ERASMUS UNIVERSITEIT ROTTERDAM
ERASMUS SCHOOL OF ECONOMICS

MASTER THESIS ACCOUNTING, AUDITING & CONTROL

Gender diversity effects on financial reporting quality; evidence from the US

Abstract:

Through answering my research question "What is the impact of board gender diversity and audit committee gender diversity on financial reporting quality within US-based firms''?

This study aims to provide clarity on the effects of gender diversity within the board of directors as well as the audit committee due to contradicting empirical findings with theoretical implications. By means of a binary logistical regression this study quantitatively investigates the impact of gender diversity on both the board of director level as well as the audit committee level within the United States using data collected from companies indexed within the S&P1500 index between 2007-2020. This study does not find evidence that neither board of directors nor audit committee gender diversity influence financial reporting quality, implying that in contrast to previous works, gender diversity does not serve as a functional monitoring mechanism over managers to the extent of ensuring financial reporting quality. Therefore, the recommendation is made to the regulatory environment to reassess corporate governance protocols.

Oneisey Rosini, Erasmus University Rotterdam

ony.rosini@gmail.com

600726

Thesis Supervisor: Dr. J. Zhang   Second Assessor: Dr. M. Erkens

Table of Contents

Chapter 1: Introduction

1.1 Introduction and background information

When a given organization omits, or otherwise misrepresents relevant financial information within their financial reports, material errors may unsuspectedly be communicated to the users of the financial statements (Pathak, Li, & Samba, 2021). If these material differences are later detected these organizations must issue a restatement to correct the material differences in order to comply with the applicable accounting standards and oversight bodies e.g. Generally Accepted Accounting Principles (GAAP) Financial Accounting Standards Bureau (FASB).

The restatement of a firm's financial statements are generally considered to be an indication of governance and ethical failures on the managements behalf (Pathak et al, 2021). The concerns which arise as a result of financial statement restatements however, persists for longer than the reporting period in question as these governance, ethical and control deficiencies may be anticipant factors to upcoming financial distresses which might induce a negative market reaction in subsequent periods (Oradi & Izani, 2020).

Needless to say, considerable financial reporting irregularities as well as unnecessary share price volatility are unfavorable to shareholders. However, to understand and mitigate these effects the causal phenomenon at the root of the problem must be acknowledged and understood.

The agency theory (Jensen & Meckling, 1976) presents that differing interests of a). management and b). shareholders, lead shareholders to a disadvantaged position of power as a result of information asymmetry which shareholders are prone to as management partakes in self-interested behavior.
In order to mitigate self-interested behavior from management, corporate governance mechanisms are put in place to deter management from exploiting their power to the detriment of shareholder interest (Man & Wong, 2013).

According to (Wahid, 2019) prior research has shown that good/effective governance decreases the extent of opportunistic behavior displayed by management and leads to better financial reporting quality and therefore less likelihood of financial statements being restated (Abbott,

Parker, & Presley, 2012). Considering the results of a study conducted in the Norwegian context which found that Norwegian companies declined in value after a mandate which required 40% of directors to be female took effect (Ahern and Dittmar as cited in Wahid, 2019), I am curious as to the extent which gender diversity can be considered a good corporate governance mechanism which safeguards financial reporting quality through oversight. Also considering the lack of recent literature regarding board of director gender diversity and audit committee gender diversity effects on financial statement restatements, I would like to provide recent evidence on the relationship between board of director and audit committee gender diversity on financial reporting quality proxied by financial statement restatements.

I aim to do so through answering the following Research Question: "What is the impact of board gender diversity and audit committee gender diversity on financial reporting quality within US-based firms?"

1.2 Relevance of research and contribution

This thesis adds value to both research and practice by expanding the sample size in contrast to prior works and finding that over an ample period leading up to more recent years as compared to more outdated studies, there is no association between gender diversity and financial reporting quality. While other studies inspect board or audit committee gender diversity effects on financial reporting quality, this study contributes to theory by assessing both variables of interest and considers their interaction, finding that no significant incremental differences are noted when considering the interaction of board gender diversity and audit committee gender diversity. The findings of this study are relevant for practice as well seeing as investors may use this information to consider other corporate governance mechanisms to better align management and shareholder interest.

1.3 Limitations, assumptions, and delimitations

A relevant delimitation to this study is that the data sample on which the statistical information is established consists of data based on US based firms as per the parameters of the CompuStat database. For comparative reasons I shall therefore only consider the matching non-financial data regarding the variables which are not included in the CompStat database to establish my final dataset.

Another delimitation is the extent to which I investigate the interaction between board gender diversity and audit committee gender diversity (board gender diversity [WFBD] * Audit committee gender diversity [FAC]). I consider my two hypotheses to be sufficient in answering my research question. Therefore, I do not develop a third hypothesis regarding the interaction of my two variables of interest, and do not include this interaction in my final model but rather report on my findings. The interaction is taken into account solely in order to add more context and understanding as to main findings and results of my research.

1.4 Organization of the thesis

The remainder of my thesis shall be structured as follows: Chapter 2 will give an overview of the relevant literature that establishes a basis for my theoretical background. In Chapter 3 I elaborate on the data collection procedures and establishment of my sample along with the measurement of the various variables included in my model. Subsequently the results and discussion shall be presented in Chapter 4 before finally concluding my thesis in Chapter 5.

Chapter 2: Theoretical background and hypothesis formulation

2.1 Corporate governance mechanisms and conflicting interests

Gender differences

In the context of gender socialization boys and girls are taught to behave differently based on their assigned gender at birth although Weisberg, Deyoung, and Hirsh (2011) also attribute gender differences between men and women to evolutionary influences. Nontheless, gender differences lead to personality and character differences between the two genders. In this chapter literature regarding these traits and polarities between male and female will be expanded upon.

Group association through gender differences

The theory of social categorization argues that the similarities and the differences between individuals such as age, gender and race (van Knippenberg and Schippers, 2007; Pathak et al., 2021) form a basis for self-categorization of individuals and others in two groups; similar ingroup members and dissimilar outgroup members(van Knippenberg & Schippers, 2007).

Members of groups identfiy with, trust and associate themselves with similar individuals, therefore, diversity leads to a lack of cohesion as a result of social catergorization.

Diverging interests and the monitoring role

The agency theory as postulated by Jensen and Meckling (1976) explains how divergent and misaligned goals between managers and shareholders give rise to the agency problem whereby managers at times may exhibit self-interested behavior at the cost of shareholders. According to Aldamen, Hollindale, and Ziegelmayer (2018), the board of directors and the various subcommittees that pertain to the board of directors function as monitoring mechanisms designed to protect shareholder interest from management on behalf of the shareholders. According to Fama and Jensen (1983) the board of directors and top-level management may however, still chose to collude. Furthermore the authors suggests that corporate governance mechanisms control for this risk. Adams and Ferreira (2009) postulate the argument that since female directors do not identify with the "old boys club", female directors may better fulfill the role of being an

independent director. This point of view is supported by the works of Pathak et al.,(2021).

The decrease in team cohesiveness among audit committee members as an effect of introducing women to the audit committee can be explained by the group think theory (Janis, 1971). Groupthink as presented by by Janis (1971) explains that *"the symptoms of groupthink begin to arise when members of decision-making groups become motivated to avoid being too harsh in the judgement of their leaders' or their colleagues' ideas."* (Janis, 1971, p. 84).

The theory of groupthink further explains that decision makers exhibiting group-think behaviour tend to seek concurrence and avoid conflicts and disagreements among one-another, as a result individual critical thinking is subsituted by consensual validation among decision makers within a group. This supports the notion that inter group variety and diversity better avoids committees from falling into the habits of groupthink.

Given the board of directors overall monitoring role and also considering that the audit committee's role as a subcommittee of the board of directors is financial oversight and monitoring; the audit committee is responsible for the financial statements insofar as accuracy and being free of accounting irregularities (Arthaud-Day et al. 2006; Bruynseels and Cardinaels 2014; Cowen and Marcel 2011; Srinivasan 2005, as cited in Pathak et al., 2021 p. 902). The social categorization theory postulates that

"The interpersonal conflict and low trust stimulated by relational diversity makes it difficult to engage the entire committee in collusion (thus reducing the likelihood of fraud)" (Pathak et al., 2021 p. 905). This stenghtens the basis of my theory that gender diversity functions as a corporate governance mechanism which theoretically should increase financial reporting quality. Pathak et al., (2021) further explain that it is not necessary for the entire audit committee to collaboratively synergize in order to prevent fraud. A single director becoming suspicious and asking probing questions to employees and managers increases the detection of fraudulent activity and reduces the likelyhood of fraudulent activity taking place (Compernolle 2018; Folau et al. 2019, as cited in Pathak et al., 2021 p.905).

2.2 Restatements

Given the fact that the dependent variable within this study; restatements represents financial reporting quality, I shall explain how restatements are related to financial reporting quality. As Pathak et al, (2021) expressed, financial restatements indicate financial and ethical shortcomings, and lead to scrutiny of management as well as the monitors which are internally implemented as a vanguard of financial reporting quality. This is also supported by Oradi and Izadi (2020) stating that restatements are indicative of poor financial reporting in previous periods. Among other reasons, audited financial statements are subject to restatements due to a). misapplication of accounting principles and approaches or b). aggressive accounting practices. These are not befitting phenomena which pertain to high financial reporting quality. Au contraire, these characteristics may raise concerns among financial statement users.

2.3 Board of director gender diversity, board member characteristics and how these relate to financial reporting quality

According to (Turner & Vann, 2010, p. 68), "The purpose of an audit committee includes *assisting in board oversight of integrity of the company's financial statements*". This aligns with the agency theory Jensen & Meckling (1976); Fama & Jensen (1983) which present corporate governance as tools to mitigate opportunism on management's behalf. As previously alluded to, Aldamen et al, (2018) among various other studies suggests that corporate governance mechanisms may control self-interested behavior from management.

Wahid (2019) states that the notion that diversity improves governance stems from two trains of thought. One of which being that a larger pool of candidates are considered for directorship positions within a given board, leading to a more competent board composition. Secondly the change in board dynamics is believed to influence the general functionality of the board of directors. Taking groupthink theory into consideration while also considering personality characteristics which are inherent traits that are causal to the creation of the dynamics between males and females such as females generally being more risk averse and conservative with regard to financial issues as compared to their male counterparts Oradi & Izani (2019). It becomes clear why studies have found board diversity to positively influence financial reporting quality. Female agreeableness in contrast to males being more disagreeable and better monitoring capability by females may also influence internal financial oversight as females may encourage working more

task oriented toward improving financial reporting accuracy. (Oradi & Izani, 2020; Pathak et al., 2021).

2.4 Audit committee diversity and restatements

Oradi an Izani (2020) found that the presence of at least one female member among the audit committee reduces the likelihood of financial restatements. This is consistent with the rationale postulated by Pathak et al., (2021) who goes as far as to refer to the audit committee as a specialized watchdog as a financial monitor next to the board of directors general responsibilities towards shareholders.

Given the board of directors overall monitoring role and also considering that the audit committee's role as a subcommittee of the board of directors is financial oversight and monitoring; the audit committee is responsible that the financial statements are accurate and free of accounting irregularities (Arthaud-Day et al. 2006; Bruynseels and Cardinaels 2014; Cowen and Marcel 2011; Srinivasan 2005, as cited in Pathak et al., 2021 p. 902).

Taking into consideration the theory of groupthink by Janis (1971) which explains that decision makers might make less critically assessed decisions due to group conformity, while simultaneously taking imto account how social categorization theory (van Knippenberg and Schippers, 2007), supplemented by gender socialization theory (Feingold, 1994; Costa et al., 2001) describes how group diversification changes the social dynamics within groups, I theorize that audit committee gender diversity as well as board of director gender diversity both have a negative affect on the incidence of financial statement restatements, with this study I aim to measure the extent by which this holds true.

2.5 Hypothesis formulation

I propose the following hypotheses to evaluate the relationship between a). audit committee gender diversity and financial statement restatements as well as b). board of director gender diversity and financial statement restatements.

H1: Audit committee gender diversity is negatively associated with restatements within US-based firms.

H2: Board of Director gender diversity is negatively associated with restatements within US-based firms.

Chapter 3: Methods

<u>3.1 General information and dependent variable</u>

In order to test my hypotheses and following the works of Wahid (2019); Oradi and Izani (2020); Felix, Pevzner and Zhao (2021), a binary logistic model is utilized where I take into consideration the independent and control variables along with industry and year dummies, which are regressed to the dichotomous dependent variable "Restatements" meaning that if a given firm restates its financial statements for the year "t", this shall be denoted as a 1 and 0 if otherwise. The type of model utilized for this study is a fixed effects model on panel data which includes industry and year fixed effects, the model measures the effects of gender diversity on a Board of Director level as well as the Audit committee level on the incidence of financial statement restatements. The statistical analysis was conducted on EViews and Stata.

The model is described as the following:

REST= β0+ β1FAC+ β2WFBD+ β3GROWTH+ β4ROA+β5ACCRUALS + β6ACSIZE+ β7LEV+ β8SIZE+ β9FEE+ ε + Industry dummies + Year Dummies

Tables 3.1a and 3.1b provide an overview of the variable definitions and their respective measurements.

Table 3.1a Model specification

RESTATEMENT = β0+ β1FAC+ β2WFBD+β3GROWTH+ β4ROA+β5ACCRUALS + β6ACSIZE+ β7LEV+ β8SIZE+ β9FEE+ YEAR DUMMIES + INDUSTRY DUMMIES + ε

Where:

REST = Indicator variable equal to 1 for firms which have issued a restatement and 0 if otherwise (Audit Analytics).

β0= Constant

FAC= Fraction of female board members within the audit committee relative to the total amount of members within the audit committee (BoardEx).

WFBD= Fraction of female director proportion relative to board of director committee positions while excluding the audit committee.

GROWTH = The change in annual sales revenue (Compustat).

ROA= Net income divided by total assets (Compustat).

ACCRUALS= The total accruals to sales calculated as net income minus cash flow from operating activities divided by the lagged total assets (Compustat).

ACSIZE= The natural logarithm of the sum of audit committee members (BoardEx).

LEV= Long term debt divided by average total assets (Compustat).

SIZE= The natural logarithm of total assets (Compustat).

FEE= The natural logarithm of the audit fees incurred during a given fiscal year. (Audit Analytics)

YEAR DUMMIES= Year dummy variables per given year.

INDUSTRY DUMMIES= Industry dummy variables per given industry based on standard industry code classification.

ε = Variables that the model fails to capture

Table 3.1b Measurement of the variables.

Variable	Measurement
RESTATEMENT (REST) = Indicator variable equal to 1 for firms which have issued a restatement for a given year and 0 if otherwise (Audit Analytics).	Pre-existing data extracted from Audit Analytics database.
Audit committee gender diversity (FAC)	Fraction of females within audit committee scaled by the total amount of members within the audit committee. (Boardex)
Board gender diversity (WFBD)	Diversity within the board of director committees while excluding audit committee diversity from the calculation. (Boardex)
Leverage (LEV)	Debt divided by the total equity (DLTT+LCT)/AT from CompustatItems.
Firm Size (SIZE)	The natural logarithm "ln(at)" of the total assets of the firm AT from CompustatItems.
ROA	Net income (NI) divided by total assets (AT) of the firm (Compustat).

Audit Committee Size (ACSIZE)	The natural logarithm of the total amount of members within a given audit committee.
Accruals	Net income (NI) – cash flow from operation activities (OANCF) /Lagged total assets (TA_{-1}).
Growth	Current period revenues less prior period revenues ($RECT – RECT_{-1}$) (Compustat).
FEES	The natural logarithm of audit fees retrieved from Audit Analytics ln(auditfees).
YEARDUMMIES	Indicator variable for a given year, a total of 14 year dummy variables were created.
INDUSTRYDUMMIES	Indicator variable for a given industry based on SIC categorization, a total of 9 industry dummy variables were created.

3.2 Independent variables

The first independent variable audit committee gender diversity (FAC) is measured by the total amount of females within the audit committee, scaled by the total amount of audit committee members. Audit committee gender diversity is then expressed as the fraction of females within the audit committee relative to the total amount of audit committee members.

The second independent variable to be measured; board of director gender diversity (WFBD) is measured by the total amount of female board of director committee occupation scaled by the total amount of board of director committee positions while excluding both male and female audit committee positions from the calculation. Following my hypotheses that both audit committee gender diversity as well as board of director gender diversity are negatively correlated

with the incidence of financial statement restatements, I predict the coefficients for both independent variables are significant and negative when the regression is conducted.

3.3 Control variables

In order to mitigate the effect of other variables influencing the results, various control variables which have been shown to be related to the incidence of financial statement restatements as listed in the works of Abbott, Parker, and Presley (2012); Oradi and Izani (2020); Felix, Pevzner and Zhao (2021) have been added to the regression model. These controlled for variables include; Leverage (LEV), Firm Size (SIZE), Return On Assets (ROA) , Audit Committee Size (ACSIZE), Accruals, Growth, and Audit Fees (FEES).

See tables 3.1a and 3.1b for a breakdown of the variables and the measurements of said control variables.

3.4 Data collection and sample selection

The collected data to be analyzed in this study is secondary data which pertains to the Wharton Research Data Services (WRDS) data center. My sample consists of data from three different sources found on WRDS. Data on restatements were retrieved from Audit Analytics, financial information from Compustat/Capital IQ, the nonfinancial information was gathered from the BoardEX database. For this study, the initial sample consists of all listed companies within the Compustat database between 2007-2020.

Initially 129.639 firm-year observations were extracted from Compustat. After removing missing data, 18.977 firm-year observations are taken into account for the study, please see table 3.2 for a more detailed overview of how the final sample size is determined.

Table 3.2 Sample selection procedure

Criteria	Observations
Initial Sample 2007-2020	129.639
Less: null values for restatements	(76.525)
Less: null values for gender information	(31.818)
Less: financial firms (SIC60...-67...)	(2.319)
Final sample	**18.977**

Chapter 4 Results

4.1 Descriptive statistics

The study consists of panel data covering 18.977 firm-year observations dating from 2007-2020. Of the 18.977 firm year observations taken into account for this study, 1.830 of these observations pertain to restated financial statements which corresponds with the mean value of 9.64%, this mean value is considerably lower than the results of studies conducted in less developed countries such as Nikbakht and Rafiee(2013) as cited in Oradi and Izani, (2020); Oradi and Izani, (2020) whom had respectively found a mean value of 79% and 66.47% for restatements in their studies. The mean value in this study is closer in proximity to the findings of Barton et al., (2017) and Felix et al., (2021) whom had found a mean value of 9.1% and 15.5% respectively for restatements using Compustat information. This implies that socio-cultural factors significantly influence financial reporting quality as archival data from these differing geographical backgrounds have such a disparity in the findings. Regarding the independent variables; Audit committee gender diversity and board of director gender diversity. It can be deduced based on the mean values, that both domains are generally male dominant as the mean values for both variables are 13.8 percent implying that out of 100 audit committee and/or board of director committee positions, 14 of these positions are occupied by women, whereas roughly 86 of 100 board of director or audit committee positions are occupied by males. The median value for the fraction of females within the audit committee further shows that from the entire sample at least half of the audit committees observed on a firm-year level had no female members as the median value indicated for this variable is 0.00.

The descriptive statistics of the variables which are relevant to this study can be found in table 4.1 where certain key statistics such as the first quartile, mean and third quartile are displayed.

Table 4.1 Descriptive Statistics

Variables	N	Median	Mean	SD	Minimum	Q1	Q3	Maximum
Accruals	18,977	-0.06	-0.08	0.09	-0.34	-0.11	-0.03	0.07
Acsize	18,977	1.39	1.38	0.30	0.00	1.1	1.61	3.00
Fee	18,977	14.00	13.94	1.23	8.52	13.14	14.76	17.57
FAC	18,977	0.00	0.14	0.17	0.00	0.00	0.25	1.00
Growth	18,977	0.06	0.09	0.25	-0.35	-0.04	0.18	0.77
LEV	18,977	0.41	0.43	0.25	0.03	0.25	0.57	1.45
Rest	18,977	0.00	0.10	0.30	0.00	0.00	0.00	1.00
WFBD	18,977	0.11	0.14	0.15	0.00	0.00	0.23	1.00
Size	18,977	6.62	6.59	2.07	1.86	5.16	8.02	11.21
ROA	18,977	0.03	-0.03	0.20	-0.72	-0.04	0.07	0.16

Notes: Table 4.1 shows the descriptive statistics for the dependent, independent and control variables included in my model based on the 18,977 firm-year observations. All variables are defined in tables 3a and 3b.

4.2 Analysis

Initial procedures

Prior to the execution of the multivariate logistic regressions and generating the descriptive statistics; all the variables within the model (apart from restatements as this is a binary variable) were plotted in order to identify variables with notable outliers. As a result, outliers were removed from the control variables; size, accruals, lev, growth and roa through winsorization of the lowest and highest 5 percentiles.

Additionally, prior to testing my hypothesis, some tests were conducted in order to establish and verify the integrity of my model.

Correlation analysis

Firstly a correlation test was conducted in order to interpret the levels of correlation between the variables of interest with regard to this study. In this correlation test I check for indication of high correlation by way of looking for correlation levels >0.7 between variables within my model. Table 4.2 displays the correlation coefficients of the 10 variables included in my model. Upon having taken note of the correlation coefficient of 0.86 between the control variables size and fee, a variance inflation factor test was conducted in Stata in order to gain better understanding of the impact of the variables included in the model on restatements. The result of this test was that the variance inflation factors of all of the variables which are regressed on restatements were under the acceptable threshold of 5 with a mean VIF of 2.03 among these variables. Based on the aforementioned, I interpret that the data contains no multicollinearity issues which threatens the integrity of my model.

Table 4.2 Correlation Matrix

	ACCRUALS	ACSIZE	GROWTH	REST	WFBD	ROA	SIZE	FAC	LEV	FEE
ACCRUALS	1.00	-	-	-	-	-	-	-	-	-
ACSIZE	0.07	1.00	-	-	-	-	-	-	-	-
GROWTH	-0.04	-0.10	1.00	-	-	-	-	-	-	-
REST	0.01	-0.01	0.01	1.00	-	-	-	-	-	-
WFBD	0.01	0.17	-0.06	-0.03	1.00	-	-	-	-	-
ROA	0.50	0.2	0.01	-0.01	0.07	1.00	-	-	-	-
SIZE	0.17	0.35	-0.05	-0.03	0.26	0.46	1.00	-	-	-
FAC	0.02	0.16	-0.04	-0.03	0.52	0.07	0.27	1.00	-	-
LEV	-0.12	0.10	-0.03	0.01	0.11	-0.12	0.20	0.12	1.00	-
FEE	0.11	0.32	-0.05	-0.01	0.27	0.31	0.86	0.27	0.26	1.00

Note: This table shows the Pearson correlation matrix which corresponds with the variables within my regression model. This test was conducted in order to gain insight on which variables have a high correlation (higher than 70 percent). Size and fee were deemed to have a high intervariable correlation; an additional variance inflation factor (VIF) test reduced my concerns of multicollinearity.

Hypothesis testing

To evaluate my hypotheses multiple logistic regressions were executed. This is shown in table 4.3 Regression results. Table 4.3 shows the results of 3 regressions, column 1 shows the results of the regression conducted with both independent variables, column 2 omits audit committee gender diversity as an independent variable and only keeps board of director gender diversity as the variable of interest, finally column 3 omits board of director gender diversity as an independent variable and keeps audit committee gender diversity as the variable of interest. The pseudo R-squared of all three of the regressions performed is found to be 0.02 meaning that these regressions are equally as useful in the prediction of the outcome variable; restatements.

Interaction WFBD*FAC

Furthermore, a fourth regression was conducted which included an interaction term WFBD*FAC in order to measure (if any) the interaction effects between the two independent variables i.e.; gain insight as to the effects of gender diverse audit committees vis-à-vis also having a gender diverse board of directors (or vice versa) on restatements. However, seeing as the interaction term WFBD*FAC does not qualify to be statistically significant at the 1-percent, 5-percent or 10-percent level and therefore does not support that gender diverse board of directors and gender diverse audit committees interact with one-another, nor impacts the significance level of any variables of interest; I opt to exclude presenting the interaction term within my model as the interaction term was not presented as a hypothesized variable but rather included to gain better understanding of my main results.

Empirical results from independent variables

The results of this study show that although indeed negative as predicted, the coefficients of both independent variables; audit committee gender diversity as well as board of director gender diversity are found to be non-significant.
Upon further inspection it can be noted that the coefficients of the dependent variables audit committee gender diversity and board of director gender diversity are shown to be insignificant for all 3 of the executed OLS regression which is consistent with the insight gained from my fourth regression model which also includes the interaction term WFBD*FAC which I did not find to be statistically significant. Therefor I conclude that gender diversity on the board of director level, and specifically within the audit committee does not have sufficient measurable influence on the incidence of financial statement restatements, furthermore it can be inferred that the hypothesized variables do not have any significant moderating influence on one-another. Therefore, I Reject both of my postulated hypotheses;

H1: Audit committee gender diversity is negatively associated with restatements within US-based firms.

H2: Board of Director gender diversity is negatively associated with restatements within US-based firms.

Table 4.3 Regression Results

Dependent Variable: Restatements

	Model 1	**Model 2**	**Model 3**
Omitted IV	(none)	(fac)	(wfbd)
Constant	-5.34***	-5.33***	-5.32***
Fac	-0.15	-	-0.21
Wfbd	-0.16	-0.24	-
Control variables			
Accruals	0.03	0.03	0.03
Acsize	-0.01	-0.01	-0.01
Fee	0.12***	0.12***	0.12***
Growth	0.05	0.05	0.06
Lev	0.10	0.10	0.11
Roa	0.00253	0.00527	0.00331
Size	-0.10***	-0.10***	-0.10***
Industry FE	YES	YES	YES
Year fixed effects	YES	YES	YES
Pseudo-R2	0.02	0.02	0.02
Observations	18, 977	18,977	18,977

Note: Table 4.3 displays the results of the 3 ordinary least squares (OLS) regressions which were executed in order to conduct the analysis. Restatements are employed as a proxy for financial reporting quality in order to estimate the effects of gender diversity. The first row; omitted independent variable (IV) shows which independent variable was excluded for the variation of the regression.
 ***, **, * indicate significance at the 1%, 2% and 5% levels, respectively.

Ch5: Conclusion

This study is designed to determine the effects of gender diversity both on a board of director level as well as the audit committee level on financial reporting quality hence I determined my research question: "What is the impact of board gender diversity and audit committee gender diversity on financial reporting quality within US-based firms?" to be appropriate.

This study answers this question by cleaving the research question into two sub-questions, from these sub-questions I derived my two hypotheses. My first hypothesis postulated that audit committee gender diversity is negatively correlated to the incidence of financial statement restatements as a proxy for financial reporting quality within US based firms. My second hypothesis postulated that board gender diversity is negatively correlated with the incidence of financial statement restatements as a proxy for financial reporting quality within US based firms.

Main results

The results of this study found that no significant link can be drawn between board of director gender diversity and financial reporting quality nor audit committee gender diversity and financial reporting quality.

Regarding the board of director level, this result challenges the findings of previous studies (Abbott et al., 2012; Wahid, 2019) whom found a negative relationship between gender diverse board of directors and the likelihood of financial statement restatements.

The results of this study also challenges the findings of previous studies (Oradi & Izani, 2020; Pathak et al., 2021) on the relationship between audit committee gender diversity and financial statement restatements.

When considering prior literature this study looks further than just board gender diversity (Abbott et al. 2012) by also considering audit committee gender diversity and the interaction between these two variables of interest. This study finds evidence based on newer data as compared to outdated sampling periods Wahid, 2019; This study vastly improves on sampling restrictions Abbott et al. 2012; Oradi & Izani, 2020; and also inspects data in a US context.

Contribution

Therefore, this study contributes to the body of existing literature not only by determining the effects of the two independent variables of interest: a). audit committee gender diversity, b). board of director gender diversity on financial reporting quality but also inspected whether as board of directors diversify their gender composition within both the board of directors as well as the audit committee if the monitoring role of the board of directors/audit committee as corporate governance mechanisms is affected i.e., the interaction effects of the independent variables.

Finally, this study provides evidence on the effects of gender diversity on both the board of directors level as well as the audit committee level on financial reporting quality proxied by restatements using a). a larger sample size than the previously aforementioned studies which supports more robust results, b). more recent data within firm-year observation than prior studies (Oradi & Izani, 2020; Pathak et al., 2021).

Suggestion for practice

My results imply that gender diversity on the board of director and also the audit committee level does properly serve as a functional corporate governance mechanism capable of increasing financial reporting quality. Therefore, the appropriate suggestion to practice is that other corporate goverance mechanisms should be considered in order to increase financial reporting quality at the best intererst of the users of financial statements.

Suggestions for further research

The contradicting results of this study as compared to prior research may be attributable to the fact that my study examines newer data as compared to other studies.
Another possible reason could be a lack of corporate governance control variables within my model such as CEO duality which were exempted from the model due to limitations with regard to data. Therefore, I suggest that future works on gender diversity include ample corporate governance control variables to enhance the explanatory power of their model.

References

1. Abbott, L. J., Parker, S., & Presley, T. J. (2012). Female Board Presence and the Likelihood of Financial Restatement. *Accounting Horizons Vol. 26, No. 4*.

2. Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics, 2009, vol. 94, issue 2*, 291-309.

3. Aldamen, H., Hollindale, J., & Ziegelmayer, J. L. (2018). Female audit committee members and their influence on audit fees. *Accounting and Finance, 2018, vol. 58, issue 1*, 57-89.

4. Ang, J., Cole, R., & Lin, J. (1999). Agency Costs and Ownership Structure. *The Journal of Finance*.

5. Barton, J., Burnett, B. M., Gunny, K., & Miller, B. P. (2017). Separating the Probability of Committing and Detecting Restatements: Evidence from Auditor Attributes and Accounting Quality.

6. Costa Jr, P. T., Terracciano, A., & McCrae, R. R. (2001). Gender differences in personality traits across cultures: robust and surprising findings. *Journal of personality and social psychology, 81(2)*.

7. Dalton, D. R., Daily, C. M., Johnson, J. L., & Ellstrand, A. E. (1998). Meta-analytic reviews of board composition, leadership structure, and financial performance. *Strategic Management Journal 19(3)*, 269–290.

8. Fama, E. F., & Jensen, M. C. (1983). Separation of Ownership and Control. *Journal of Law and Economics, Vol. XXVI, June 1983*.

9. Feingold, A. (1994). Gender differences in personality: A meta-analysis. *Psychological Bulletin, 116(3)*, 429-456.

10. Felix, R., Pevzner, M., & Zhao, M. (2021). Cultural Diversity of Audit Committees and Firms' Financial Reporting Quality. *ACCOUNTING HORIZONS American Accounting Association Vol. 35, No. 3*, 143-159.

11. G., J. S., Karen, S., & Hill, A. D. (2013). Board Composition Beyond Independence: Social Capital, Human Capital, and Demographics. *Journal of Management, 39*, 232-262.Ghosh, A., Marra, A., & Moon, D. (2010). Corporate Boards, Audit Committees, and Earnings Management: Pre- and Post-SOX Evidence. *Journal of Business Finance & Accounting, 37(9) & (10)*.

12. Janis, I. L. (1971). Groupthink 5(6). *Psychology Today*, 43-46.

13. Jensen, M. C., & Meckling, W. H. (1976). THEORY OF THE FIRM: MANAGERIAL BEHAVIOR, AGENCY COSTS AND OWNERSHIP STRUCTURE. *Journal of Financial Economics 3 (1976) 305-360.*

14. Man, C.-k., & Wong, B. (2013). Corporate Governance And Earnings Management: A Survey Of Literature. *The Journal of Applied Business Research – March/April 2013*.

15. Oradi, J., & Izani, J. (2020). Audit committee gender diversity and financial reporting: evidence from restatements. *Managerial Auditing Journal Vol. 35 No. 1*, 67-92.

16. Pathak, S., Li, M., & Samba, C. (2021). Audit Committee Diversity and Financial Restatements. *Journal of Management & Governance*, 899-931.

17. van Knippenberg, D., & Schippers, M. (2007). Work Group Diversity. *Annual Review of Psychology, 58*, 515-541.

18. Wahid, A. S. (2019). The Efects and the Mechanisms of Board Gender Diversity: Evidence from Financial Manipulation. *Journal of Business Ethics*, 705-725.

19. Weisberg, Y. J., Deyoung, C. G., & Hirsh, J. B. (2011). Gender Differences in Personality across the Ten Aspects of the Big Five. *Frontiers in psychology, 2*.

20. Zheng, K., Zhang, Z., & Song, B. (2020). E-commerce logistics distribution mode in big-data context: A case analysis of JD.COM. *Industrial Marketing Management, Volume 86*, 154-162.

21. Zhu, D. (2013). Group Polarization on Corporate Boards: Theory and Evidence on Board Decisions about Acquisition Premiums. *Strategic Management Journal. 34.*