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Abstract

This paper examines the association between audit partner gender and client financial reporting quality. I hypothesize that audit engagements with a Big 4 female audit partner will exhibit higher financial reporting quality than with other auditors. I test my hypothesis by estimating a multivariate ordinary least squares regression model. Consistent with my hypothesis, the results indicate that female auditors within the Big 4 accounting firms have the lowest discretionary accruals.

Keywords

Audit partner, Gender, Reporting quality, Big 4, Discretionary accruals

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Abstract

This paper examines the association between audit partner gender and client financial reporting quality. I hypothesize that audit engagements with a Big 4 female audit partner will exhibit higher financial reporting quality than with other auditors. I test my hypothesis by estimating a multivariate ordinary least squares regression model. Consistent with my hypothesis, the results indicate that female auditors within the Big 4 accounting firms have the lowest discretionary accruals.

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1 INTRODUCTION

This paper aims to examine the association between audit partner gender and client financial reporting quality. Motivation for this study comes from existing research exploring gender roles in the accounting profession. Prior research has shown that females are more risk averse and conservative, and other studies have shown that male and female auditors respond to information differently[1]. While some studies focus on the differences of gender, there is no research surrounding audit partner gender as it relates to firm size and accounting quality.

Consistent with my hypothesis, the results indicate that female auditors within the Big 4 accounting firms have the lowest discretionary accruals. In other words, female audit partners who work for one of the Big 4 accounting firms have clients that exhibit the highest financial reporting quality relative to other clients.

This paper provides new contributions to the existing literature by expanding on previous studies and providing new insights into the factors that contribute to a client's reporting quality. Past research has explored the relationship between audit partner gender and CFO gender in terms of accounting quality. This paper shows a correlation between audit partner gender, firm size, and accounting quality.

2 LITERATURE REVIEW

Looking at the differences between male and female auditors, the selectivity model shows that males are more selective information processors than females. Males are less likely to look comprehensively at information and rather focus on cues that are readily available or only lead to single inferences[2]. Women, on the other hand, attempt to comprehend all available information and are more likely to notice subtleties. Based on the selectivity model, research finds that males are more likely to outperform females when tasks are of low complexity, but females outperform males when the tasks become more complex[3]. The gender role socialization theory suggests that people acquire emotions, attitudes, and behaviors that are consistent with their gender due to the surrounding environment and culture. Using this theory, studies show that males are more goal-oriented while women prefer to be more democratic and communicative[4]. Theory further suggests that women are more ethical than men, and research confirms that females are less concerned with the commercial, revenue generating side of auditing and are more focused on the quality of the audit[5]. The organizational theory helps to explain the behavior of individuals and groups who interact with each other while striving to reach a common goal. This theory suggests that females are better able to facilitate "tough" decision making and improve organizational outcomes compared to their male counterparts[6]. These cognitive theories are significant when it comes to audit quality since audits require many situations for human judgement.

Additional research shows that if auditors learn their superior partners' viewpoints prior to making their own decisions and judgements, they are influenced by the audit partner. This can be correlated to the theory of motivated reasoning where people have an unconscious bias to interpret information in a way that aligns with their own goals. Kunda[7] found that motivated reasoning can drive cognitive biases in auditing, and additional research shows that auditors will change their original opinions based on learning the judgements of their partners[8]. Motivated reasoning not only explains why an auditor may take their partner's word at face value, but it can also explain why auditors may convince themselves that a client is being reasonable without practicing appropriate professional skepticism. Additionally, the lead audit partner has the responsibility to determine the type of audit report issued and can suffer serious consequences if there are failures. Therefore, there is much at stake for the audit partner both personally and professionally when it comes to making decisions about the audit. Prior research suggests that males and females make different overall audit decisions which can affect the audit quality and the type of audit report issued[6]. Gender roles can affect the financial reporting quality of the client as well since females are more risk averse, conservative, and likely to follow rules and regulations.

Prior research argues that auditor characteristics affect the audit quality. Studies have found that Big 4 accounting firms have higher-quality audits than non-Big 4 firms since larger firms have a greater incentive to detect and reveal misreporting[9]. DeAngelo[10] shows that the greater number of clients an auditor has, the higher the audit quality will be. Big 4 firms typically have more clients, and auditors at those firms have less incentive to behave opportunistically since there are more clients to financially support them. The larger firms have more to lose if they supply a lower than expected quality of an audit since they have a greater reputation at stake that spans a larger number of clients. Additionally, other studies use the presence of litigation as an indicator of audit quality. Studies show that non-Big 4 firms experience more litigation issues than Big 4 firms despite larger firms having more money available for litigation cases[11]. Since non-Big 4 firms face more litigation issues, it suggests that their audit quality is lower than Big 4 firms. Finally, other research has shown that companies audited by Big 4 firms have a higher earnings response coefficient than ones audited by non-Big 4 firms, thereby showing that Big 4 firms have higher accrual and audit quality[12]. Based on this, researchers predict that non-Big 4 auditors will report higher discretionary accruals than firms with Big 4 auditors[9]. However, it is not only the environment and size of the firm that can affect audit quality.

Research also shows that gender can affect audit quality. Following prior studies, audit quality has been measured by the likelihood of an auditor issuing a disclosure, called a "going concern opinion," that is made when the auditor believes there is substantial doubt that the company will continue into the future. The audit quality is higher when an auditor issues a going concern opinion when the company is in financial distress[5]. Researchers hypothesize that females will issue a going concern opinion more often than males when a firm is in financial distress since females are more ethical and less concerned with generating revenues[5]. The researchers use a sample of 7,105 private, financially distressed Belgian companies to run a multiple regression testing a gender variable that is 1 if the audit engagement partner is female and 0 if it is male. The results support the hypothesis and find that females are more likely to issue a going concern opinion even when the client is high risk or important for generating revenue. Based on the results, the researchers suggest that females produce higher quality audits since they are more risk averse and less willing to impair independence[5]. However, a different study suggests that females are less likely to issue a going concern opinion when the company is in financial distress[6]. The study concluded that males and females make different audit decisions based on their differing risk tolerance levels and that these decisions can influence audit quality. Notably, these opposing studies were conducted in different countries, and varying results could speak more to gender norm differences in the countries rather than the audit quality. The research notes that females use more precise information to make decisions which could explain why researchers in this study found that females are more hesitant to issue a going concern opinion than males. Regardless of the conflicting findings, both studies note that females are more risk averse and offer a consensus that gender plays into an auditor's role on the engagement.

Another study focuses on whether there are systematic differences in financial reporting choices in the context of accounting conservatism between male and female CFOs[1]. The study researches whether female CFOs are more sensitive to certain types of risk than males. The researchers hypothesized that when a firm changes from a male to a female CFO, the female CFO will implement more conservative reporting procedures than her predecessor. The hypothesis was tested using a sample of 974 firm observations with "92 cases of male to female transitions" in addition to 4,239 other firm observations with 353 male to male transitions and 421 female to male transitions[1]. In multivariate analyses, controlling for profitability, leverage, and research and development, among other variables, they find that female CFOs are more conservative in financial reporting decision making than males; however, this increase in conservatism cannot be explained by corporate governance. The results also find that females report more conservatively when there is higher default risk, systematic risk, and management turnover risk[1]. Contrary to the general tendency of managers seeking to report financial results that present a more favorable view of a company regardless of its true performance, conservative reporting is often preferred because it provides users of financial statements with the "worst case scenario" without instilling a false sense of security for the future. Additionally, conservatism encourages management to be more cautious when making operational decisions that will improve the likelihood that a company experiences positive financial performance. This study contributes to the literature because it examines how characteristics and styles of management can affect financial reporting policies and accounting conservatism. These different characteristics can relate to how males and females respond to earnings management, the use of accounting reporting techniques to portray financial statements in an overly positive way. Since females are more risk averse and more likely to follow rules and regulations, studies find that women are less likely than men to manage both discretionary accruals and real activity operations to avoid losses[13]. Because females tend to be more ethical, research suggests that the risk and possible unethical decision to manage earnings deters females more than males from engaging in earnings management. Regardless, several motivations for earnings management still exist. A main motivation is due to pressure from a third party. Research shows that managers are often under great stress from stakeholders and the board to improve company performance. There can be incentives to avoid a debt covenant violation, an agreement that a company will operate within certain rules from its lenders, or to lower the tax burden. This pressure can come from within the organization as well in order to meet internal goals, and often there is a personal incentive for executives to perform successfully which can lead to earnings management to meet benchmarks[14]. Based on these studies, the gender of an auditor may influence client outcomes since females are less likely to engage in and tolerate earnings management.

Not only does research examine the role gender plays in conservative policy choices, but studies also observe the effect of CFO gender on accruals quality. The interest in CFO gender comes after accounting scandals like Enron and the need for CFOs to personally sign off on financial statements. Prior research finds that women tend to be less aggressive in ambiguous situations than men and are more likely to be in compliance with rules and regulations[15]. Based on these factors, the researchers hypothesize that female CFOs would have higher accruals quality. The researchers test their hypothesis using a sample of 2,781 firms over the years of 2004-2005 for their multivariate analyses. The model controls for variables such as total assets, book value of equity to market value, revenue growth, return on assets, operating cash flow, debt to equity, operating cycle, and if the firm was audited by a Big 4 auditor. The research concludes that female CFOs have lower accrual estimation errors and lower absolute abnormal accruals, thereby confirming the hypothesis. Since females are more risk averse than males, females are less likely to overestimate accruals. Risk aversion is seen in women even after controlling for factors such as age, income, and marital status.

3 HYPOTHESIS AND METHODOLOGY

This study explores whether a client's financial reporting quality is associated with the audit partner gender and firm size. Because females are more risk averse, I believe that female audit partners will more strictly enforce conservative accounting policies and will ensure that all rules are being followed. Female audit partners will likely be less flexible with client estimates and require more detail to support estimations. Since females are less focused on the commercial side of auditing, it is likely that they are more concerned with providing accurate information to financial statement users than pleasing their clients. Females are likely less influenced by their clients and will not facilitate misreporting just so the client can reach its reporting objectives. Additionally, since females can better navigate difficult decision making and tend to be more ethical, it is likely that females will not cut corners and will be more willing to report fairly and correctly. Auditors at Big 4 firms have been shown to have higher audit quality because they face fewer litigation issues than non-Big 4 firms. Similar to females, Big 4 auditors in general are less likely to be influenced by their clients since they have more clients that they work for. Big 4 auditors also have a greater reputation at stake that they must not harm by behaving opportunistically. Because women are more risk averse and more often use conservative accounting and Big 4 firms have been proven to have higher audit quality, I state my hypothesis as follows in alternative form:

H1: *Audit engagements with a Big 4 female audit partner will exhibit higher financial reporting quality than those of other audit partners.*

I obtain audit partner information and other audit firm data from Audit Analytics and client data for model variables from Compustat for public companies headquartered in the U.S. from the years 2016 to 2018. I manually code partner gender and use various websites to verify gender for partner names when there are discrepancies. I exclude firm-year observations of regulated firms (i.e., financial institutions and utility firms) due to their unique reporting standards and regulatory requirements. My final sample consists of 6,873 client-year observations (2,914 unique clients).

To study whether female and male audit partners have clients with different levels of earnings management, audit partners will be classified as male or female based on the disclosed engagement partner informa-

Variables	Female Audit Partner 2016: n = 322 2017: n = 402 2018: n = 372				Male Audit Partner 2016: n = 1,672 2017: n = 2,149 2018: n = 1,956				Test of Difference between Mean (Median)
	Mean	Q1	Median	Q3	Mean	Q1	Median	Q3	p-Values
ABS_DD	0.1512	0.0273	0.0686	0.1573	0.1444	0.0256	0.0613	0.1422	< 0.01
AU	0.6825	0.0000	1.0000	1.0000	0.6256	0.0000	1.0000	1.0000	0.10
SIZE	6.0301	4.5725	6.2592	7.6961	6.0066	4.2943	6.2870	7.7977	0.01
BM	0.3736	0.1299	0.3214	0.6413	0.3263	0.1302	0.3185	0.6137	0.91
SGROWTH	0.2303	-0.0390	0.0627	0.2136	0.2257	-0.0306	0.0694	0.2147	0.57
ROA	-0.2103	-0.1983	0.0091	0.0592	-0.2394	-0.1589	0.0134	0.0675	< 0.01
OCF	-0.0838	-0.0655	0.0595	0.1143	-0.0937	-0.0381	0.0632	0.1165	< 0.01
OCF^2	0.3073	0.0037	0.0114	0.0412	0.4066	0.0036	0.0109	0.0328	< 0.01
DE	0.4966	0.0000	0.2086	0.7501	0.5009	0.0000	0.2059	0.7990	< 0.01
OPCYCLE	3.3853	0.0000	4.4851	5.0094	3.5993	0.0000	4.5587	5.1102	0.14

Variable Definitions:

ABS_DD = absolute value of accrual estimation errors using the Dechow and Dichev model[16];

AU = indicator variable takes a value of 1 if the firm is audited by one of the Big 4 auditors and 0 otherwise;

SIZE = natural logarithm of market value of equity;

BM = ratio of book value of equity to market value;

SGROWTH = changes in current year's sales divided by lagged sales;

ROA = return on assets measured as earnings before extraordinary items divided by average total assets;

OCF = operating cash flow scaled by lagged assets;

DE = debt-equity ratio; and

OPCYCLE = natural logarithm of the length of operating cycle measured as the sum of average days of account receivable and average days of inventory.

Table 1 Descriptive Statistics

tion to the PCAOB and various company websites. This study will examine the engagement partners' clients by focusing on factors such as discretionary accruals, real earnings management, and the issuance of going concern comments between male and female partners to determine varying levels of financial reporting quality.

3.1 Regression Model

I conduct a multiple regression model using ordinary least squares to test my hypothesis that audit engagements with a Big 4 female audit partner will have higher financial reporting quality. I employ an augmented regression model of Barua et al.[15] as follows:

$$\begin{aligned} ABS\_DD_{it} = {} & \alpha_0 + \alpha_1 PTRNR\_GENDER_{it} + \alpha_2 AU_{it} \\ & + \alpha_3 SIZE_{it} + \alpha_4 BM_{it} + \alpha_5 SGROWTH_{it} \\ & + \alpha_6 ROA_{it} + \alpha_7 OCF_{it} + \alpha_8 OCF_{it}^2 + \alpha_9 DE_{it} \\ & + \alpha_{10} OPCYCLE_{it} + \epsilon_{it} \end{aligned}$$

4 RESULTS

4.1 Sample and Descriptive Statistics

Table 1 lists the descriptive statistics for the dependent and independent variables. The data is split based on audit partner gender. Female audit partners make up 16% of the total data over the three-year period. The mean absolute value of accrual estimation errors is 0.1512 for firms with female audit partners compared to 0.1444 for firms with male audit partners. Additionally, the median is 0.0686 for firms with a female audit partner and 0.0613 for firms with a male audit partner. This table also provides the mean and median for the control variables.

4.2 Hypothesis Test

Table 2 shows the results from the multivariate regression using the dependent variable of ABS_DD. The coefficients SIZE, BM, SGROWTH, ROA, and OCF are statistically significant based on the p-value and have signs that are consistent with prior research. The coefficient for partner gender is opposite from the predicted sign. However, it is still significant with a *p*-value of 0.0490.

Table 3 shows the results from the multivariate regression using ABS_DD as the dependent variable and the interaction term AU_GENDER, which is calculated by multiplying the AU and the PTRNR_GENDER variables together. The coefficient AU_GENDER is statistically significant and consistent with my hypothesis.

		ABS_DD	
Variables	Predicted Sign	Coefficient	*p*-Value
Intercept	?	0.2242	< 0.0001
PTRNR_GENDER	-	0.0172	0.0490
AU	-	-0.0170	0.0620
SIZE	-	-0.0245	< 0.0001
BM	-	-0.0283	< 0.0001
SGROWTH	+	0.0340	< 0.0001
ROA	-	-0.1720	< 0.0001
OCF	?	0.0994	< 0.0001
OCF^2	+	0.0037	0.1860
DE	?	0.0002	0.9040
OPCYCLE	+	0.0039	0.0370
R Squared	36.81%		
No. Observations	6,873		

Table 2 Regression of Absolute Value of Accrual Estimation Errors

		ABS_DD	
Variables	Predicted Sign	Coefficient	*p*-Value
Intercept	?	0.2190	< 0.0001
PTRNR_GENDER	-	0.0664	< 0.0001
AU	-	-0.0062	0.0518
AU_GENDER	-	-0.0724	< 0.0001
SIZE	-	-0.0245	< 0.0001
BM	-	-0.0284	< 0.0001
SGROWTH	+	0.0339	< 0.0001
ROA	-	-0.1722	< 0.0001
OCF	?	0.0999	< 0.0001
OCF^2	+	0.0038	0.1860
DE	?	0.0002	0.9040
OPCYCLE	+	0.0035	0.0370
R Squared	36.84%		
No. Observations	6,873		

Table 3 Regression of Absolute Value of Accrual Estimation Errors Including Interaction Term

5 CONCLUSION

This study investigates the relationship between auditor gender and firm size with respect to the client's financial reporting quality. Based on prior research, Big 4 firms have higher audit quality than non-Big 4 firms. This research confirmed that discretionary accruals are significantly lower for Big 4 firms. The main analysis fails to support my initial hypothesis, suggesting female auditors have clients that exhibit the lowest level of accounting quality. This could likely be due to the lower degree of resources and support at smaller firms to help their female partners succeed. I therefore explore whether clients of Big 4 firms with female auditor partner have higher quality financial reporting. I find evidence that female auditors in Big 4 firms have clients that exhibit superior accounting quality relative to other audit client engagements. This is significant because it suggests that audit firms may increase their client's reporting quality if more audit engagements have females as the lead engagement partner. Additionally, it may benefit audit firms to have female partners on high stake clients or clients that are historically important to help increase the likelihood of the clients' accounting quality. Non-Big 4 firms may want to adopt practices used by the Big 4 to increase the reporting quality of their clients regardless of the partner's gender but especially for those with female partners.

6 FUTURE DIRECTIONS

These results contribute to the accounting research because they link audit gender, firm size, and client accounting quality. This research connects extant research that examines gender and firm size independently in audit settings and provides new insight into differences in reporting quality between clients of female audit partners versus male audit partners. I acknowledge that this study has limitations. Additional research could explore various factors that drive the results. It is possible that the results are being driven by CFO gender, first year engagements of the audit partner-client relationship, audit partner experience, and the workload (i.e., number of private and public companies under audit by the partner) and other correlated omitted variables. Additionally, the results could be driven by the client's duration as a public company, facing reporting burdens that stem from an increase in regulatory compliance requirements. Therefore, more extensive research is warranted to fully understand audit client engagements influenced by audit partner characteristics. Finally, given the nature of the role of monetary incentives in motivating high-quality work, it would be interesting to explore compensation differences between female and male audit partners.

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8 EDITOR'S NOTES

This work was adapted from a senior thesis and has been condensed for publication. Contact DUURJ staff for the full publication.

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