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Breaking the Glass Ceiling: Do Female Auditors in Public Accounting Shine?

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by

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1. Introduction:

This paper investigates the influence of auditor gender on the performance of public accounting firms. More specifically, the paper explores whether female auditors differ from their male counterparts on various aspects such as quality, profitability, and risk within the public accounting profession. The paper is motivated by the findings of studies that show gender-based differences in various workplace settings such as teams, leadership positions, career progression, and quality (Anderson et al, 1994; Burke & Collins, 2001; Kaufman & Fetters, 1989; Collins, 1993; Hull & Umansky, 1997; Garcca et al, 2016; Ittonen et al, 2012; Hardies et al, 2014; Breesch et al, 2009). It is expected that the differences in teams, leadership positions, career progression, and quality have significant consequences for firms that lack gender-diversity. Therefore, a firm lacking female accountants will suffer in key areas that in turn will result in lower productivity and quality of work.

There is a focus on auditor gender within this examination due to the general lack of female accountants in upper-level positions at any given firm. As noted by Anderson (Anderson, 2019) women make up 50% of full-time employees at public accounting firms. However, only 25% of women are successful in obtaining partnership or principal status within the firm. Throughout the paper, it will be determined how the lack of women in public accounting is either furthering or impeding the success of firms.

Keywords: Gender gap, gender diversity, audit quality, public accounting industry, performance metrics, female auditors

1. Literature Review

a. **Women in Leadership**:

Prior studies show that women are valuable leaders and provide a separate set of skills than their male counterparts. These differing viewpoints result in variation in leadership styles, quality of work, risk, and profitability. In a study by Burke (Burke, 2001) the leadership styles of women and men are discussed and compared. Women tend to be transformational leaders. This means they are more focused on coaching, developing, and communicating. Men tend to be transactional leaders. In this leadership style, leaders rely on reward and punishment to encourage subordinates to achieve goals. Another study by Dezso (Dezso, 2012), showed that of firms in the S&P 1500, only 30% of them had females in an upper-level manager position. Those firms that had a female in a managing position brought several benefits such as informational and social diversity, enhanced manager behavior, and motivated other women in lower positions. Both instances provide evidence that show the organization impact females can have on a firm when in a top management position.

Literature on women in accounting also show how quality of work can be influenced by gender. In a journal written by Ittonen et al. the accrual quality is evaluated based on the gender of the partner assigned to the audit engagement (Ittonen et al., 2012). The study was evaluated by looking at factors such as diligence, accounting conservatism, and tolerance. The results showed that women are connected to smaller abnormal accruals and reduce earnings management. Another article by Breesch and Branson investigated how gender-based differences impact audit reports and expressed audit opinions (Breesch and Branson, 2009). An audit report's quality can be determined by the probability that the auditor will find a material misstatement of the

financial statements. Although audit quality can also be based on the knowledge of the engagement team and the audit procedures used within the engagement, this journal presents the idea that gender can influence audit quality as well. The study concluded that women work more efficiently in complex decision-making situations, make more accurate decisions, and are more risk-averse than their male counterparts. Due to these differences, there is a difference in the way male and female auditors discover, account for, and considered misstatements. This should influence how engagement teams are structured.

Another factor that can impact audit quality is overconfidence. An article written by Hardies et al., looks at what factors might inhibit audit quality and increase risk. Overconfidence is the tendency for people to think that their judgement is more accurate than it truly is. In a profession where much of the work is based on professional judgement, overconfidence can significantly impact an auditor. The result of overconfidence can cause ineffective audits, legal issues, and ineffective audit teams. It was expected that men would be more overconfident than women. Overconfidence within the public accounting profession might result in proper judgement, which increases audit riskiness.

It is also important to determine the risk level that is associated with a female in a leadership position. There is a lot of literature that addresses ethical sensitivity among genders. It produces a debate on whether there is gender-based differences when it comes to decision-making in the workplace. In a journal written by Ameen et al., the gender-based difference in values and traits were examined to see how they impact ethical matters. In general, men and women react to most situations within the workplace differently. This has allowed them to develop different sensitivities in ethical situations. The study results show that females tend to have a higher severity rating than males. Bernardi also evaluated gender-based differences in

moral development of public accountants. A test was used to determine several individuals' level of moral development. The results show that females tend to have a higher level of sensitivity to moral implications. Another article by Radtke also examined the impact of gender on ethical decision-making (Radtke, 2000). The author found that there are significant differences between males and females, however not differences that influence ethical decision-making. The results did not provide sufficient conclusive evidence that there was a gender-based difference in this scenario.

Lastly, profitability is vital to a firm's success, and it is investigated whether profitability is linked to leader gender. A study was conducted to determine differences among male and female-owned accounting practices. In order to determine if there is a gender-based differences a study was conducted on 1,000 males and 1,000 females (pulled from the AICPA membership list) that own their own accounting practice (Fasci & Valdez, 1998). The survey collected data about the business, personal, and attitudinal characteristics of male and female owners. The survey concluded that there is a gender-based difference that impacts important aspects such as profitability. It is thought that women being able to own their own businesses helps them to overcome typical workplace discrimination. On average, women face obstacles to succeed, such as vertical growth. They also suffer from gender-differentiated promotion rates, salaries, and hiring rates. Since 1990 there has been a 45% increase in women-owned accounting firms, which is an indication that women are tired of the barriers presented in other firms (Fasci & Valdez, 1998). Unfortunately, it was found that women who own their own businesses typically earn less than males who own their own businesses.

Based on earlier studies presented, there is indeed gender-based differences when women are in leadership positions. The significant variances can be seen in terms of leadership styles,

quality, risk, and profitability. The impact that women have when in a leadership position at an accounting firm are important to consider when weighing the consequences of female auditors.

b. **Women in Accounting**:

Prior studies have identified factors that may prohibit women from succeeding in the public accounting profession. Those obstacles prevent women from climbing the "ladder" of an accounting firm and achieving the partner status. It is important to understand why the lack of women in accounting is present in the accounting world. Some factors that will be explored are upward mobility deterrents, work values, and motivation.

The Future Issues Committee of the AICPA has recently developed a list of issues necessary to address in the accounting profession (Collins, 1993). One of those is the lack of upward mobility for women. The AICPA discussed what factors and obstacles may exist that would prevent women from achieving upper-level positions at the same rate as their male counterparts. The most prominent barrier was stress (Collins, 1993). In general, women are thought to experience more stress in their day-to-day lives than men. Upon investigation, the additional stress from internal and external factors encourages women to leave the accounting profession for other employment opportunities and restricts upward mobility within a firm.

Many associate the lack of presence of women to be due to gender-based variation in work values and motivation. Women are thought, and even expected, to prioritize familial matters. This creates generalizations that women are less career-oriented and less work-inclined than men, as noted by Kaufman (Kaufman, 1980). In terms of motivation, women also are assumed to be extrinsically motivated. However, in further investigation, Kaufman determined

that individuals in lower-level jobs value extrinsic factors more so than individuals in upper-level jobs which tend to value intrinsic factors. So, the association between women and values is not a difference among gender but rather a difference in the job level.

In light of the literature that surrounds the gender-based differences within the workplace, there are some differences among male and female auditors in public accounting. Further analysis of literature will assist in determine what those differences are, and if women have a beneficial impact on the public accounting profession as a whole. To get a better understanding of the current status of women in the workplace, data from LinkedIn will be analyzed. This analytical analysis in connection with literature written in the recent years will aid in answering the question of the impact of women in public accounting. It is my hypothesis that the literature will show that women provide several benefits to public accounting firms.

2. Methodology

There are several studies conducted prior that look to determine how woman impact businesses by using regression analysis or surveys. However, there is currently no dataset that explains the impact that female auditors have on the public accounting field. In order to answer the research question: does auditor gender matter in public accounting and do female partners in public accounting firms improve audit office outcomes, it was necessary to create a new dataset. The dataset that examines the female impact on accounting firms is comprised from two sources: Wharton Research Data Services (WRDS) and LinkedIn. First, the data from WRDS will be explained. The WRDS website is managed by the University of Pennsylvania and has received a global gold standard in data management. It serves over 75,000 researchers across more than 500

institutions in 37 countries. WRDS partners with global vendors to provide over 350 TB of data in various disciplines such as accounting, banking, economics, ESG, finance, healthcare, insurance, marketing, and statistics. For the purposes of determining female impact of public firms, we looked into the accounting related data. More specifically, we chose the Audit Analytics datasets that contained data on Audit Opinions and Restatements.

WRDS permits users to select only specific columns in the dataset that are relevant to the researchers' specific needs. For the purpose of this study we acquired the following items from the Audit Opinion dataset: audit opinion key, auditor fkey, auditor name, signature data of opinion, going concern, auditor city, auditor state, auditor country, fiscal year of opinion, fiscal year end of opinion, file date, company fkey, total asset, total revenue, total fees, company name, company city, company state, company country, and company year end. Prior to the exportation, queries were used to only gather data on Big Four accounting firms (PriceWaterhouseCooper, Ernst&Young, Deloitte, and KPMG). Only the Big Four were analyzed since data from smaller firms may be more difficult to find in the second step of the data collection process. After extracting this data from WRDS data cleaning was used to point the data in the right direction of the study. The file date column was restricted to only showing data from 2018 to 2022. This was to ensure that recent data was collected while also accounting for the potential impact COVID may have had on firms during 2020 and 2021. Next, it was important to ensure that the data was only from firms and companies within the United States. Now the data is ready for analyzation. Tables were created to determine the amount of clients each firm had, the total amount of audits per year, the amount of audits per year by auditor, the amount of audits in each city by auditor, total assets by auditor and city, total audit fees by auditor and city, average audit report lag by auditor and city, and total going concerns by auditor and city.

Next, the Restatement dataset from WRDS needed to be exported and cleaned to match the Audit Opinion dataset. The following items were used from the Restatement dataset: restatement notification key, restatement begin date, restatement end date, file date, company fkey, company name, company fiscal year end. This dataset was also filtered to only show data from 2018 to 2022. Then, using the file date and company name, the data was matched, using VLOOKUP, from the Audit Opinion dataset to the Restatement dataset. For analysis purposes, it was necessary to have the auditor's name and city within the Restatement dataset as well. Finally, a table was created with the number of restatements by auditor and city. At this point, the Audit Opinion dataset analysis was complete, and it was time to move onto the second step of the data collection process; the LinkedIn data.

As mentioned before, there is no current dataset that explains the gender composition of accounting firms. For this part of the data collection process, an innovative process was used. LinkedIn data was collected by writing a detailed code that essentially pulled any user with a Big Four accounting firm and the term “Partner” on their profile page. This compiled all of the information related to any Partners at the Big Four firms. Although, this step did not help to determine the gender of individuals because that is not something that is shared on LinkedIn. The next step in getting this data into a usable state was to use artificial intelligence software to read the names of the LinkedIn users and return a “0” for males and a “1” for females. The steps up until this point helped to get the dataset into a very early stage. Due to the nature of the data collection process, there was room for error, making it necessary to fill in any blanks and randomly check data to ensure overall accuracy. The two most important columns to check were the male-female designation and the audit office city. It was important that the format of the city listed in this dataset matched the format of the city name listed in the other two datasets. This

part required significant additional time to diligently check each data entry for accuracy. However, it was essential to the research and made upcoming steps easier.

To determine the results of the study, three tables were made to identify three distinct categories of audit offices by city based on their female-male ratio. The total clients, total restatements, total going concerns, average audit fees, and average assets audited were summarized by category within each table. This prepared the data to determine the outcome of the results and made it simple to compare female-male ratios among various firms.

It is also important to realize that there are limitations to the data being gathered in this manner. The LinkedIn dataset that addresses the partner gender is restricted to partners that actually utilize LinkedIn. It relies on those users properly updating their account with their respective office and position. If a partner, female or male, within an office did not have a LinkedIn it could alter the data and analysis. That being said, it is expected that any errors caused by the limitations in the study would outweigh one another. It is likely that if a female did not have a LinkedIn that a male in the same office also failed to create or properly maintain an account as well. Therefore, the limitations should not have any material effect on the results. As gender data becomes more developed and accessible, it would become easier to quantify this theory more accurately.

3. Results

Now, there were three main sources of data that would be used in determining the outcome and they all shared some identifying columns. With all of the datasets formatted in the same manner, the analysis process began. There were 1,452 LinkedIn profiles across 159 audit

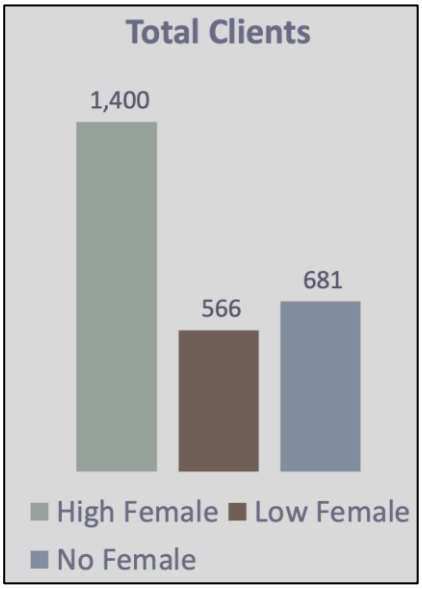
offices used in this study (See appendix, table 07). First, an overall female-male ratio was calculated for the entirety of the partner gender dataset, which was 29% of all offices are female (See appendix, table 08). Then, the female-male ratio was also calculated for each of the Big Four firms. The results for each firm were: Deloitte 31% female, EY 25% female, KPMG 26% female, and PwC 31% female (See appendix, table 08). There was only slight variation among the firms, but it is noted that EY had the lowest female-male ratio. Next, the data was analyzed in terms of five key factors: total clients, average audit fees, average assets audited, total restatements, and total going concerns. These factors were chosen to be analyzed because they are quantifiable by the Audit Opinion, Restatement, and Gender dataset. Each of these factors will be split up based on audit firm and audit office city.

There were also three criteria established that will be utilized in the remainder of the study. The three categories were high female, low female, and no female. The term high female refers to a unique entry related specifically to the audit city and the audit firm. The top ten audit firms by city with the highest female-male ratio were considered to be in the high female category. For example, the Deloitte office in Austin, Texas had the highest female-male ratio at 75% (See appendix, table 02). The second highest ratio was the PwC in Seattle, Washington at a female-male ratio of 70% (See appendix, table 02), and so forth. The low female category followed a similar concept but excluded any offices that returned a female-male ratio of 0%. It was the bottom ten audit firms by city with the lowest female-male ratio. In this case, the Deloitte office in Atlanta, Georgia came in at a mere 5.56% female-male ratio (See appendix, table 04). The PwC in Houston, Texas was the second lowest at a ratio of 10% (See appendix, table 04). The last category, no female, is exactly how it sounds. This category contained ten of

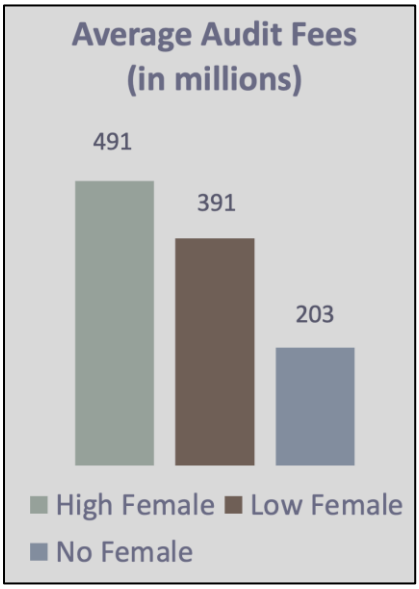
the offices that had no female partner representation (See appendix, table 06). For the analysis, these three categories were used to determine the five key factors mentioned before.

The results of the analysis are as follows:

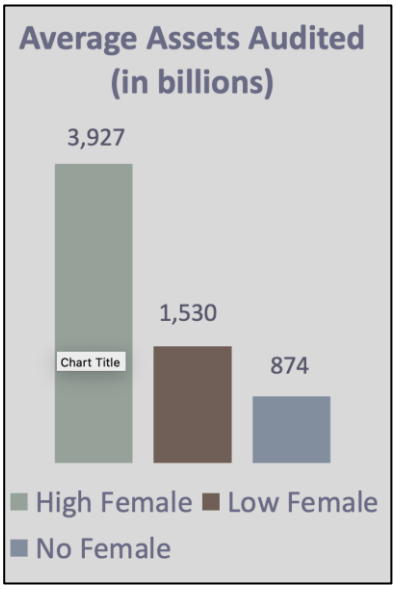
4a.



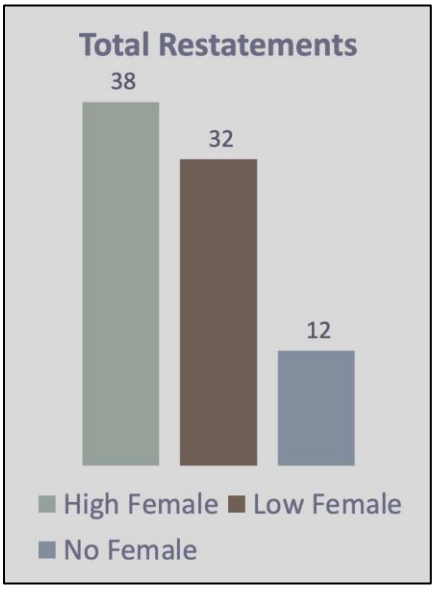
4b.

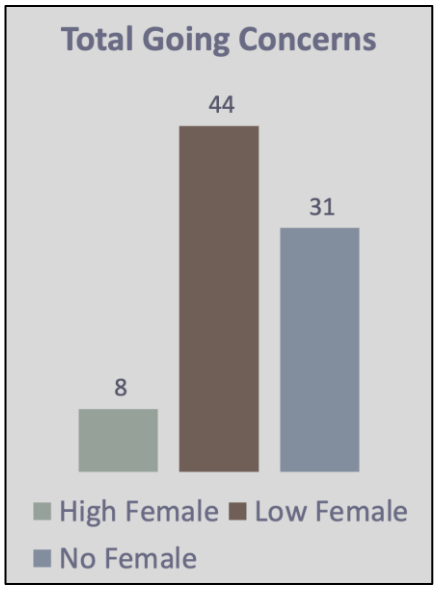


4c.



4d.



4e. 

The results displayed above will now be discussed. In the graph shown in 4a – Total Clients – you will find that the high female category has the highest number of clients at 1,400 (See appendix, table 01). The no-female category has the next highest number of clients at 681 (See appendix, table 05), and the low-female category has the lowest amount at 566 clients (See appendix, table 03). This graph demonstrates that audit offices with a higher female ratio, actually hold more clients than those that have less female auditor representation. The assumption is that a firm with more clients would also have better success in other areas as well and ultimately reflect on the performance of the firm as a whole. These indicates that high-female representation offices are attracting and retaining significantly more clients, although specific retention and acquisition rates would have to be further analyzed to say for sure.

The graph shown in 4b – Average Audit Fees (in millions) – identifies which category has the highest audit fees. This chart used the average of the audit fees because as noted in graph 4a, the high-female firms have many more clients, and therefore it would be expected that the audit fees would also be higher. The average audit fees eliminate the factor of varying numbers

of clients. The high-female category reported the highest audit fees of $491 million (See appendix, table 01), then the low-female category with $391 million (See appendix, table 03), and lastly, the no-female with $203 million (See appendix, table 05). What this means is that on average, firms with high female representation are receiving higher fees per audit. This benefits those firms because they are more profitable. The results show that firms within the no-female category are showing less than half of the profit from audit fees than high female firms. The low-female category results are not quite as dramatic, but yet still show a $100 million decrease in audit fees from the high-female category, which is significant.

The graph shown in 4c – Average Assets Audited (in billions) – looks at the size of the companies that are being audited by the firms. The high female category audited companies with the highest valued assets at $3,927 billion (See appendix, table 01), followed by low-female with $1,530 billion assets audited (See appendix, table 03), and no-female with $874 billion of assets audited (See appendix, table 05). The high female paves the way by $2,397 billion of assets. This means that firms with high female representation tend to audit more assets from larger companies. This is connected to the profitability of firms, as they are likely to receive higher fees because the clients are larger. The low-female group is about double of the no-female group in terms of assets audited.

The graph 4d – Total Restatements – shows the number of restatements that each category of firm had. A restatement is issued when an accountant finds a material misstatement that requires the revision of previous financial statements. Restatements are important because there was a material inaccuracy that needs to be corrected and further investigated to determine the cause behind it. As shown above, the high-female category has the greatest number of restatements with 38 (See appendix, table 01), followed closely by the low-female category with

32 restatements (See appendix, table 03). The no-female category has the lowest number of restatements with only 12 noted (See appendix, table 05). It is difficult to interpret how this determines quality within a firm. On one hand, the high-female firms having the greatest number of restatements could speak to the thoroughness of the more recent audits, resulting in the need for a restatement. This could speak to the quality that females bring to a firm. On the other hand, if the female ratio was the same in the year of the file date and the restatement date, then it could speak to a potential decrease in audit quality. Without further information, or insight from the firms, it is hard to pin down the true reasoning behind this outcome.

The graph 4e – Total Going Concerns – shows the number of going concerns that each firm issued. A going concern is the used to decide if a company is likely to survive the next year of operations. The high-female category had the lowest number of going concerns, followed by the no-female category, and lastly the low-female category. The high-female issued only 8 going concerns (See appendix, table 01), a significant difference than the no-female at 31 going concerns (See appendix, table 05), and the low-female at 44 going concerns (See appendix, table 03). This means that firms with high female partner representation are serving more financially healthy clients than the other two categories. This speaks to the quality of the clients and can also contribute to the profitability of the firms. The high figures of the other two categories show that overall, they are serving financially challenged clients that have the possibility of failure within the next year. Further investigation could determine if firms with high-female ratios have a smaller number of going concerns due to better client selection processes or rather the tendency to attract clients that are already financial stable.

4. Conclusion

Given the results of the data analysis, it has been determined that female auditors do positively impact the public accounting field in terms of profitability, audit quality, and clientele. Females have the potential to provide firms with more clients, audit more assets, deliver higher quality audits, serve financially healthy clients, and earn more fees. Any of the firms that have a female-male ratio of less than 50% should strive to increase their ratio percentage for the sake of diversifying the firm but also for reaping the benefits that are associated with this ratio. Some recommendations for achieving a higher female ratio could be to offer alternative work arrangements for female auditors, provide leadership opportunities for female auditors, or enact more diversity and inclusion initiatives within the firm.

This research paper does not directly address what presents obstacles to females climbing the corporate ladder into the partner status. However, this is a critical issue to address and gain a better understanding of soon due to the benefits presented by having a more diverse leadership serve the firm and the clients better. Within the course of research, it was suggested that females often leave the time-demanding field to raise a family because many firms do not provide the opportunity for alternative work arrangements. These alternative work arrangements would allow females to continue to pursue their careers while also pursuing other valued experiences. Further research would be able to explore how to overcome the obstacles withholding female accountants from achieving a partner level position within public accounting firms. Some potential areas to investigate might include the impact of alternative work arrangements or examining the factors that t promote female auditors within the public accounting field.

5. Works Cited

Alderman, Jillian. "Does Auditor Gender Influence Auditor Liability? Exploring the Impact of the Crime Congruency Effect on Jurors' Perceptions of Auditor Negligence." *Advances in Accounting*, vol. 38, 2017, pp. 75–87., https://doi.org/10.1016/j.adiac.2017.07.006.

Ameen, Elsie C., et al. "Gender Differences in Determining the Ethical Sensitivity of Future Accounting Professionals." *Journal of Business Ethics*, vol. 15, no. 5, 1996, pp. 591–597., https://doi.org/10.1007/bf00381934.

Anderson, John C., et al. "Perceived Effects of Gender, Family Structure, and Physical Appearance on Career Progression in Public Accounting: A Research Note." *Accounting, Organizations and Society*, vol. 19, no. 6, 1994, pp. 483–491., https://doi.org/10.1016/0361-3682(94)90019-1.

Anderson, John, and Hannah Smith. *An Analysis of Alternative Work Arrangements to Address the Gender Gap in Public Accounting*, 2019.

Anderson-Gough, Fiona, et al. "'Helping Them to Forget..': The Organizational Embedding of Gender Relations in Public Audit Firms." *Accounting, Organizations and Society*, vol. 30, no. 5, 2005, pp. 469–490., https://doi.org/10.1016/j.aos.2004.05.003.

BERNARDI, RICHARD A., and DONALD F. ARNOLD. "An Examination of Moral Development within Public Accounting by Gender, Staff Level, and Firm." *Contemporary Accounting Research*, vol. 14, no. 4, 1997, pp. 653–668., https://doi.org/10.1111/j.1911-3846.1997.tb00545.x.

Breesch, Diane, and Joel Branson. *The Effects of Auditor Gender on Audit Quality*, VIII, no. 3 & 4, 2009.

Burke, Sarah, and Karen M. Collins. "Gender Differences in Leadership Styles and Management Skills." *Women in Management Review*, vol. 16, no. 5, 2001, pp. 244–257., https://doi.org/10.1108/09649420110395728.

Collins, Karen M. *Stress and Departures from the Public Accounting Profession: A Study of Gender Differences*, vol. 7, no. 1, Mar. 1993, pp. 29–38.

Dezsö, Cristian L., and David Gaddis Ross. "Does Female Representation in Top Management Improve Firm Performance? A Panel Data Investigation." *Strategic Management Journal*, vol. 33, no. 9, 2012, pp. 1072–1089., https://doi.org/10.1002/smj.1955.

Fasci, Martha A, and Jude Valdez. *A Performance Contrast of Male- and Female-Owned Small Accounting Practices*, July 1998.

Francis, Bill, et al. "Gender Differences in Financial Reporting Decision-Making: Evidence from Accounting Conservatism." *SSRN Electronic Journal*, 2009, https://doi.org/10.2139/ssrn.1471059.

Garcca Lara, Juan M., et al. "Gender Discrimination and the Monitoring Role of Female Directors over Accounting Quality." *SSRN Electronic Journal*, 2016, https://doi.org/10.2139/ssrn.2732588.

Hardies, Kris, et al. "Do (Fe)Male Auditors Impair Audit Quality? Evidence from Going-Concern Opinions." *European Accounting Review*, vol. 25, no. 1, 2014, pp. 7–34., https://doi.org/10.1080/09638180.2014.921445.

Hardies, Kris, et al. "Male and Female Auditors' Overconfidence." *SSRN Electronic Journal*, 2009, https://doi.org/10.2139/ssrn.1553779.

Hull, Rita P., and Philip H. Umansky. "An Examination of Gender Stereotyping as an Explanation for Vertical Job Segregation in Public Accounting." *Accounting, Organizations and Society*, vol. 22, no. 6, 1997, pp. 507–528., https://doi.org/10.1016/s0361-3682(96)00028-1.

Ittonen, Kim, et al. "Female Auditors and Accruals Quality." *SSRN Electronic Journal*, 2012, https://doi.org/10.2139/ssrn.2060797.

Kaufman, Debra, and Michael L Fetters. "Work Motivation and Job Values among Professional Men and Women: A New Accounting." *Journal of Vocational Behavior*, vol. 17, no. 3, 1980, pp. 251–262., https://doi.org/10.1016/0001-8791(80)90021-4.

Radtke, Robin R. *The Effects of Gender and Setting on Accountants' Ethically Sensitive Decisions* , 2000, pp. 299–312.

Zalata, Alaa Mansour, et al. "Audit Committee Financial Expertise, Gender, and Earnings Management: Does Gender of the Financial Expert Matter?" *International Review of Financial Analysis*, vol. 55, 2018, pp. 170–183., https://doi.org/10.1016/j.irfa.2017.11.002.

6. **Appendix**:

Table 01: Top 10 High Female Summarized Results

	High Female
	(Highest 10 Cities based on Female-Male Ratio)
Average Female-Male Partner Ratio	64.55%
Total Clients	1,400
Total Audit Fee	490,517,287
Total Assets Audited	3,927,233,282,010
Total Restatements	38
Average Audit Report Lag	64
Total Going Concern	8

Table 02: Top 10 High Female by Auditor and City

City	Auditor	City | Auditor	Female	Male	Going Concern	Audit Report Lag	Audit Fees	Restatements	Assets	Revenue
Austin	Deloitte	Austin|Deloitte	75.00%	25.00%	0	75.714	7,489,302	1	5,386,485,517	1021868077
Seattle	PwC	Seattle|PwC	70.00%	30.00%	1	64.271	213,285,718	0	731,733,239,743	2.80379E+11
Columbus	Deloitte	Columbus|Deloitte	66.67%	33.33%	0	61.627	157,818,046	1	215,111,113,000	1.52925E+11
Detroit	EY	Detroit|EY	66.67%	33.33%	3	55.955	281,432,635	3	1,387,617,046,000	8.597E+11
New York	PwC	New York |PwC	66.67%	33.33%	2	69.397	3,449,342,950	23	35,338,122,773,731	2.80001E+12
Orlando	EY	Orlando|EY	66.67%	33.33%	0	58.150	134,034,260	2	185,401,363,375	73941805316
Washington	KPMG	Washington|KPMG	66.67%	33.33%	0	41.000	-	0	-	0
Miami	EY	Miami|EY	60.00%	40.00%	0	65.563	49,934,000	2	64,680,123,816	41878385607
Denver	PwC	Denver|PwC	57.14%	42.86%	2	65.683	148,659,507	5	258,363,282,919	1.14517E+11
Hartford	PwC	Hartford|PwC	50.00%	50.00%	0	85.397	463,176,448	1	1,085,917,392,000	8.40319E+11

Table 03: Bottom 10 Low Female Summarized Results

	Low Female
	(Lowest 10 Cities based on Female-Male Ratio)
Average Female-Male Partner Ratio	12.64%
Total Clients	566
Total Audit Fee	391,106,329
Total Assets Audited	1,530,415,226,156
Total Restatements	32
Average Audit Report Lag	58
Total Going Concern	44

Table 04: Bottom 10 Low Female by Auditor and City

City	Auditor	City | Auditor	Female	Male	Going Concern	Audit Report Lag	Audit Fees	Restatements	Assets	Revenue
Boston	Deloitte	Boston|Deloitte	15.79%	84.21%	21	62.879	722,308,686	9	6,221,989,002,666	5.02276E+11
Boston	KPMG	Boston|KPMG	14.29%	85.71%	7	72.839	469,002,350	2	1,265,662,506,365	3.14519E+11
Denver	EY	Denver|EY	14.29%	85.71%	3	65.554	219,062,004	2	481,026,754,000	3.01119E+11
Houston	EY	Houston|EY	14.29%	85.71%	6	61.118	474,511,042	8	1,359,477,644,170	1.27384E+12
Tampa	PwC	Tampa|PwC	14.29%	85.71%	0	71.795	125,020,724	1	189,277,519,689	72016620630
Tampa	EY	Tampa|EY	14.29%	85.71%	3	56.675	239,802,189	1	345,571,248,000	3.42604E+11
Los Angeles	EY	Los Angeles|EY	12.50%	87.50%	1	59.996	631,159,643	3	1,317,721,503,991	5.24498E+11
Columbus	EY	Columbus|EY	11.11%	88.89%	0	-	-	0	-	0
Houston	PwC	Houston|PwC	10.00%	90.00%	1	71.885	601,729,777	5	2,343,064,327,236	9.55701E+11
Atlanta	Deloitte	Atlanta|Deloitte	5.56%	94.44%	2	59.190	428,466,877	1	1,780,361,755,442	7.67555E+11

Table 05: Bottom 10 No Female Summarized Results

	No Female
	(If Female-Male Ratio = 0; i.e., no female partner)
Average Female-Male Partner Ratio	0.00%
Total Clients	681
Total Audit Fee	202,678,297
Total Assets Audited	874,140,884,784
Total Restatements	12
Average Audit Report Lag	59
Total Going Concern	31

Table 06: Bottom 10 No Female by Auditor and City

City	Auditor	City | Auditor	Female	Male	Going Concern	Audit Report Lag	Audit Fees	Restatements	Assets	Revenue
Irvine	PwC	Irvine|PwC	0.00%	100.00%	0	67.548	103,337,405	5	95,489,563,579	44498822000
Miami	Deloitte	Miami|Deloitte	0.00%	100.00%	0	64.833	86,560,568	0	578,448,382,000	1.4953E+11
Pittsburgh	Deloitte	Pittsburgh|Deloitte	0.00%	100.00%	0	58.615	49,322,905	0	169,657,417,000	84702348000
Pittsburgh	KPMG	Pittsburgh|KPMG	0.00%	100.00%	0	65.067	27,953,972	2	100,699,849,000	9869113000
Pittsburgh	EY	Pittsburgh|EY	0.00%	100.00%	0	52.885	221,929,719	1	676,051,110,466	1.79713E+11
Richmond	Deloitte	Richmond|Deloitte	0.00%	100.00%	0	58.161	118,481,958	1	819,506,683,000	3.15921E+11
Sacramento	KPMG	Sacramento|KPMG	0.00%	100.00%	0	-	-	0	-	0
Sacramento	Deloitte	Sacramento|Deloitte	0.00%	100.00%	1	81.000	9,195,751	0	5,763,238,000	2075340000
San Diego	EY	San Diego|EY	0.00%	100.00%	27	78.718	211,452,199	2	233,976,575,795	1.01274E+11
San Jose	EY	San Jose|EY	0.00%	100.00%	3	59.639	1,198,548,491	1	6,061,816,029,000	4.09959E+12

Table 07: Methodology Overview

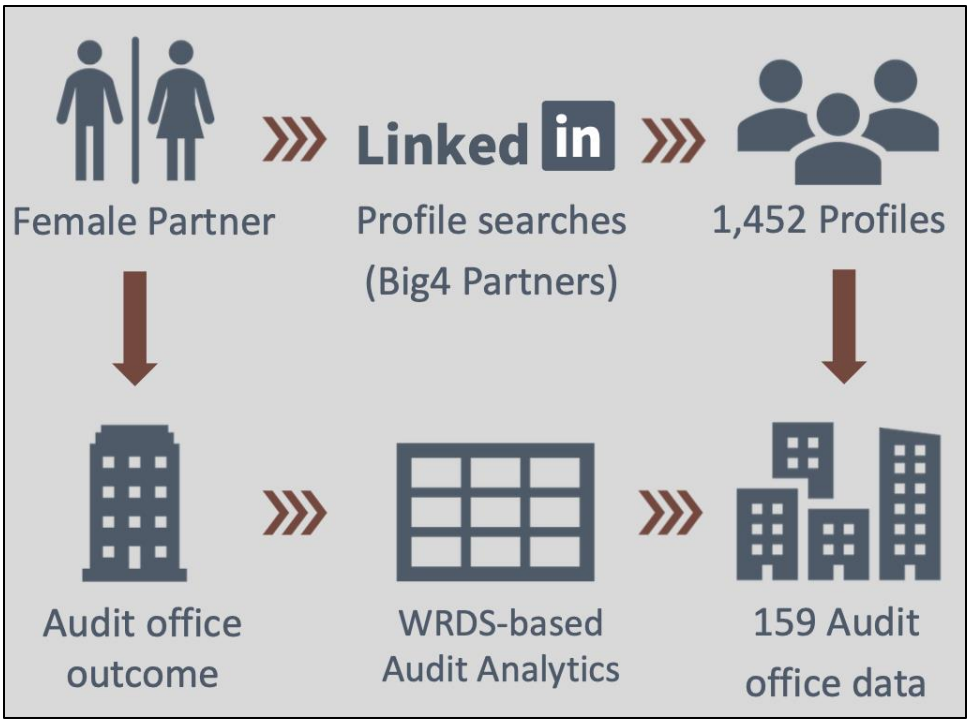
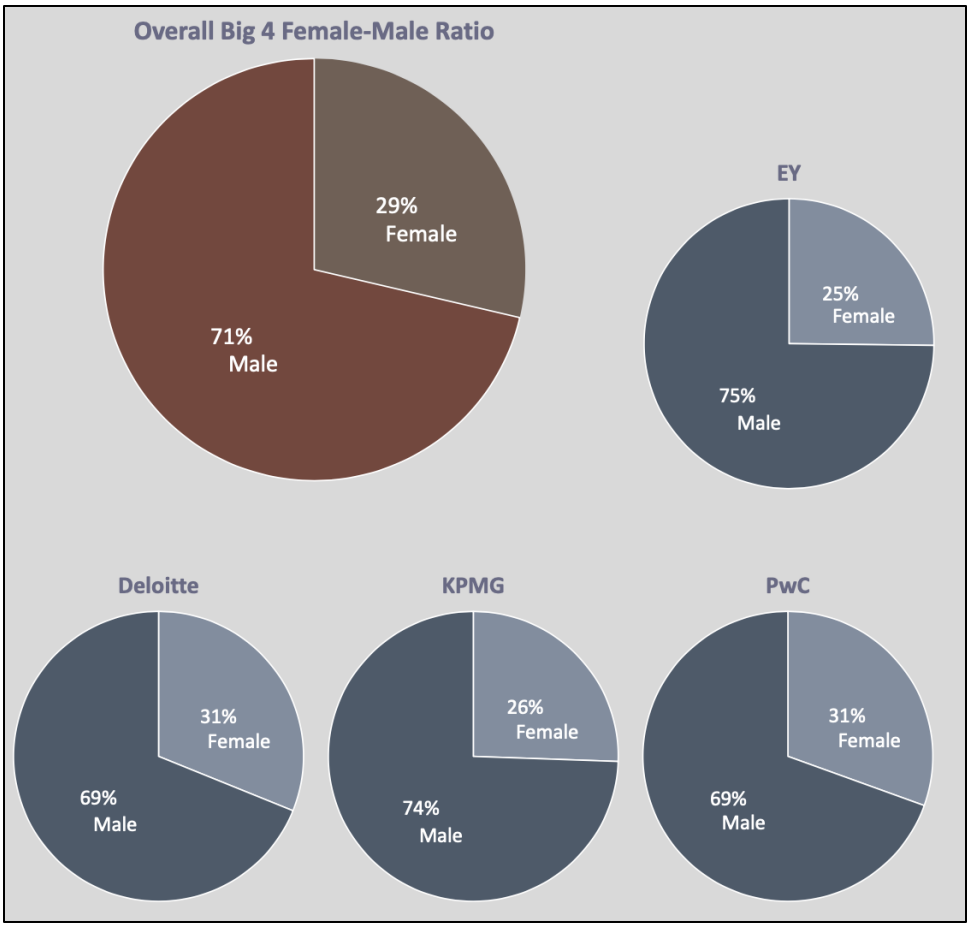


Table 08: Female-male Ratio Overall & By Firm


Overall Big 4 Female-Male Ratio
29% Female
71% Male
EY
25% Female
75% Male
Deloitte
31% Female
69% Male
KPMG
26% Female
74% Male
PwC
31% Female
69% Male