lg REC/REV, the coefficient implíe that firms with higher values of Lg REC/REV are more likely to be classified as fraudulent. Conversely, Lg INV/TA exhibited a significant negative effect with a coefficient are negative. This implies that firms with lower values of Lg INV/TA are more likely to be classified as non-fraudulent. Lastly, the ratio of Lg REV/TA showed a significant positive effect with a positive coefficient, suggesting that firms with higher values of Lg REV/TA are more likely to be classified as non-fraudulent.

**Conclusion.** The findings indicate that the leverage proxy represented by the total debt to total equity ratio is a significant indicator for fraud analysis. This aligns with the findings some prior studies. Essentially, this implies that firms with elevated total debt to total equity values are more likely to be classified as fraudulent entities. Similarly, capital turnover proxies represented by receivables to revenue also yield significant results. High ratios of accounts receivable to sales are consistent with research indicating that accounts receivable is an asset prone to manipulation. These variables may signify fraudulent firms manipulating the underlying factors. Additionally, asset composition proxies represented by inventory to total assets also demonstrate significant results. It can be inferred that leverage, capital turnover, and asset composition were significant predictors for fraud detection. This finding is supported by the study's overall correct classification.

One limitation of this study is the reduction in sample size due to unavailable information from Datastream. Consequently, the findings may not accurately represent the sample of fraudulent firms, evidenced by the relatively low percentage of correct

classification. Moreover, this study solely relied on financial data sourced from Datastream, thereby restricting access to other potentially useful sources of information for detecting fraudulent financial reporting (FFR). Additionally, the study focused on a sample of companies for which fraud was detected and reported by Bursa Malaysia through their issued listings. Consequently, other types of fraud that remained undiscovered, as well as those that may be uncovered during audits, were not accounted for in the analysis.

## References:

1. Abbott, L. J., Park, Y., & Parker, S. (2000). The effects of audit committee activity and independence on corporate fraud. *Managerial Finance, 26*(11), 55-68.

2. Almustafa, H., Nguyen, Q. K., Liu, J., & Dang, V. C. (2023). The impact of COVID-19 on firm risk and performance in MENA countries: Does national governance quality matter? *PloS one, 18*(2), e0281148.

3. Alzeban, A. (2019). Influence of internal audit reporting line and implementing internal audit recommendations on financial reporting quality. *Meditari Accountancy Research*.

4. Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *Accounting review*, 443-465.

5. Beasley, M. S., & Salterio, S. E. (2001). The Relationship between Board Characteristics and Voluntary Improvements in Audit Committee Composition and Experience*. *Contemporary Accounting Research, 18*(4), 539-570. doi:doi:10.1506/RM1J-A0YM-3VMV-TAMV

6. Cohen, J., Krishnamoorthy, G., & Wright, A. (2017). Enterprise risk management and the financial reporting process: The experiences of audit committee members, CFO s, and external auditors. *Contemporary Accounting Research, 34*(2), 1178-1209.

7. Dang, V. C., Le, T. L., Nguyen, Q. K., & Tran, D. Q. (2020). Linkage between exchange rate and stock prices: Evidence from Vietnam. *The Journal of Asian Finance, Economics, and Business, 7*(12), 95-107.

8. Dang, V. C., & Nguyen, Q. K. (2021a). Determinants of FDI attractiveness: Evidence from ASEAN-7 countries. *Cogent Social Sciences, 7*(1), 2004676.

9. Dang, V. C., & Nguyen, Q. K. (2021b). Internal corporate governance and stock price crash risk: evidence from Vietnam. *Journal of Sustainable Finance & Investment*, 1-18. doi:10.1080/20430795.2021.2006128

10. Dang, V. C., & Nguyen, Q. K. (2022). Audit committee characteristics and tax avoidance: Evidence from an emerging economy. *Cogent Economics & Finance, 10*(1), 2023263.

11. Dang, V. C., Nguyen, Q. K., & Tran, X. H. (2022). Corruption, institutional quality and shadow economy in Asian countries. *Applied Economics Letters*, 1-6.

12. Davis, J. G., & Garcia-Cestona, M. (2021). Financial reporting quality and the effects of CFO gender and board gender diversity. *Journal of Financial Reporting and Accounting*.

13. Dechow, P. M., Ge, W., Larson, C. R., & Sloan, R. G. (2011). Predicting material accounting misstatements. *Contemporary Accounting Research, 28*(1), 17-82.

14. Eliwa, Y., Haslam, J., & Abraham, S. (2016). The association between earnings quality and the cost of equity capital: Evidence from the UK. *International Review of Financial Analysis, 48*, 125-139.

15. Ghafoor, A., Zainudin, R., & Mahdzan, N. S. (2019). Corporate fraud and information asymmetry in emerging markets: Case of firms subject to enforcement actions in Malaysia. *Journal of Financial Crime, 26*(1), 95-112.

16. Habib, A., & Hossain, M. (2013). CEO/CFO characteristics and financial reporting quality: A review. *Research in Accounting Regulation, 25*(1), 88-100.

17. Herda, D. N., Notbohm, M. A., & Dowdell Jr, T. D. (2014). The effect of external audits of internal control over financial reporting on financial reporting for clients of Big 4, Second-tier, and small audit firms. *Research in Accounting Regulation, 26*(1), 98-103.

18. Ho, T. T., Tran, X. H., & Nguyen, Q. K. (2023). Tax revenue-economic growth relationship and the role of trade openness in developing countries. *Cogent Business & Management, 10*(2), 2213959. doi:10.1080/23311975.2023.2213959

19. Hunjra, A. I., Hanif, M., Mehmood, R., & Nguyen, L. V. (2021). Diversification, corporate governance, regulation and bank risk-taking. *Journal of Financial Reporting and Accounting, 19*(1), 92-108.

20. Katmon, N., & Al Farooque, O. (2017). Exploring the impact of internal corporate governance on the relation between disclosure quality and earnings management in the UK listed companies. *Journal of Business Ethics, 142*(2), 345-367.

21. Khai, N. Q. (2022). *Corporate governance and bank risk in Asean countries.* University of Economics Ho Chi Minh City.

22. Kim, J. B., & Zhang, L. (2014). Financial reporting opacity and expected crash risk: Evidence from implied volatility smirks. *Contemporary Accounting Research, 31*(3), 851-875.

23. Kouaib, A., & Jarboui, A. (2014). External audit quality and ownership structure: interaction and impact on earnings management of industrial and commercial Tunisian sectors. *Journal of Economics Finance and Administrative Science, 19*(37), 78-89.

24. Luo, J.-h., Peng, C., & Zhang, X. (2020). The impact of CFO gender on corporate fraud: Evidence from China. *Pacific-

*Basin Finance Journal, 63*, 101404.

25. Maulidi, A., Shonhadji, N., Sari, R. P., Nuswantara, D. A., & Widuri, R. (2022). Are female CFOs more ethical to the occurrences of financial reporting fraud? Theoretical and empirical evidence from cross-listed firms in the US. *Journal of Financial Crime*(ahead-of-print).

26. Miettinen, J. (2008). *The effect of audit quality on the relationship between audit committee effectiveness and financial reporting quality*.

27. Nguyen, Q., & Dang, V. (2020). Audit committee structure and bank stability in Vietnam. *ACRN Journal of Finance and Risk Perspectives, 8*(1), 240-255.

28. Nguyen, Q. K. (2020). Ownership structure and bank risk-taking in ASEAN countries: A quantile regression approach. *Cogent Economics & Finance, 8*(1), 1809789.

29. Nguyen, Q. K. (2021). Oversight of bank risk-taking by audit committees and Sharia committees: conventional vs Islamic banks. *Heliyon, 7*(8), e07798.

30. Nguyen, Q. K. (2022a). Audit committee effectiveness, bank efficiency and risk-taking: Evidence in ASEAN countries. *Cogent Business & Management, 9*(1), 2080622.

31. Nguyen, Q. K. (2022b). Audit committee structure, institutional quality, and bank stability: evidence from ASEAN countries. *Finance Research Letters, 46*, 102369.

32. Nguyen, Q. K. (2022c). Determinants of bank risk governance structure: A cross-country analysis. *Research in International Business and Finance, 60*, 101575. doi:https://doi.org/10.1016/j.ribaf.2021.101575

33. Nguyen, Q. K. (2022d). The impact of risk governance structure on bank risk management effectiveness: evidence from ASEAN countries. *Heliyon*, e11192.

34. Nguyen, Q. K. (2023a). Does the financial flexibility prevent stock price crash risk during COVID-19 crisis? Evidence from the Vietnamese stock market. *Heliyon, 9*(11).

35. Nguyen, Q. K. (2023b). Macroeconomic determinants of economic growth in low-and mid-income countries: new evidence using a non-parametric approach. *Applied Economics Letters*, 1-6.

36. Nguyen, Q. K. (2023c). Women in top executive positions, external audit quality and financial reporting quality: evidence from Vietnam. *Journal of Accounting in Emerging Economies*.

37. Nguyen, Q. K., & Dang, V. C. (2022a). Does the country's institutional quality enhance the role of risk governance in preventing bank risk? *Applied Economics Letters*, 1-4.

38. Nguyen, Q. K., & Dang, V. C. (2022b). The Effect of FinTech Development on Financial Stability in an Emerging Market: The Role of Market Discipline. *Research in Globalization*, 100105.

39. Nguyen, Q. K., & Dang, V. C. (2023a). The impact of FinTech development on stock price crash risk and the role of corporate social responsibility: Evidence from Vietnam. *Business Strategy & Development*.

40. Nguyen, Q. K., & Dang, V. C. (2023b). Renewable energy consumption, carbon dioxide emission and financial stability: does institutional quality matter? *Applied Economics*, 1-18.

41. Nguyen, Q. K. (2024). How Does Financial Flexibility Strategy Impact on Risk Management Effectiveness? Sage Open. doi: https://doi.org/10.1177/21582440241240842

42. Oussii, A. A., & Taktak, N. B. (2018). Audit committee effectiveness and financial reporting timeliness. *African Journal of Economic and Management Studies*.

43. Pomeroy, B., & Thornton, D. B. (2008). Meta-analysis and the accounting literature: The case of audit committee independence and financial reporting quality. *European Accounting Review, 17*(2), 305-330.

44. Prochniak, M. (2011). Determinants of economic growth in Central and Eastern Europe: the global crisis perspective. *Post-communist economies, 23*(4), 449-468.

45. Salancik, G. R., & Pfeffer, J. (1980). Effects of ownership and performance on executive tenure in US corporations. *Academy of Management journal, 23*(4), 653-664.

46. Skinner, D. J., & Soltes, E. (2011). What do dividends tell us about earnings quality? *Review of Accounting Studies, 16*(1), 1-28.

47. Spathis, C. T. (2003). Audit qualification, firm litigation, and financial information: an empirical analysis in Greece. *International Journal of Auditing, 7*(1), 71-85.

48. Sun, J., Cahan, S. F., & Emanuel, D. (2009). Compensation committee governance quality, chief executive officer stock option grants, and future firm performance. *Journal of Banking & Finance, 33*(8), 1507-1519.

49. Watson, L. (2015). Corporate social responsibility, tax avoidance, and earnings performance. *The Journal of the American Taxation Association, 37*(2), 1-21.

50. Wen, F., Xu, L., Ouyang, G., & Kou, G. (2019). Retail investor attention and stock price crash risk: evidence from China. *International Review of Financial Analysis, 65*, 101376.

51. Yang, P., Riepe, J., Moser, K., Pull, K., & Terjesen, S. (2019). Women directors, firm performance, and firm risk: A causal perspective. *The Leadership Quarterly, 30*(5), 101297.

52. Ye, K., Zhang, R., & Rezaee, Z. (2010). Does top executive gender diversity affect earnings quality? A large sample analysis of Chinese listed firms. *Advances in Accounting, 26*(1), 47-54.

53. Zgarni, I., Hlioui, K., & Zehri, F. (2016). Effective audit committee, audit quality and earnings management. *Journal of Accounting in Emerging Economies, 6*(2), 138-155.