

Role of Board Gender Diversity in Facilitating or Mitigating Fraud: A Research Review

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Abstract: This study reviewed previous research articles (28 studies) in the last 10 years on the role of board gender diversity on the perpetuation or mitigation of fraud in corporations. The popular grand theory, the Agency Theory of DeAngelo was used as the framework for the study in conjunction with the framework developed by (Jain and Jamali, 2016) on corporate governance. The main finding of the study was that out of the 4 levels he proposed, most of the reviewed studies identified with only 3 levels, namely group; individual and firm excluding the institutional level. The other finding of this study was that gender diversity or presence of women on board facilitated fraud deterrence at all levels, gender diversity was also observed to influence cybersecurity disclosure even though it has no bearing on the strength of the internal control. Several factors capable of influencing these relationships were recommended by the reviewed articles, part of which are political connections; board meeting frequency; establishment of specific law enforcement agencies and laws; a shift in board group dynamics; a mix of directors with industrial and accounting/finance experience, and independent directors among others. The findings suggest that promoting gender diversity on boards is crucial for improving management choices and audit quality. Female directors' presence can reduce fraud occurrence and mitigate it, and as fraud continues to grow, new solutions are needed to ensure financial reporting quality. Reconsidering stereotypes and addressing the importance of female directors' presence on boards is essential.

I. Introduction

The occurrence of old and very recent financial scandals in developed regions, including Patisserie Valerie (Grant Thornton), Carillion (KPMG), Conviviality (KPMG), Rolls-Royce (KPMG), BT (PriceWaterhouseCoopers), Mitie Group (Deloitte), BHS (PWC), Ted Baker (KPMG), and Quindell (KPMG), has caused high profile financial debacles and the indictment of the Big Four firms namely KPMG, PriceWaterhouseCoopers, Deloitte, and EY. Accurate financial reporting is essential to the maintenance of shareholder trust. The scandals which have been highlighted above heralded the total overhaul of the financial reporting process in the United States of America. Consequently, several pieces of legislations were enacted, the most notable one among them being the Sarbanes Oxley Act of 2002 (SOX). In response to the Enron incident, the SOX significantly altered corporate governance (DeFond and Zhang 2014). The quality of corporate governance and its implications on financial misconducts such as restatements, enforcement actions, and malfeasance are primarily impacted by the increased regulations on audit committee provisions, internal control audits, Public Company Accounting Oversight Board (PCAOB) inspections, and the prohibition of non-audit services. Before then, the financial world became confused as it was believed that auditors' work cannot be relied upon anymore. But sequel to the implementation of several legislations, in addition to numerous studies carried out on the global phenomenon. Despite the improvement observed in quality of financial reporting, scandals continue to occur.

According to report of (KPMG, 2020), it indicates that the majority of US organizations are more likely to suffer a combined loss from fraud, compliance concerns, and regulatory fines. According to reports, internal fraud cost 85% of the corporations just over \$10 billion. As a result of compliance infractions, 55% of the firms paid regulatory penalties. Separately, the American Edition of the Association of Certified Fraud Examiners/ACFE (2020) offers data on occupational fraud in the context of the US. They discover that although the great majority of fraud schemes (77% of instances) include the theft of assets, these schemes often result in the lowest median loss, at \$100,000 per case, the report further states that even though financial reporting fraud is the least frequent, it is the largest and most costly type of occupational fraud when compared to other types. (Maulidi, 2023).

Financial misbehaviour by a company may have extremely detrimental effects on capital sources, workers, clients, suppliers, and the entire economy. Many contentious debates on the procedures that may stop or even identify unethical and opportunistic corporate activity have been going on in recent years (Velte, 2023). The financial reporting witnessed new approaches aiming to bring a halt to occurrence of financial scandals from different dimensions. From auditors' perspective, to shareholders perspective, and also from the corporate governance perspective to mention a few. From its origin in 1992 to the present form visible today, the Corporate Governance Code in the "UK" underwent a number of protracted processes and revisions (Elmagrhi et al., 2017; Elamer and Benyazid, 2018; Bufarwa et al., 2020; Feng et al., 2020; McLaughlin et al., 2021). The Cadbury Committee, which advocated for stronger corporate governance control mechanisms like subcommittees (such as the audit committee) (Agyemang-Mintah and

Schadewitz, 2018, 2019; Albitar et al., 2020a, 2020b; Karim et al., 2013; Li and Song, 2018; Yu and Wang, 2018) in (McLaughlin et al., 2021), was the original source of the code's recommendations. Thus, this paper attempts to review researches conducted on the influence of gender diversity in boards and corporate scandals/fraud.

There is a growing interest in whether male and female corporate executives are associated with different business behaviours as a result of the surge in the number of female gender in corporate leadership roles (Wiley and Monllor-Tormos, 2018) in (Maulidi, 2023). According to some previous academics, there exist no cognitive demarcation between male and female sex, hence gender diversity on boards will not have an impact on business decisions. Males and women differ mostly in how they express their emotions rather than in how they approach a particular problem. (Khan and Vicito, 2013; Triana et al., 2014; and Baez et al., 2018) in (Maulidi, 2023).

Other previous research on the other hand indicates that companies with female CFOs consistently have accruals of a higher caliber than companies with male CFOs (Arun et al., 2015; Li et al., 2021; Janahi et al., 2021) in (Maulidi et al., 2022). They contend that in terms of financial reporting, female CFOs are more cautious than male CFOs. They also point out that in many decision-making situations, female CFOs are more circumspect and less assertive than male counterparts. According to Taleatu et al.'s (2020) research, female CFOs are more likely than males to make ethical decisions and act in ethical ways. Therefore, it is reasonable to anticipate that female CFOs will be less likely to engage in corporate reporting fraud. Additionally (McLaughlin et al., 2021) claim that audit committees on diverse boards impart more general, strategic, and performance-oriented knowledge. Thus, audit committees on diverse boards may lessen the probability of corporate fraud, controversy, or punishment.

Therefore, based on the tasks and functions that are relevant in the local socio-cultural environment, human qualities can be differentiated (Stoller, 1968). In comparison to male CEOs, female CEOs are seen to be more equipped to make moral judgements (Brennan and McCafferty, 1997; Cumming et al., 2015; Zahra et al., 2007). However, since women's morale isn't higher than men's, the practice of fraud is really more often linked to opportunities in the position that the individual has (Dodge, 2009). This is supported by research indicating that women are more frequently involved in financial fraud cases than males are (Bonny et al., 2009).

Regulators and academics have given board gender diversity a lot of attention, and over the past 20 years, the proportion of female directors on boards has grown in many nations (Gabaldon et al., 2016). This is due in part to legislation promoting gender equality and pressure from stakeholders, such as shareholders and social organizations, for businesses to encourage the representation of women on corporate boards (Adams, 2016; Nadeem, 2020).

Global efforts to overhaul corporate governance have placed a strong priority on gender diversity in company boardrooms. The 2012 change to the corporate governance code in the UK was the first to address gender diversity. After taking into account the Davies Review 2011 (Hampton Alexander Review, n.d.), Tyson Report (Tyson, 2003), and Higgs Report (Higgs, 2003) recommendations, this adjustment was made. The selection of a female director may be required in some nations. Norway and Spain, for instance, have mandated minimum director gender ratios of 40% for all registered corporations. The Malaysia Corporate Governance Blueprint particularly addresses board gender diversity, and Bursa Malaysia has mandated that listed businesses in Malaysia have at least 30% female directors (Securities Commission Malaysia, 2011). Although representation is required in various areas in Indonesia, the makeup of the board of commissioners and directors is different since it is not covered by the legislation or the Financial Services Authority's Acts for the banking and non-banking sector (Sondakh et al., 2021).

II. Conceptual Framework

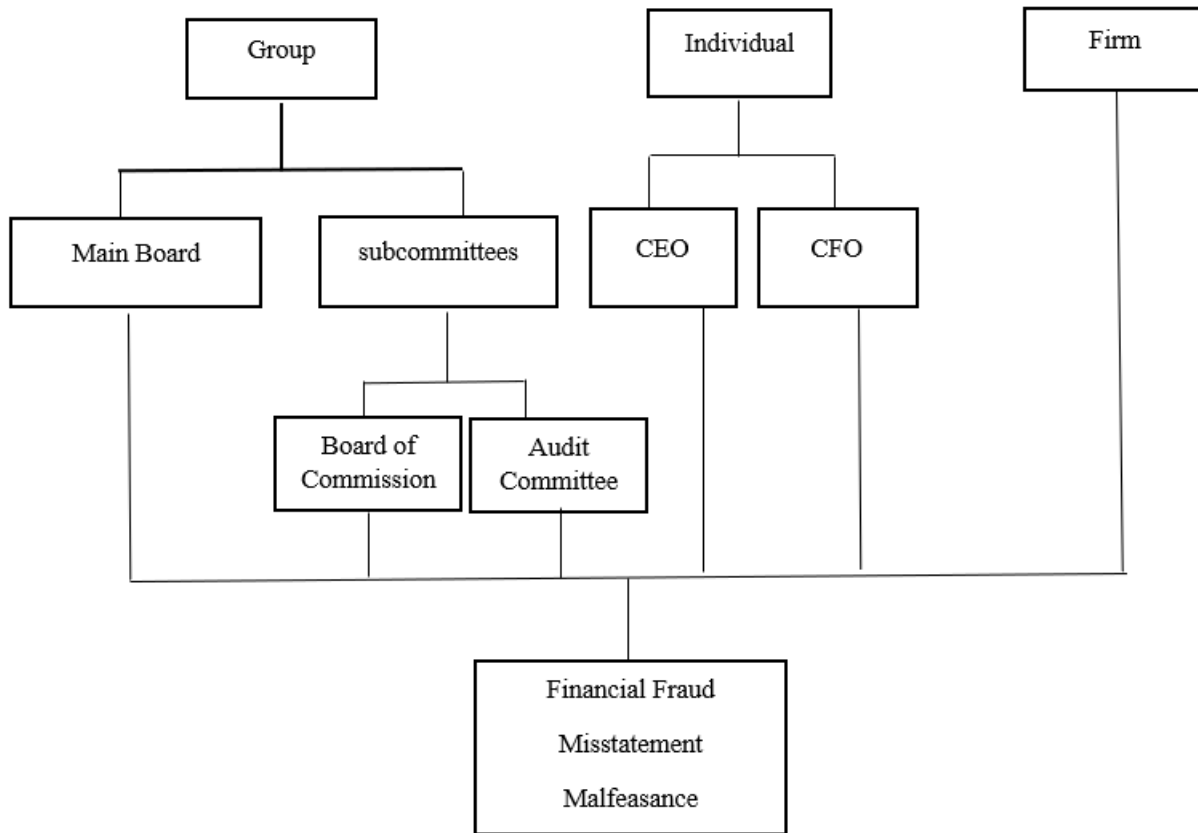
Different theories (such as the resource-based approach; stakeholder theory, and legitimacy theory), have the potential to explain the connection between corporate governance and enterprises' financial fraud. Since agency theory was used in the bulk of the studies included in this research review (Ross 1973; Jensen and Meckling 1976), we also employ this theoretical framework. In an attempt to control for insiders' opportunism, information asymmetry, as well as halt managerial incentives in earnings management practices and thereby influencing the quality of the financial reporting (Peasnell et al., 2005; Chen et al., 2011; Chi et al., 2015; Khalil & Ozkan, 2016), the board of directors has emerged as the key player for the corporation in ensuring effective corporate governance. The agency problem between agents (managers) and principals (shareholders) is therefore lessened by the board of directors (Fama & Jensen, 1983; Zahra & Pearce, 1989; Hillman & Dalziel, 2003). The board of directors and the company's shareholders must put in place robust monitoring mechanisms to reduce these agency conflicts. Information asymmetries appear in the financial reporting documents because mistakes and fraud may lower the quality of the financial reporting, which might result in restatements, enforcement actions, and public fraud incidents (1989, Zahra & Pearce) in (Velte, 2023). Thus, the approach in this review is to summarize and explain the existing knowledge of the board gender diversity and fraud. This study may be categorized as a general literature review type that will serve as a preparatory work to a thesis because it identifies gaps in the literature. These gaps will create novelty for future research.

Meanwhile, we divide our corporate governance variables into four levels based on the framework for corporate governance

developed by (Jain and Jamali, 2016) as cited in (Velte, 2023): group, person, firm, and institutional level. However, the articles under review happen to identify with only three levels namely group, individual(person), and firm excluding the institutional level. Below is a diagram to pictorially represent the framework.

Figure 1.0

Conceptual Framework



Source: Authors work

III. Research Methods

The authors collected and assessed data from earlier studies. They listed the questions that the articles set out to address. They took notice of the research's procedures and participants. They examined the outcomes and recommendations. They identified the topics on which the earlier scholars concurred or disagreed. But the researcher also included studies from subject-matter authorities. We draw attention to the expanding range of empirical research on the connection linking Board Gender Diversity with Financial Misconduct. We looked through the SSRN and Semantic Scholar databases for relevant studies in the last 10 years 2014 to 2023. We searched “Board Gender Diversity (BGD)”, “Fraud” “Scandals” “Financial Misconduct” 52 result surfaced and were filtered to only take the most relevant ones and finally 28 articles were arrived at. The objectives pursued in this study includes:

1. Whether BGD is associated with the firm’s propensity to perpetuate fraud.
2. Whether diversities in Board subcommittees influenced fraud occurrence.
3. Whether diversities in Board Individual members influenced fraud occurrence.
4. What are the factors capable of influencing the relationship between BGD and fraud perpetuation or mitigation.
5. Does BGD affects corporate internal control strengths
6. Does BGD affects cybersecurity disclosures among corporations.
7. Lastly to give suggestion for future research based on the gaps identified.

IV. Organisation of Literature and Discussion

Denyer & Tranfield (2009) suggest the analysis and development of certain categories to help explain and evaluate the articles. This will make cross-tabulation and interpretation of the articles more effective. As a result, the literature will be arranged using a method similar to that used by (Bjrnnek & Mitchell, 2002; Gosselin, 2007; Albertsen & Lueg, 2014), where several categories are employed. The featured articles and their patterns will be succinctly summarized in this section. We divide our corporate governance variables into four levels based on the framework for corporate governance developed by (Jain and Jamali, 2016) as cited in (Velte, 2023): group, person, firm, and institutional level. However, the articles under review happen to identify with only three levels namely group, individual(person), and firm excluding the institutional level.

- A. Group Level: The board serves as a framework for overseeing managers to prevent agency clash at the group level of corporate governance, according to Jain and Jamali (2016), corporate governance at this level is primarily influenced by the make-up of the board, its subcommittees, and the internal audit department. At this level we looked at the articles based on general board group and/or subcommittee within the board. Below is a table to summarize the articles that identify with this level.

Table 1. General board.

Citation	Topic/Title
Maulidi, 2023	Gender board diversity and corporate fraud: empirical evidence from US companies.
Ibadin & Ehigie, 2019	Beneish Model, Corporate Governance and Financial Statements Manipulation.
Saidu and Aifuwa, 2020	Board Characteristics and Audit Quality: The Moderating Role of Gender Diversity.
Kamarudin et al., 2018	Board Members Diversity and Financial Statements Fraud using Malaysian Firms Data
Mohd Uzir & Saat, 2023	Critical Insights into The Attributes of An Effective Board of Directors as A Deterrent to Corporate Fraud.
Purba et al., 2022	Detecting Financial Statement Fraud Using Fraud Triangle and Board of Director's Attributes Analyses.
Salleh & Othman, 2016	Board of Director's Attributes as Deterrence to Corporate Fraud.
Davis & Garcia-Cestona, 2021	Financial reporting quality and the effects of CFO gender and board gender diversity.
Wan Abdullah et al., 2021	Gender Diversity on Board and Financial Reporting Quality in an Emerging Country.
Wahid, 2019	The Effects and the Mechanisms of Board Gender Diversity: Evidence from Financial Manipulation.
Velte, 2023	The connection between corporate governance and corporate financial misstatement. A systematic review of archival studies and implications for future research.
Haron et al., 2021	The Relationship between Board Diversity, Board Independence and Corporate Fraud.
Juwita, 2023	The Role of Gender Diversity in Corporate Governance for Quality Assurance of Financial Statements using Audit Fee as Moderating Variable.
Aldaoud, 2019	The Impact of Board Independence, Women on Board and Auditor Independence on the Fraud: Evidence From Jordanian Firms.

Source: Authors' work

Maulidi, (2023) examined the relationship between board gender diversity and corporate fraud taking United States companies as samples, he found out that female corporate executives are less likely to commit corporate fraud in the setting of non-state-owned firm contexts. But according to the authors' actual data, female business executives are still underrepresented in boardrooms of companies with a state-owned history. According to reports, having female business executives has little to no influence on improving company ethics and governance standards. When political ties between corporations and governments or politicians are common, this situation does arise.

Kamarudin et al. (2018) Affirmed the findings of Maulidi above when he examined whether the diversity of board members—including their gender, ethnicity, and job titles—is related to the likelihood of financial statement fraud. They chose all fraud firms that the Securities Commission of Malaysia had made public and matched them with an equal number of non-fraud firms. The results of the logistic regression study demonstrated a positive correlation between financial statement fraud and less gender and position diversity. Additionally, there is a considerable correlation between financial statement fraud and governance traits (board size, board meetings, and chairman dual position). According to the study's findings, companies that engage in fraud have more frequent board meetings, a board that is predominately made up of people of Chinese descent, a high percentage of independent directors, and a chairman who doubles as the CEO or Managing Director.

By critically analysing results from earlier and more contemporary studies, (Mohd Uzir & Saat, 2023) looked at the traits of boards of directors that are successful in reducing corporate fraud. Their review indicated that gender diversity of the board's members, their business experience, independence, and the frequency of board meetings are crucial factors in the board's authority, reputation, and impact over how organizations handle fraud. In order to ensure that fraudulent activities are prevented, it is essential to establish some specific law enactment agencies, which may include the Anti-Corruption Authorities, the Anti-Money Laundering, Anti-Terrorism Financing, and Proceeds of Unlawful Activities, the Penal Code, and the Companies and Allied Matters Act. We can therefore see similarities in his findings with the ones above.

Still in the same direction and in support of the above, (Velte, 2023), examined 98 papers from the recent past that examined the effects of corporate governance on restatements, enforcement actions, and fraud as corporate financial malfeasance. However, they discovered that there are signs that board experience and, in particular, female diversity in the top management, reduce the financial malfeasance of firms.

Davis & Garcia-Cestona (2021) examined the impact of gender diversity on the board and the chief financial officer (CFO) on financial reporting quality (FRQ), as measured by restatements. Their findings concurred with the summations above, they observed that restatements are less frequent when there are more women on the board. The study discovered that women on the board are more successful at lowering the chance of a restatement when the CFO is a woman, taking into account the interaction effects. And while having a female CFO generally lowers the likelihood of a restatement, when the BOD is entirely male, they have no statistically significant effect.

In support of the above, Wan Abdullah et al. (2021) looked into whether the gender diversity of the board of directors affected the firm's financial reporting quality as measured by earnings management significantly as evidenced in emerging economies, their findings showed that having female directors on the board helps mitigate earnings management. As a result, the findings offer insight to policymakers and regulators; that gender diversity on boards should be further stressed because the presence of female directors will alter management choices and audit quality.

Wahid (2019) also agreed to the above findings when he studied how gender diversity on boards affected financial malfeasance. According to their findings, companies with gender diverse boards make less errors in financial reporting and commit fewer financial misconduct. Their results hold for companies with both good and poor governance and are constant across pre- and post-regulation (Sarbanes-Oxley) periods. The results do not appear to be the result of disparities between the independence and expertise of female and male directors in terms of effort or quality. At higher levels of gender diversity, the effect of having more female directors on corporate boards appears to decrease, suggesting that the influence of gender diversity on reducing the chance of financial malfeasance may be due to a shift in board group dynamics.

Haron et al. (2021) analysed the connection between corporate fraud, board independence, and board diversity. They analysed a representative sample of 42 firms listed on Bursa Malaysia, which between 2013 and 2017 included 21 fraudulent companies and 21 non-fraudulent companies. Their findings showed a strong link between gender diversity, board experience, and board independence and corporate fraud. According to the findings, corporate fraud is less likely to occur when there are more women directors, a mix of directors with industrial and accounting/finance experience, and independent directors.

In support of the above, (Ibadin & Ehigie, 2019), employed the Beneish model, to study Nigerian corporate governance and financial statement manipulation, it was revealed that a higher percentage of women on the board as a whole will enhance the likelihood of spotting, stopping, and looking into financial statement manipulation. Additionally, the findings showed that an increase in the board composition, as measured by the percentage of non-executive directors (NEDs) on the board, will boost the likelihood of spotting,

preventing, and looking into financial statement fraud in Nigeria's listed companies, and that an increase in the likelihood of identifying, preventing, and looking into inaccuracies in the yearly financial statements of Nigerian companies was found to result from a drop in board dominance.

All of the above studies concurred to each other regarding how gender diversity/women on board affects how that board reacts to fraud perpetuation or mitigation but most of the studies differed on which factors influenced the relationship. Some of the factors noticed by the literature under review include, political connections, (Maulidi, 2023); frequent board meetings, a board that is predominately made up of people of Chinese descent, a high percentage of independent directors, and a chairman who doubles as the CEO or Managing Director, (Kamarudin et al., 2018); establishment of specific law enforcement agencies and laws, such as the Anti-Corruption Commission, the Anti-Money Laundering, Anti-Terrorism Financing, and Proceeds of Unlawful Activities, the Penal Code, and the Companies Act, (Mohd Uzir & Saat, 2023); a shift in board group dynamics, (Wahid, 2019); a mix of directors with industrial and accounting/finance experience, and independent directors, (Haron et al., 2021); increase in the board composition, as measured by the percentage of non-executive directors (NEDs) on the board, as well as a drop in board dominance (Ibadin & Ehigie, 2019).

Contrary to the above conclusions, (Saidu and Aifuwa, 2020) looked into how the board's qualities affected the accuracy of the audits of listed manufacturing companies in Nigeria. He found no correlation between board independence as well as female gender on audit quality. The study also found no evidence supporting the idea that having a woman on the board would have a moderating influence on the relationship between board independence and audit quality. According to the study's findings, board qualities have little bearing on audit quality. So, in order to increase audit quality, we advised that the number of non-executive directors on the board be decreased in manufacturing enterprises.

Purba et al. (2022) explored if assessments of the fraud triangle and the characteristics of the board of directors may spot financial statement fraud in Indonesian listed businesses. The financial stability, effective oversight, and rationalization aspects of the fraud triangle study have been juxtaposed with the number of independent boards and the gender diversity of the board of directors in the analysis of the board of director's attributes. Companies listed in KOMPAS100, an index of 100 companies with strong liquidity and significant market capitalization and listed on the Indonesian Stock Market (IDX), serve as the unit of study. 2016 to 2019 is the study's timeframe. The study's findings demonstrate that neither the three-aspect fraud triangle nor the two-aspect examination of the board of directors' qualities can catch financial statement fraud. These findings demonstrate how extensively large, liquid Indonesian listed corporations have honestly disclosed their financial statements.

Salleh & Othman (2016) They investigated how board characteristics, particularly board size, board duality, and frequency of board meetings, affected the prevention of corporate fraud in Malaysia. The outcome demonstrated that there is no causal relationship between how frequently board meetings occur and corporate fraud. The relationship between board size and board duality toward corporate fraud, however, is not particularly important. They came to the conclusion that corporate fraud can be prevented in Malaysia by increasing the frequency of board meetings not by other board characteristics.

(Aldaoud, 2019) investigated the effect of board independence, the presence of women on boards, and auditor independence on financial reporting fraud for a sample of 86 industrial enterprises listed on the Amman Stock Exchange between 2015 and 2016. The results demonstrated that the presence of women at the top of industrial Jordanian enterprises has no bearing on financial reporting fraud.

(Juwita, 2023) examined the impact of gender diversity on audit committee, the board of directors, board of commissioners, and on the quality of financial statements using audit fees as a moderating variable and data fetched from Indonesian Stock Exchange from 2019 to 2020. The results showed that gender and women, notably on the board of directors, audit committee, and board of commissioners, are crucial to the Corporate Governance process. Despite the board of directors' incapacity to improve the integrity of financial statements when evaluated, the role of ladies in supervision, such as the board of commissioners and audit committee, was able to improve the company's financial statements quality.

Despite finding negative correlation between gender diversity and corporate fraud, they gave suggestion of those factors capable of causing positive correlation. They include, decrease in number of non-executive directors on the board in manufacturing enterprises, (Saidu and Aifuwa, 2020); increase in the frequency of board meetings, (Salleh & Othman, 2016).

Table 2. Subcommittees

Citation	Topic/Title
Hasnan et al., 2022	Audit Committee attributes and Financial Restatement Incidence in the Emerging Economies.
McLaughlin et al., 2021	Audit committee diversity and corporate scandals: evidence from the UK.
Albawwat & harasees, 2019	Gender traits & Audit Committee Members against the Quality of Financial Reports
Zaitul & Ilona, 2019	Gender in audit committee & financial reporting timeliness
Dahlan & Andesto, 2022	The Characteristic Influence of the Board of Commissioners, on Financial Reporting Fraud and its Implications on the Value of the Firm.
Kamarudin & Ismail, 2014	The Effects of Audit Committee Attributes on Fraudulent Financial Reporting.
Juwita, 2023	The Role of Gender Diversity in Corporate Governance for Quality Assurance of Financial Reports using Audit Fees as Moderating Variable.

Source: Authors' work

At the subcommittee level, Hasnan et al. (2022) talked about the traits of audit committees that cause financial restatements to arise in Malaysian public listed corporations (PLCs). Their result indicated that the size and frequency of the audit committee's meetings, as well as the members' racial and political backgrounds, are all significantly correlated with the frequency of financial restatements in Malaysian PLCs. But they found insignificant correlations to exist between the incidence of financial restatements and the other audit committee features, such as gender diversity.

McLaughlin et al. (2021) supported the above conclusion by Hasnan, when he analysed experimentally the unique qualities of an audit committee that could be linked to the possibility of corporate controversy, scandal, or sanctions. The authors find negative but insignificant relationships among audit committee female chair, audit committee female members percentage, audit committee qualified accountants' members, audit committee attendance, number of shares held by audit committee members, and audit committee meeting frequency, which supports the findings based on the logit regression.

Kamarudin & Ismail (2014) concurred with above findings after he examined the association between the likelihood of fraudulent financial reporting and the audit committee's characteristics (independence, financial knowledge, frequency of meetings, gender diversity, and ethnic composition). The sample consists of 116 companies, both fraudulent and legitimate, listed on Bursa Malaysia between 2005 and 2010. They came to the conclusion that there is no correlation between the frequency of audit committee meetings, gender, or ethnicity, and corporate fraud.

In contradiction to the above, (Albawwat & harasees, 2019) investigated how the gender characteristics of audit committee members affect the reliability of financial reports in Jordanian commercial banks. The question under discussion is whether having a female chair and member of the audit committee has an impact on the quality of financial reports. The findings of study suggested that having a female member of the audit committee has a beneficial impact on the quality of financial reports. Additionally, there is a link between the quality of financial reports and the number of women who chair audit committees.

Almost similar to the findings above, (Juwita, 2023) examined the impact of gender diverse board of directors, audit committee, board of commissioners, and on the integrity of financial statements using audit fees as a moderating variable and data fetched from Indonesian Stock Exchange from 2019 to 2020. The results showed that gender and women, notably on the board of directors, audit committee, and board of commissioners, are crucial to the Corporate Governance process. Despite the directors board's incapacity to improve the soundness of financial reports when evaluated, the role of women in oversight function, such as the audit committee and commissioners' board, was able to improve the company's financial records.

Zaitul & Ilona (2019) on his part maintained middle ground after he investigated whether or not the gender of the members of the Audit Committee has an impact on the timeliness of financial reporting a country which adopts a Continental European System.

They discovered that the gender of the members of the Audit Committee is still up for debate in terms of their contribution to enhancing financial reporting timeliness. But discovered that, the operations of the Audit Committee have a negligible impact on how quickly financial reports are released.

With regards to board of commissioners subcommittee, (Dahlan & Andesto, 2022) examined how the traits of the commissioners' board, including gender, affected financial reporting malfeasance that had an impact on the company's worth through the use of Beneish M-Score on data collected from Indonesian Exchange. They came to the conclusion that the Gender Diversity of the Board of Commissioners has no significant impact on the Company's Value. Financial Reporting Fraud also has no significant impact on the Value of the Company.

- B. Individual Level: The individual level of corporate governance tackles the sociopsychological or demographic traits of particular senior management personnel. The two most significant individuals who have been examined in previous empirical corporate governance studies are the CEO and the CFO. Below is a table to summarize the articles that identify with this level.

Table 3.

Citation	Topic/Title
(Maulidi et al., 2022)	Are female CFOs more ethical to the occurrences of financial reporting fraud? Theoretical and empirical evidence from cross-listed firms in the US.
(Masruroh & Carolina, 2022)	Beneish Model: Detection of Indications of Financial Statement Fraud Using CEO Characteristics.
(Davis & Garcia-Cestona, 2021)	Financial reporting quality and the effects of CFO gender and board gender diversity
(Yustrida Bernawati, 2020)	The Effect of Chief Financial Officer Demographics on Fraudulent Financial Reporting.

Source: Authors' work

Maulidi et al. (2022) investigated the possibility of instances of financial reporting fraud in US enterprises with female chief financial officers (CFOs), they found that the data support the findings of their study's expectations. The study revealed a negative and significant correlation between the instances of financial reporting fraud and the dummy factors for female CFOs, they clarified that female CFOs can improve monitoring procedures to ensure the accuracy of the company's financial reporting and compliance with any relevant legal or regulatory requirements. The authors discover that this link depends on many governance factors, including ownership structure, politically connected CEOs, and whether or not a corporation invests in a gender-diverse board.

In a result somewhat similar to the results of Maulidi above, (Yustrida Bernawati, 2020) Analysed how the demographics of the CFO affect financial statement fraud. The test results demonstrated that the CFO's age had an impact on the misrepresented financial figures. The CFO tends to engages in fake financial statements as he gets older. Other findings show that the CFO's educational level, gender, and experience have little bearing on financial statement fraud. Though other factors may influence this relationship as in the case of Maulidi's conclusion.

(Davis & Garcia-Cestona, 2021) examined the impact of gender diversity on the board and the chief financial officer (CFO) on financial reporting quality (FRQ), as measured by restatements. According to their findings, restatements are less frequent when a woman serves as the chief financial officer (CFO) and when there are more women on the board of directors (BOD). The authors discovered how women on the BOD were more successful at lowering the chance of a restatement when the CFO is a woman, taking into account the interaction effects. And while having a female CFO generally lowers the likelihood of a restatement, when the BOD is entirely male, they have no statistically significant effect. This findings, however concurs accurately with the two conclusions of (Maulidi et al., 2022) and (Yustrida Bernawati, 2020) above

Using the Beneish Model, (Masruroh & Carolina, 2022) examined the impact of Chief Executive Officer personality traits on signs of financial statement fraud. They make use of secondary data obtained from financial statements of mining firms listed on the Indonesia Stock Exchange between 2015 and 2019. Their finding is similar to findings above on female CFOs, according to their findings, factors like the CEO's nationality, tenure, and gender, also have an impact on the signs of financial statement fraud. Therefore, it may be argued that attempts to avoid fraud may involve CEO traits that are connected to the detection of financial statement misconduct.

Table 4. Firm Level The below table summarizes the articles that identify with this level.

Citation	Topic/Title
Maulidi, 2023	Gender board diversity and corporate fraud: empirical evidence from US companies.
Sondakh et al., 2021	The influences of woman on TMT on banking & Other relevant financial institutions results.
Sbai & Ed-Dafali, 2023	Board Gender diversity and risk-Appetite: evidence from dual banking systems (shariah&conventional).
Kirsch & Wrohlich, 2021	Gender diversity benefits supervisory board work of many companies.
Radu and Smaili, 2022	Board Gender Diversity and Corporate Response to Cyber Risk: Evidence from Cybersecurity Related Disclosure.
Pasko et al., 2022	Does female Presence on corporate boards enhances the strengthening of internal control system in firms with good CSR

Source: Authors' work.

Over the years 2012 to 2020, (Sbai & Ed-Dafali, 2023), looked at the association between gender diversity and the risk profile of 141 listed banks from 14 emerging nations. Their study specifically explores if, before and after the COVID-19 outbreak, there are differences in the link between gender diversity and banking risk between conventional banks and Islamic banks. The second goal was to determine whether the COVID-19 health issue affects how banks behave when taking risks in a dual banking system. Their findings demonstrated that having women on the board of directors lowers the financial risk to institutions. But the capital adequacy ratio of major banks continued to benefit from the presence of women. The findings also demonstrate a notable reduction in banking risk when at least two female directors are present. Furthermore, the inclusion of female board members in and of itself has little impact on the risk-taking behaviour of Islamic banks. Finally, our study reveals that major banks are only better effective at reducing the COVID-19 health crisis than small banks.

Studying the same financial sector, (Sondakh et al., 2021) analysed the association between the performance of banking and non-bank financial institutions in the era of COVID-19 pandemic, and the participation of female managers in management. How the quality of a company's financial accounts may be impacted by the presence of women in leadership positions. They found that there are clear gender variations in traits including empathy, inclusivity, compassion, and risk appetite between men and women, with women taking less risk than their male counterparts. Their review supported anecdotal evidence to this effect, as a result of which they will be more careful and vigilant with fraudulent practices. Both studies found a positive influence of the presence of women at top management level to influence quality of governance and fraud deterrence in the firms through their unique risk-taking behaviour.

Still on risk in relation to gender diversity, Radu and Smaili (2022) looked at how the distribution of genders on the board may affect how much information about significant cyber risks and breaches is disclosed. The findings concurred with the assertion that gender diverse boards and cybersecurity disclosure are positively correlated. Before this beneficial effect can be seen, at least 3 women needs to be on that board.

(Kirsch & Wrohlich, 2021) The conversations, interactions, and decision-making in supervisory boards are improved by the presence of female directors. the female members of the supervisory board wanted more information, questioned the executive board's plans and choices, and were especially inquisitive in their queries. In doing so, they compelled the executive board to more fully and effectively defend its goals. The results demonstrated that gender diversity on supervisory boards can help ensure that executive boards are monitored more efficiently. They supported their findings with current research on the factors contributing to high management malfeasance. According to that research, the organizational culture at the top of organizations and the board composition both affect executives' willingness to commit fraud. Particularly, uniformly constituted boards and business cultures that excuse unethical conduct support fraudulence. They concluded that companies and society as a whole may benefit from an increase in the proportion of women on these boards.

Maulidi, (2023) examined the relationship between board gender diversity and corporate fraud taking United States companies as samples, even though he found that female corporate executives are less likely to commit corporate fraud in the setting of non-state-owned firm contexts, but he reported that having female business executives has little to no influence on improving company ethics and governance standards, which is somewhat contrary to the above findings, he added that it is when political friendship between

corporations and political institutions are common, will such a situation arise. Meanwhile he admits that female business executives are still underrepresented in boardrooms of companies with a state-owned history.

With regards to internal control efficacy, (Pasko et al., 2022) analysed the connection between internal control efficacy and corporate social responsibility, as well as gender diverse board to determine if or not presence of women on board promote corporate integrity. The outcome demonstrated that companies with strong social performance have internal control systems that are more efficient. The paper, however, was unable to demonstrate a positive correlation between board gender diversity and internal control efficacy, as well as the reinforcing impact of the presence of women on board with internal control in firms with a social conscience. According to this study, female directors in China's business setting are unlikely to enhance corporate integrity.

V. Discussion

According to our analysis of the literature, the group and individual levels of corporate governance were the focus of the majority of studies on corporate governance and business malfeasance, i.e., to say the perpetuation at firm level is not so entrenched as in group and individual level. Most of the reviewed dwelled more on the presence of women on the general board and it was observed that majority of them found significant correlation, which means that presence of women on the board facilitated the detection and mitigation of fraud, with very few contradicting the above. However, most of those studies that recorded significant relationship concurred that other factors mediated or moderated the relationship, such factors include; political ties, existence and maintenance of institutions in charge of fraud mitigation, technical knowhow, enhanced board composition etc., on the other hand, the remaining reviewed studies, posited that the relationship exist irrespective of whether companies are having either appreciable level of performance or poor performance in governance as well as irrespective of the effects of (Sarbanes-Oxley, 2002) implementation, same result was obtained at both times (pre and after implementation periods).

At the subcommittee level, all the studies that fall under this category dwelled on audit committee i.e., the presence of women on audit committee. In this category, unlike in the main board as discussed above, half of the articles concurred on the non-existence of correlation between presence of women in the audit committee and fraud detection as well as mitigation, while the other half's findings are in contradiction with the above, with one of the studies maintaining a middle ground in between the two positions.

At individual level, a category that studied the impact of women serving as either chief executive officer (CEO) or chief financial officer (CFO). All the studies that fell under this category found significant relationship. This is not unconnected with individual characteristics in the female gender which can alter the way they think, their risk appetite, the caution they exert in making decisions and taking actions, therefore is correct to posit that female CFOs and CEOs can improve monitoring procedures to ensure the accuracy of the company's financial reporting and compliance with any relevant legal or regulatory requirements.

Similarly, at the firm level, all the studies except one recorded significant relationship. At this level, it is interesting to note that the studies covered banks, cyber risk and breaches disclosures as well as the efficacy of internal control system. In other words, how the presence of women on board influenced the detection & mitigation of fraud in banks, in cybersecurity risk and breaches disclosure as well as the improvement of the efficacy of the internal control being one of the means to mitigate fraud. In all the above scenarios, this review observed that presence of women in board has influenced fraud detection and mitigation except in the improvement of the internal control system.

These findings offer insight to policymakers and regulators; that gender diversity on boards should be further stressed because the presence of female directors will alter management choices and audit quality. These findings call for reconsideration of the stereotype that is fond of looking down on the capacity of women to serve on boards. The importance of their presence on board to help bring down the possibility of fraud occurrence and mitigation cannot be overemphasized. As fraud continues to occur in the business world, taking new dimensions, there is also the need to come up with new solutions to ensure quality of financial reporting.

VI. Conclusion

This study through review of previous research, sheds light on the role of Board Gender Diversity (BGD) in perpetuation and or mitigation of fraud in corporations. Our study is based on the popular grand theory that dealt with problem of information asymmetry i.e., the "Agency Theory" and also the corporate governance framework developed by Jain and Jamali (2016), which proposed levels of corporate governance. Agency theory postulates that corporate governance will serve as a primary monitoring tool to identify and stop financial misbehaviour by firms since it will lessen information asymmetries. The occurrence of scandals in the last decade triggered the urge of looking for way forward in order to maintain investors confidence and trust in corporations, coupled with increasing efforts by legislators to decrease tendencies of firm's financial malfeasance through corporate governance regulations. Such regulations mostly contained in SOX 2002, include proscription of non-audit services; increased regulations on internal control audits, audit committee provisions; inspections carried out on public accountants by the (PCAOB), all help in mitigation of corporate fraud. Our review however aimed at providing answers to whether BGD is associated with the firms',

subcommittees' as well as individuals' propensity to perpetuate or mitigate fraud; factors that are capable of affecting the aforementioned relationship; whether BGD affects strength of internal controls as well as cyber security disclosure.

First, our review observed that most of the studies reviewed affirmed that gender diversity in boards affects the risk appetite of that board and subsequently its propensity to affect fraud occurrence in such organisations, same also applies to audit committees; board of commissioners; as well as individuals such as CEOs and CFOs, nevertheless it is important to note that there are other studies that found a contrary result to the one mentioned above. Additionally, such factors that are likely to influence this relationship include among others, political connections, (Maulidi, 2023); frequent board meetings, (Kamarudin et al., 2018); establishment of specific law enforcement agencies and laws, such as the Anti-Corruption Commission, the Anti-Money Laundering, Anti-Terrorism Financing, and Proceeds of Unlawful Activities, the Penal Code, and the Companies Act, (Mohd Uzir & Saat, 2023); a shift in board group dynamics, (Wahid, 2019); a mix of directors with industrial and accounting/finance experience, and independent directors, (Haron et al., 2021); increase in the board composition, as measured by the percentage of non-executive directors (NEDs) on the board, as well as a drop in board dominance (Ibadin & Ehigie, 2019) etc. Moreover, based on the findings in previous research, we observed that gender diversity affected cybersecurity disclosures among corporations but didn't affect the strength or weakness of the internal control.

Future research should focus on areas such as, investigating the extent of legislation enacted by nations to encourage gender diversity in boards as it has already started in nations like UK which was the first to address gender diversity in 2012. Norway and Spain, also, have mandated minimum director gender ratios of 40% for all registered corporations, in Malaysia at least 30%; Making comparison between developed and developing nations regarding better observance of gender diversity in boards among corporations as well as the extent of legislation regarding that. The main significance of this study is for corporations and regulatory agencies. Regulators need to be aware of the potential effects and bounds of corporate governance factors (specifically, board gender diversity) on business malfeasance.

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