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REPORT

# The Audit Gender Gap: Has It Narrowed?

Sandra J. Peters

A 2018 CFA Institute study found that women rarely run the biggest audits at Big Four accounting firms. A new report examines updated data to determine whether the gap has changed and how much progress is still needed.

**B**ack in 2018, CFA Institute published the report *New Public Company Audit Disclosures: Who Audits the Company You Invest In? How Long Have They Been the Auditor?*<sup>1</sup> The report used data from then recently enacted transparency provisions related to audit participants—*Auditor Reporting of Certain Audit Participants* (the Audit Participants Standard)—published by the US Public Company Accounting Oversight Board (PCAOB) in 2016 and enacted in 2017.<sup>2</sup> This Audit Participants Standard required disclosure to the PCAOB, and ultimately the public, of the name of each public company engagement partner.

As we noted in our previous report, investors told the PCAOB—and CFA Institute in our numerous surveys over the last decade—that they wanted to know more about the lead engagement partner assigned to the company in which they invest. Investors have expressed their interest in the name of the lead engagement partner not only because this is something that is available on the face of the auditor's report in other parts of the world but also because of the behavioral implications—namely, accountability and increased audit quality—they perceive emanate from such identification. Investors indicate they view naming the audit

<sup>1</sup>See the full report at <https://www.cfainstitute.org/-/media/documents/article/position-paper/new-public-company-auditor-disclosures.ashx>.

Our 2018 publication also looked at auditor tenure, because such information was also then newly reported in the auditor's report *The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion* (New Audit Reporting Standard, [https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-adopts-new-standard-to-enhance-the-relevance-and-usefulness-of-the-auditor's-report-with-additional-information-for-investors\\_614](https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-adopts-new-standard-to-enhance-the-relevance-and-usefulness-of-the-auditor's-report-with-additional-information-for-investors_614)).

We did not update the auditor tenure study as part of this report, because change in auditors occurs much more slowly than change in audit partners, given the mandatory rotation of engagement partners but not audit firms. As part of this report, we note that only about 15 companies (3% of the S&P 500) changed auditors since our previous report.

<sup>2</sup>See the full Audit Participants Standard at [https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-adopts-rules-requiring-disclosure-of-the-engagement-partner-and-other-audit-firms-participating-in-an-audit\\_551](https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-adopts-rules-requiring-disclosure-of-the-engagement-partner-and-other-audit-firms-participating-in-an-audit_551).



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partner as no different than identifying the chief financial officer, the controller, or the chief executive officer for the companies in which they invest. Company management also supported the naming of the lead engagement partner. Although investors wanted the name of the lead audit partner disclosed on the face of the audit opinion, the PCAOB compromise was to include the partner's name in the PCAOB's AuditorSearch Database.

As it relates to diversity, investors have sought greater board as well as management diversity because a broad array of research suggests that diverse perspectives produce better outcomes for investors. Further, such diversity reflects the corporate and social responsibility objectives that many investors seek to support. Lead engagement partners are hired by investors through the audit committee and ratified by proxy voting to protect their interests.

For the aforementioned reasons, we thought it would be interesting for investors to understand how diversity of the lead engagement partner is represented in the boardroom of the largest public US companies using this newly available data.

Using the PCAOB's AuditorSearch Database<sup>3</sup>—which stores the public company engagement partners' names filed on Form AP—CFA Institute identified the lead engagement partners of S&P 500 and S&P 100 companies—the firms' largest, most prestigious, and sometimes most lucrative "clients." We then stratified the population by male versus female engagement partners. In 2018, based on the new 2017 data, we found that only 15% and 11%, respectively, of S&P 500 and S&P 100 companies' lead audit partners were women. We sorted the data by Big 4 firms, noting that the percentages ranged from 9% to 21% for the S&P 500 and 7% to 16% for the S&P 100.

Our report was the basis for a *Wall Street Journal* article, "Women Rarely Run the Biggest Audits at the Big Four Accounting Firms."<sup>4</sup> We also summarized the findings in a blog post, "The Audit Gender Gap: Who Audits the Companies You Invest In?"<sup>5</sup>

Given it has been nearly five years since our report<sup>6</sup>—and given the diversity, equity, and inclusion push since the publication of our initial report in 2018—we thought it would be interesting to update the data and see if the percentage of women acting as lead audit engagement partner of these largest corporations had improved. Said differently, has the gap narrowed?

The 2018 report was based on 2017 fiscal year-end audits, and this 2022 report (issued in early 2023) is based on 2021 fiscal year-end audits. We used the S&P 500 Index and S&P 100 Index as of the dates we pulled our samples in 2018 and 2022. Approximately 80 companies have shifted into and out of the S&P 500 Index during these four years.

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<sup>3</sup>The database is online at <https://pcaobus.org/resources/auditorsearch>.

<sup>4</sup><https://www.wsj.com/articles/women-rarely-run-audits-at-the-big-four-accounting-firms-1537106401>.

<sup>5</sup><https://blogs.cfainstitute.org/marketintegrity/2018/10/10/the-audit-gender-gap-who-audits-the-companies-you-invest-in/>.

<sup>6</sup>Auditor rotation rules in the United States require audit partners to rotate every five years. Accordingly, if an even distribution of tenures exists across firms, then 80% of the audit partners would have rotated in the four years since we gathered the data from our initial report. Our work showed that approximately 80 partners, or about 16%, of the auditors remained unchanged. Said differently, approximately 84% of the lead engagement partners (i.e., 420 of the S&P 500 firms) have rotated partners during the time between our studies, thereby validating our hypothesis.

## Who Audits the S&P 500 and S&P 100?

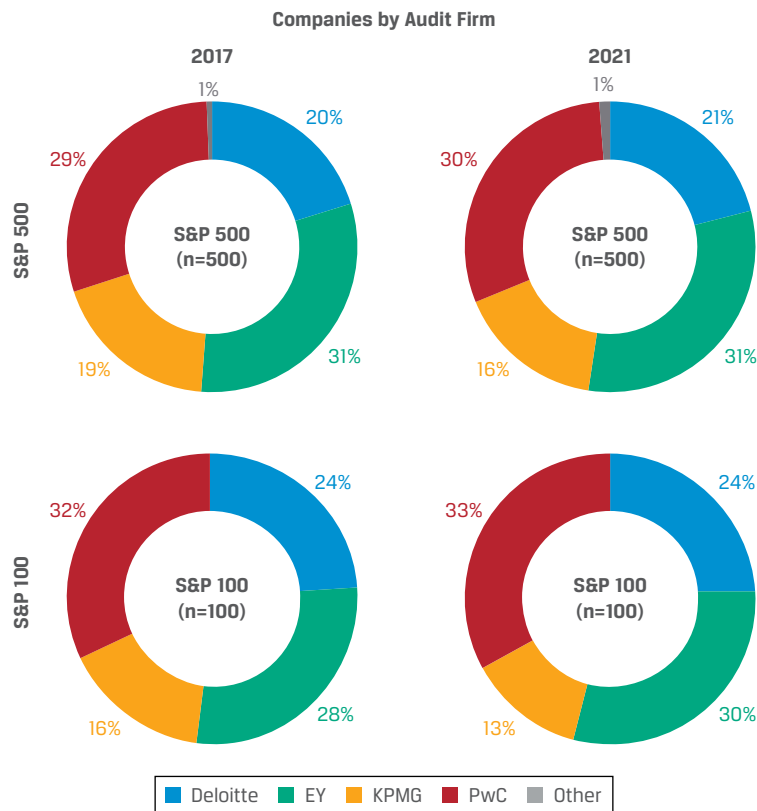
We commenced our analysis by identifying not only the population of the companies constituting the S&P 500 and S&P 100 but also the auditor of each respective company. The following exhibits highlight that the Big 4 Firms—Deloitte; Ernst & Young (EY); PricewaterhouseCoopers (PwC); and KPMG—audit 99% of these companies.

Although approximately 80 S&P 500 companies from the earlier report have been replaced in the index by other companies, we observed no major shift in the distribution of these companies among the Big 4 firms.

KPMG has 12 fewer S&P 500 clients than it did four years prior—a 13% decrease for KPMG and a reduction in its proportion of the S&P 500 from 19% to 16%. These clients were evenly redistributed among the other three Big 4 firms and the "other" (non-Big 4) firms. KPMG also has three fewer S&P 100 clients—a 19% decrease for KPMG and a reduction in its proportion of the S&P 100 from 16% to 13%. Deloitte's number of S&P 100 clients remained unchanged, with EY increasing by 2% and PwC by 1% of the S&P 100. **Exhibit 1** offers a visual illustration of these changes.



### Exhibit 1. S&P 500 and S&P 100 Companies by Audit Firm



**Exhibit 2** shows the numbers and percentages in tabular format for additional reference.

## Exhibit 2. Four-Year Comparison: S&P 500 and S&P 100 Companies by Audit Firm

	2017		2021		Difference	
	Number	Percentage	Number	Percentage	Number	Percentage
<b>S&amp;P 500 Companies</b>						
Deloitte	101	20%	105	21%	4	4%
EY	155	31%	157	31%	2	1%
KPMG	94	19%	82	16%	-12	-13%
PwC	147	29%	150	30%	3	2%
Other	3	1%	6	1%	3	100%
Total	500		500			
<b>S&amp;P 100 Companies</b>						
Deloitte	24	24%	24	24%	0	0%
EY	28	28%	30	30%	2	7%
KPMG	16	16%	13	13%	-3	-19%
PwC	32	32%	33	33%	1	3%
Total	100		100			

## S&P 500 and S&P 100 Lead Engagement Partners: Male or Female?

Using the AuditorSearch Database, we identified the names of the lead engagement partners, shown in Exhibits 3, 4 and 5.<sup>7</sup>



### Exhibit 3. Female Auditor Names



### Exhibit 4. Male Auditor Names



<sup>7</sup>For names that could apply to more than one gender, we used other sources (e.g., social media sources such as LinkedIn) to ascertain the lead engagement partner's gender.

Exhibit 5. S&P 500 and S&P 100 Lead Engagement Partners by Gender

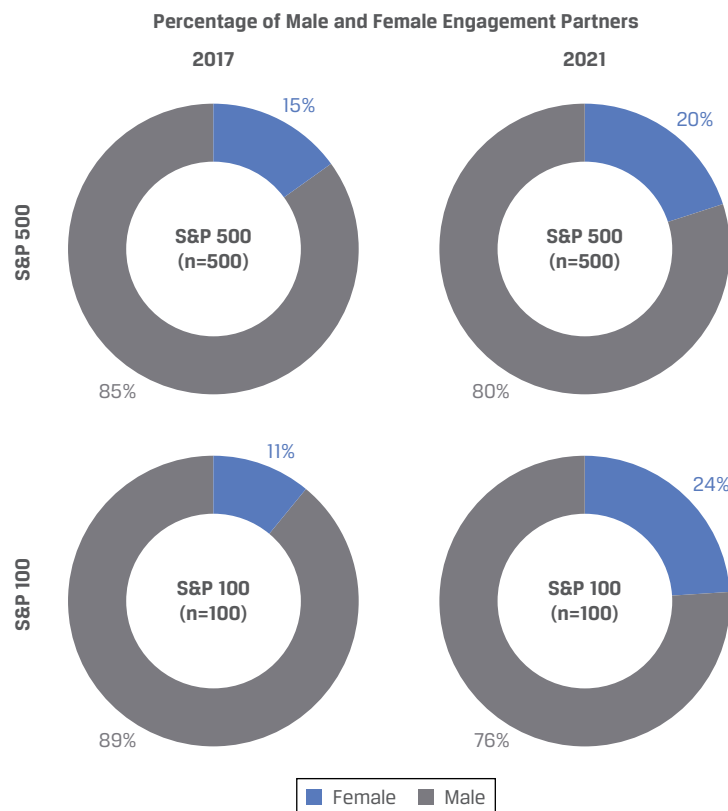


Exhibit 6 shows the numbers and percentages in tabular format for additional reference.

Exhibit 6. Four-Year Comparison: S&P 500 and S&P 100 Lead Engagement Partners by Gender

	2017		2021		Difference	
	Number	Percentage	Number	Percentage	Number	Percentage
<b>S&amp;P 500 Companies</b>						
Female	73	15%	102	20%	29	40%
Male	427	85%	398	80%	-29	-7%
Total	500		500			
<b>S&amp;P 100 Companies</b>						
Female	11	11%	24	24%	13	118%
Male	89	89%	76	76%	-13	-15%
Total	100		100			

We found that although no large shift occurred among the Big 4 in the percentages of companies audited—other than the KPMG decrease—the percentages of male and female engagement partners differed noticeably from our prior analysis.

## S&P 500 Engagements

The number of female lead engagement partners of S&P 500 companies rose from 15% (73 women) to 20% (102 women) in just four years—an increase of 29 women. This shift represents an increase of 40% in the number of women and approximately 6% of the S&P 500.

We noted in our review of the S&P 500 that all but approximately 80 lead engagement partners had rotated since our last analysis. Said differently, 84% of lead engagement partners (420) had changed, resulting in a net increase of 29 women.

## S&P 100 Engagements

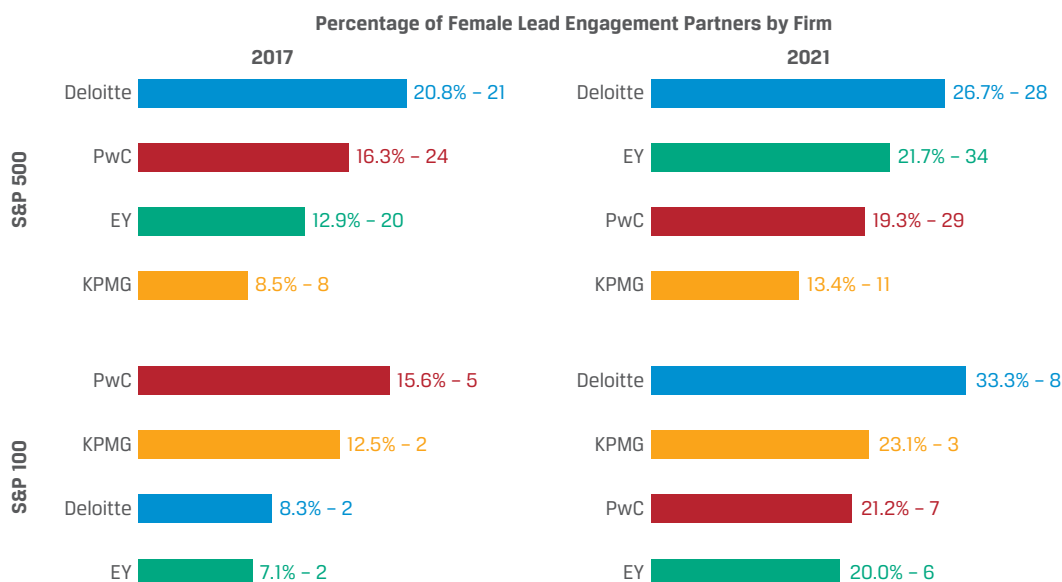
The number of female lead engagement partners of S&P 100 companies more than doubled in four years, from 11% (11 women) to 24% (24 women)—a 118% increase.

In short, the gap narrowed.

## Which Firms Have Narrowed the Gender Gap?

When looking at the individual firms, we see that although all four firms increased the number of female lead engagement partners, some had a larger increase than others, as illustrated in **Exhibit 7**.

### Exhibit 7. Female Lead Engagement Partners by Firm



**Exhibit 8** shows the numbers and percentages of female lead engagement partners for S&P 500 and S&P 100 companies by audit firm.

### Exhibit 8. Four-Year Comparison: S&P 500 and S&P 100 Companies and Female Lead Engagement Partners by Audit Firm

	2017			2021			Difference			
	Female Partners	Companies	Percentage	Female Partners	Companies	Percentage	Female Partners		Companies	
							Number	Percentage	Number	Percentage
<b>S&amp;P 500 Companies</b>										
Deloitte	21	101	20.8%	28	105	26.7%	7	33.3%	4	4.0%
PwC	24	147	16.3%	29	150	19.3%	5	20.8%	3	2.0%
EY	20	155	12.9%	34	157	21.7%	14	70.0%	2	1.3%
KPMG	8	94	8.5%	11	82	13.4%	3	37.5%	-12	-12.8%
Other	0	3	0.0%	0	6	0.0%	0	-	3	100.0%
Total	73	500	14.6%	102	500	20.4%	29	39.7%	0	0.0%
<b>S&amp;P 100 Companies</b>										
PwC	5	32	15.6%	7	33	21.2%	2	40.0%	1	3.1%
KPMG	2	16	12.5%	3	13	23.1%	1	50.0%	-3	-18.8%
Deloitte	2	24	8.3%	8	24	33.3%	6	300.0%	0	0.0%
EY	2	28	7.1%	6	30	20.0%	4	200.0%	2	7.1%
Total	11	100	11.0%	24	100	24.0%	13	118.2%	0	0.0%



## S&P 500 Engagements

In 2017, 73 women were lead auditors of S&P 500 companies. In 2021, that number rose to 102—an increase of 5.8% of S&P 500 company audits being led by women.

Deloitte remains at the top of the list, with 26.7% (28 women) of its S&P 500 engagements led by women—an increase of 33.3% (7 women) from its 20.8% (21 women) four years ago.

Among the Big 4, Ernst & Young saw the largest increase, adding 14 female lead engagement partners (a 70.0% increase) and raising the firm's female lead S&P 500 engagements from 12.9% (20 women) to 21.7% (34 women). This increase also moved EY from third to second place by percentage of engagements led by women, ahead of PwC.

PwC increased its female lead engagement partners from 16.3% (24 women) to 19.3% (29 women) of its S&P 500 engagements—an increase of 20.8% (5 women).

Although KPMG showed improvement from 8.5% (8 women) to 13.4% (11 women), its 13.4% of women in 2021 was nearly half the percentage of Deloitte's 26.7% and only two-thirds that of EY and PwC's 21.7% and 19.3%, respectively. KPMG's level of female lead engagement partners in 2021 was only at the level of the other Big 4 firms four years earlier.

Except for KPMG, all firms were near or exceeded 20% of their S&P 500 engagements being led by women.

## S&P 100 Engagements

In 2017, 11 women were lead auditors of S&P 100 engagements. In 2021, that number rose to 24—an increase of 13% of S&P 100 company audits being led by women.

Of the S&P 100, Deloitte had the largest increase from 8.3% (2 women) to 33.3% (8 women)—a fourfold increase in its S&P 100 engagements being led by women.

PwC fell from first to third place, based upon percentage of female lead partners, because of Deloitte's increase in female lead engagement partners. PwC increased from 15.6% (5 women) leading its largest clients to 21.2% (7 women)—a 40% (2 women) increase in its S&P 100 engagements being led by women.

KPMG increased lead engagement partners from two to three women on its S&P 100 engagements, but because its number of S&P 100 clients decreased from 16 to 13, the percentage rose from 12.5% to 23.1%. KPMG remained in second place because Deloitte and PwC switched places.

EY was in last place four years ago, with only 7.1% (2 women) leading its S&P 100 engagements. This percentage has since risen to 20% (6 women) leading its S&P 100 engagements, a threefold increase. That said, EY stayed in fourth place because it gained rather than lost S&P 100 clients over the four-year period, and because Deloitte's increase was fourfold rather than threefold.

All firms exceeded 20% of their S&P 100 engagements being led by women.

**Exhibit 9** details the numbers and percentages of male and female lead engagement partners for S&P 500 and S&P 100 companies by audit firm.

## Exhibit 9. S&P 500 and S&P 100 Lead Engagement Partners by Audit Firm and Gender

	2017		2021		Difference	
	Number	Percentage	Number	Percentage	Number	Percentage
<b>S&amp;P 500 Companies</b>						
Female	73	14.6%	102	20.4%	29	39.7%
Male	427	85.4%	398	79.6%	-29	-6.8%
Total	500		500		0	
<b>Deloitte</b>						
Female	21	20.8%	28	26.7%	7	33.3%
Male	80	79.2%	77	73.3%	-3	-3.7%
Total	101		105		4	4.0%
<b>EY</b>						
Female	20	12.9%	34	21.7%	14	70.0%
Male	135	87.1%	123	78.3%	-12	-8.9%
Total	155		157		2	1.3%
<b>KPMG</b>						
Female	8	8.5%	11	13.4%	3	37.5%
Male	86	91.5%	71	86.6%	-15	-17.4%
Total	94		82		-12	-12.8%
<b>PwC</b>						
Female	24	16.3%	29	19.3%	5	20.8%
Male	123	83.7%	121	80.7%	-2	-1.6%
Total	147		150		3	2.0%
<b>Other</b>						
Female	0	0.0%	0	0.0%	0	-
Male	3	100.0%	6	100.0%	3	100.0%
Total	3		6		3	100.0%
<b>S&amp;P 100 Companies</b>						
Female	11	11.0%	24	24.0%	13	118.2%
Male	89	89.0%	76	76.0%	-13	-14.6%
Total	100		100		0	
<b>Deloitte</b>						
Female	2	8.3%	8	33.3%	6	300.0%
Male	22	91.7%	16	66.7%	-6	-27.3%
Total	24		24		0	0.0%
<b>EY</b>						
Female	2	7.1%	6	20.0%	4	200.0%
Male	26	92.9%	24	80.0%	-2	-7.7%
Total	28		30		2	7.1%
<b>KPMG</b>						
Female	2	12.5%	3	23.1%	1	50.0%
Male	14	87.5%	10	76.9%	-4	-28.6%
Total	16		13		-3	-18.8%
<b>PwC</b>						
Female	5	15.6%	7	21.2%	2	40.0%
Male	27	84.4%	26	78.8%	-1	-3.7%
Total	32		33		1	3.1%

**Exhibit 10** illustrates the growth in S&P 500 and S&P 100 companies audited by female lead engagement partners in total and by audit firm.

## Exhibit 10. Growth in S&P 500 and S&P 100 Company Female Lead Engagement Partners

	2017		2021		Difference	Growth Rate*
	Female	Companies	Female	Companies		
<b>S&amp;P 500</b>						
Deloitte	21	101	28	105	7	6.9%
EY	20	155	34	157	14	9.0%
KPMG	8	94	11	82	3	3.2%
PwC	24	147	29	150	5	3.4%
Other	0	3	0	6	0	0.0%
Total	73	500	102	500	29	5.8%
<b>S&amp;P 100</b>						
Deloitte	2	24	8	24	6	25.0%
EY	2	28	6	30	4	14.3%
KPMG	2	16	3	13	1	6.3%
PwC	5	32	7	33	2	6.3%
Total	11	100	24	100	13	13.0%

Note: \*The growth rate is computed as the increase in female lead engagement partners from 2017 to 2021 as a percentage of total S&P 500 and S&P 100 clients, respectively, in 2017.

## The Gender Gap Has Narrowed: More Progress Necessary

Our review of the data suggests that progress has been made in narrowing the gender gap during the last four years.

In our prior report, only one firm (Deloitte) had more than 20% of S&P 500 engagements staffed by female lead engagement partners—and it was barely above this level at 20.8%. Now, three of the Big 4 firms are at or near 20%. Only KPMG lags, with 13.4% of S&P 500 lead engagement partners being female. KPMG remains at 50% of the level of Deloitte (26.7%) and about two-thirds of both EY (21.7%) and PwC's (19.3%) percentages. Overall, in 2021, there were nearly 40% (an increase of 29 women) more S&P 500 female lead engagement partners than four years prior.

In the S&P 100, progress has been even more significant. The number of female lead engagement partners has more than doubled from 11% to 24%. No firm exceeded 16% four years ago, and two firms were in the single digits. As of the most recent update, however, all Big 4 firms are at or above 20%.

Although these shifts offer good news, further progress is still needed, especially at KPMG.

As we noted in our 2018 report, half of those entering the accounting profession are women.<sup>9</sup> So, there is room to improve the 20% of today's engagement partners toward this 50% level. As we noted in our 2018 report, the issue in Big 4 firms is leakage from the pipeline rather than input into the pipeline. Within 10 to 15 years (the time it takes to become a partner), the near majority of women in accounting turns into a significant minority. The accounting profession has sought to answer this issue. Progress is slow, but the foregoing statistics highlight that progress is nevertheless being made.

Although only about 6% of all S&P 500 companies are run by women,<sup>9</sup> recent reports suggest that most S&P 500 boards have at least three female directors<sup>10</sup> and that women constitute nearly 30% of board members.<sup>11</sup> We know the Big 4 firms offer a good training ground for future controllers, CFOs, and audit committee members and progress in the Big 4 can contribute to gender progress in the boardroom.

An expectation of at least 30% of lead engagement partners being female does not seem unreasonable or unachievable by our next update, given the progress made to date and the capacity and natural pathway that mandatory audit partner rotation affords for greater movement of women into these roles. Nearly 85%, or some 420, of S&P 500 lead engagement partners have rotated since our initial report four years ago in 2017. This shift resulted in a net increase of 29 (5.80% of the S&P 500) female lead engagement partners.

To get to 30% (150 women), nearly 50 women (10% of the S&P 500) need to be added over the next four to five years. That is nearly a 50% increase (moving from 102 to 150 women) in female lead engagement partners over the next four to five years. In the S&P 100, that number of lead engagement partners needs to move from 24 to 30 female partners, a 25% increase.

The investment management industry itself has much to do to improve diversity in its own ranks. Recent studies highlight the lack of diversity of fund managers (particularly in the United States) and the potential that women may produce slightly higher returns because of their risk-averse nature, lower trading proclivity, and long-term investment mindset. The issue in the investment management industry as it relates to gender diversity differs from that of the accounting profession, specifically with regard to the pipeline by which women enter the profession. In the investment management industry, women are not necessarily

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<sup>9</sup>As we noted in our 2018 report, women enter the accounting profession at rates similar to those for men. According to a 2008 AICPA Trend Report, new graduates hired by CPA firms in 2000 were 56% female and 44% male. AICPA's 2017 Trends Report illustrates that over the last decade, the number of female hires by US accounting firms has decreased from a slight majority of 52% to a slight minority at 48%.

<sup>9</sup>See <https://www.catalyst.org/research/women-ceos-of-the-sp-500/> and <https://www.womleadmag.com/women-ceos-of-the-sp-500-companies/>.

<sup>10</sup>See <https://observer.com/2022/11/most-sp-500-company-boards-now-have-at-least-three-female-directors/>.

<sup>11</sup>See <https://www.cnn.com/2021/10/20/30percent-of-all-sp-500-board-directors-are-women-a-new-landmark.html>.

entering the profession at the same rate as men, and some studies suggest women must be more credentialed than their male counterparts to be considered credible. This perceived obstacle to entry is something CFA Institute is seeking to improve through its Women in Investment Management initiative and through the introduction of the Diversity, Equity, and Inclusion Code (DEI Code).<sup>12</sup>

Although the research is inconclusive on whether women make better auditors than men, the potential benefits of diversity in the boardroom, within top management of companies, and within the investment profession would seem to apply as well for lead audit partners. Auditors are important participants in the boardroom, where investors have focused on diversity for better outcomes. Lead engagement partners participate in audit committees of the board each quarter and interact with upper management. If diversity of decision making is important to investors in the boardroom, auditors are just an extension of that interest. Further, research suggests that diverse audit committees make better auditor selection decisions. To achieve a diverse audit committee, women must have the financial expertise to qualify to participate. Big 4 firms provide a training ground for many such individuals to develop the necessary skills, as well as provide a pipeline for controllers and CFOs of these large public companies. To that end, audit committees have a role to play to benefit diversity in the financial management of the organizations they oversee.

The PCAOB data on lead engagement partners presents an opportunity for discussion and further research on the importance of diversity on these key engagements. This updated data shows that mandatory rotation of public company lead engagement partners every five years presents an opportunity to observe, monitor, and effectuate change in the number of female lead engagement partners.

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<sup>12</sup><https://www.cfainstitute.org/en/ethics-standards/codes/diversity-equity-inclusion>.

## Author

Sandra J. Peters  
Senior Head Global Advocacy, CFA Institute

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