

**2016**  
PROXY SEASON

# Gender Diversity in Silicon Valley

A Comparison of Silicon Valley Public  
Companies and Large Public Companies

Fenwick  
FENWICK & WEST LLP

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# Gender Diversity in Silicon Valley

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## Executive Summary

Gender diversity in corporate leadership—and diversity in the business world more broadly—continues to drive vigorous discussion across the country, with Silicon Valley and the tech industry often at the center of heightened scrutiny.

Findings from the Fenwick & West Gender Diversity Survey, which looks at women’s positions in leadership based on public data from the last 21 years, point to a few promising trends and areas where Silicon Valley leads mixed with, not surprisingly, many areas with room for continued improvement.

Fenwick’s gender diversity survey provides unique insight into women’s participation at the most senior levels of technology and life sciences public companies in the Silicon Valley 150 index and the large public companies of the Standard & Poor’s 100 Index. The report reviews public filings from 1996 through 2016 to analyze the gender makeup of boards, board leadership, board committees and executive management teams, in the two groups, with special comparisons showing how the top 15 largest companies in the SV 150 fare (as they are the peers of the large public companies included in the S&P 100).

Our latest survey indicates that company size continues to matter; the bigger the company, the more diverse its leadership. Diversity numbers for the top 15 largest companies in the SV 150 are generally closer to—and in some cases exceed—those of the S&P 100.

Companies, board members and C-level executives can use this survey as a statistical benchmark for Silicon Valley leaders, as well as for comparison to the landscape of the largest public companies across the United States.

For a long time, much of the discussion about gender diversity in Silicon Valley was based on personal observation and limited data. We believe that our survey, covering more than two decades of statistics, adds perspective and depth to the discussion.

Executive Summary *(continued)***Key observations include:*****Growth rates remain low.***

- The representation of women on boards continued to increase between 2014 (the last year Fenwick published the gender diversity survey) and 2016 in the United States but at lower rates than in other countries. The average percentage of women directors increased 4.1 percentage points in the SV 150 to 14.1% in 2016 and in the S&P 100 rose 2.2 percentage points to 23.1% (with the top 15 companies in the SV 150 increasing 6.5 percentage points to 22.2%) (page 12).
- However, in both the S&P 100 and the top 15 of the SV 150, 100% of companies have had at least one woman director in the last few years. In the SV 150 overall, the percentage of companies with at least one woman director increased 12 percentage points to 74% (page 13).
- The average number of women directors remains low across all three groups, but their average percentage has been on a clear upward trajectory, with 23.1% in the S&P 100, 22.2% in the top 15 of the SV 150, and 14.1% in the SV 150 through the 2016 proxy season (page 19).

***Fenwick Gender Diversity Score™***

Fenwick created the Gender Diversity Score in 2014 as a metric for assessing gender diversity overall. This composite score is based on data at the board and executive management level in the SV 150, top 15 of the SV 150, and S&P 100 each year over the last two decades surveyed and in a set of categories selected as representative of the overall gender diversity picture (pages 8 and 71).

A review of the annual score over the last 21 years shows that:

- Gender diversity generally has improved over time—albeit slowly—with some years showing no progress.
- In the S&P 100, gender diversity has grown slowly but steadily at an aggregate rate of 66% over the last two decades.
- The SV 150 has lower scores overall, but a faster aggregate growth rate of 186%.
- Among the top 15 largest companies in the SV 150, where the diversity score has now exceeded the S&P 100, the aggregate growth rate has been 157%, well above the S&P 100 but below the aggregate growth rate of the SV 150 over the period.

***Size continues to matter; Board Leadership.***

- Larger companies by revenue and market capitalization tend to have larger boards and executive management teams, which tend to be more diverse.

**Executive Summary** *(continued)*

- In recent years, the top 15 largest companies in the SV 150 have surpassed the S&P 100 in percentage of women in board leadership positions, including board chairs, lead directors, and committee chairs (page 29).
- Women board chairs are rare across the U.S., but the top 15 largest SV 150 companies have in recent years more frequently had women board chairs than the similarly sized S&P 100 companies (page 29).
- The top 15 of the SV 150 have exceeded their S&P 100 peers in appointing women as lead directors—now often considered the most significant board leadership role (page 32).
- What's more, when measured in terms of likelihood of being in a board leadership position among women that serve as board members, the top 15 of the SV 150 and the SV 150 overall have been significantly more likely to include women in board leadership positions (Chair, Lead Director or committee chair) than the S&P 100 (page 29).

**Chief Executive Officers** *(page 48)*

Women CEOs continue to be a rarity in the United States but companies in the SV 150, with 6% women CEOs, and the S&P 100, with 7% women CEOs, appear to slightly exceed the percentage of women CEOs in the general corporate population (approximately 4%). The top 15 companies of the SV 150, though a small sample set, notched a notable increase in women CEOs, coming in at 13.3%.

**Named Executive Officers** *(page 43)*

Named executive officers are the executives that are generally the most highly compensated and in some sense those that a company considers among the most important. As a group, the SV 150 has shown a faster rate of increase in numbers in this cohort.

Notably, the average percentage growth rate of women NEOs has been faster in the SV 150 (approximately 705% growth) than in the S&P 100 (approximately 544% growth).

What's more, when measured in terms of likelihood of being a NEO among women that serve as executive officers, the SV 150 has been significantly more likely to include women as NEOs than the S&P 100, and in the most recent year the top 15 of the SV 150 were slightly more likely to include women than men as NEOs.

**Top 15 companies had more women NEOs under a woman CEO** *(pages 43-47).*

The top 15 of the SV 150 have a significantly higher percentage of NEOs (25%) when the CEO is a woman compared to the full SV 150 (14%) and the S&P 100 (7%).

That's compared to 19% of women NEOs when the CEO is a man at a top 15 company, 13% when the CEO is a man at an S&P 100 company, and 12% when the CEO is a man at an SV 150.

**Executive Summary** *(continued)*

However, male CEOs were more likely to include women as executive officers (19% in the S&P 100, 22% in the top 15 of the SV 150 and 15% in the SV 150 overall) when compared to women serving as CEOs (15% in the S&P 100, 6% in the top 15 of the SV 150 and 12% in the SV 150 overall).

Though, care should be taken when comparing statistics for women and men serving as CEO, as the number of women CEOs is very low.

## Introduction

Since 2003, Fenwick & West has collected a unique body of information on the corporate governance practices of publicly traded companies that is useful for all Silicon Valley companies, publicly traded technology and life sciences companies across the U.S. and public companies and their advisors generally. A large subset of that information is published in a Fenwick survey titled *Corporate Governance Practices and Trends: A Comparison of Large Public Companies and Silicon Valley Companies*<sup>1</sup>. This report on gender diversity is a companion supplement that expands on a subset of the data from which the broader corporate governance survey was drawn.<sup>2</sup> This report expands on the board diversity topic covered in the corporate governance report and focuses on women in leadership positions on the boards and executive management teams of the companies surveyed beginning with the 1996 proxy season through the 2016 proxy season (across 21 proxy seasons).

We recognize that leadership diversity can be measured using a wide range of factors and that the traditional factors of gender, race and ethnicity are not the only measures of a truly diverse workforce. We have elected to track the number of women on the boards and executive management teams of the technology and life sciences companies included in the Silicon Valley 150 Index (SV 150) and the large public companies included in the Standard & Poor's 100 Index (S&P 100) because gender can be more readily and accurately measured in public filings than other traditional diversity factors, and because women make up almost half of the workforce and hold slightly more than half of the management, professional and related positions in the broad U.S. workplace.<sup>3</sup> For a number of years, there has been media coverage and commentary, as well as much discussion among participants in the Silicon Valley ecosystem, about gender diversity in Silicon Valley. For a long time, much of the discussion was based on anecdotal experience, personal observation of a small number of situations or relatively limited statistical information, often measured at a relatively narrow point in time. Although there is still a dearth of comprehensive long-term data tracking gender diversity in Silicon Valley, more and more companies are proactively issuing diversity reports and exploring ways to make meaningful progress.<sup>4</sup> This survey is intended as a contribution to that growing conversation, in the form of a broader set of statistics regarding the roles of women in senior leadership positions at public companies in Silicon Valley measured annually over two decades, along with a comparison set of similar statistics for large public companies nationally.

- 1 A copy of the 2016 edition of *Corporate Governance Practices and Trends: A Comparison of Large Public Companies and Silicon Valley Companies*, which covered a complementary portion of the data through the 2016 proxy season, and was published with this report in November 2016, is available at <http://fenwick.com/CorporateGovernance>.
- 2 The corporate governance survey is primarily focused on governance at the board level and includes a section on board diversity. A small portion of the data in this report was published in the 2016 edition of the corporate governance survey, released in November 2016.
- 3 Women were 46.8% of the U.S. labor force in 2015 and held 51.5% of management (considering all levels), professional and related positions in 2015. See "Quick Take: Women in the United States" by Catalyst (2016).
- 4 See e.g., "Tech Companies Delay Diversity Reports to Rethink Goals" *Wall Street Journal* (December 2016), and "Silicon Valley Female Leaders Launch Diversity Tool" *Wall Street Journal* (May 2016).

**Introduction** *(continued)*

We hope this survey of gender diversity in Silicon Valley will stimulate more discussion and serve as a resource for measuring how well women are faring at the senior levels of leadership in the Silicon Valley workplace. We have also introduced the Fenwick Gender Diversity Score™ as another way to measure how well the companies in the S&P 100 and SV 150 are faring at gender diversity overall, which we have updated with two additional years of data. We recognize the good intentions of many companies in Silicon Valley as they strive to attract the very best, most talented employees and leadership teams to help them transform the world, and we commend organizations that promote the development and advancement of women in entrepreneurship and as executives in the technology and life sciences industries to further those goals.

**About the Data — Group Makeup**

When reviewing this report, it is important to understand the makeup of the data set from which it is drawn. In 2016, there were approximately 275 public companies<sup>5</sup> in “Silicon Valley,” of which the SV 150 captures those that are the largest by one measure — revenue.<sup>6</sup> However, there are thousands of technology and life sciences companies based in Silicon Valley (as geographically defined for purposes of the SV 150) that are not public.<sup>7</sup> They range from the proverbial founder/entrepreneur working alone in his or her garage and many tiny companies beginning to develop in a range of incubators, to seed-stage companies and various levels of venture capital-backed companies all the way up to fairly large (yet privately-held) companies such as Airbnb, Uber, Nutanix or Line Corp.<sup>8</sup> The public companies in the SV 150 are in some sense the cream of technology and life sciences companies in Silicon Valley. They are companies that desired to access the public capital markets and have reached a scale and level of success such that investment banks were

- 5 The number fluctuates constantly as some companies complete initial public offerings and others are acquired. As of November 20, 2015, Hoover’s includes 423 public companies in Silicon Valley (defined by the *San Jose Mercury News* as Alameda, Contra Costa, San Francisco, San Mateo and Santa Clara counties). Of the 423 public companies in Silicon Valley, we consider more than 275 of them technology or life sciences companies based on their “Line of Business” description from Hoover’s as well as their initial sources of funding. The number of Silicon Valley public companies is down from a high of 417 reached in 2000 during the dot-com era. See “[Vanishing Public Companies Lead To The Incredible Shrinking Silicon Valley](#)” (*SiliconBeat* February 17, 2010) and “[Outside Silicon Valley, IPO Market Still in Drought](#)” (*Seeking Alpha* May 14, 2011).
- 6 See the “Methodology—Group Makeup” section beginning on p. 66 for a more detailed discussion of the makeup of the SV 150 and the geography of Silicon Valley for its purposes, including footnote 91.
- 7 There are also many more in the San Francisco Bay Area and elsewhere that are sometimes generically referred to collectively as “Silicon Valley” (meaning the industry).
- 8 Nutanix completed its initial public offering on September 30, 2016. If Nutanix had been public in 2015, with estimated 2015 revenue of \$241M, it would have ranked 134 on the SV150 list for the 2016 proxy season, which is ordered based on revenue for the most recent available four quarters prior to publication of the list. For the 2016 proxy season, this was generally revenue for the four quarters ended December 31, 2015. Line Corp. completed its initial public offering on July 14, 2016. If Line had been public in 2015, with estimated 2015 revenue of \$989.5M, it would have ranked 66 on the SV150 list. Uber and Airbnb are still private at the time of publishing with estimated 2015 revenue of \$2B and \$675M, respectively, and would have ranked 45 and 79, respectively, had they been public by the end of 2015.



**Introduction** *(continued)*

willing to underwrite their IPOs and public investors were willing to buy their stock.<sup>9</sup> Consequently, the data presented in this report should not be understood to be fully representative of “Silicon Valley” as a whole.

Similarly, it is important to understand the differences between the technology and life sciences companies included in the SV 150 and the large public companies included in the S&P 100. Compared with the S&P 100, SV 150 companies are on average much smaller and younger, have much lower revenue and are concentrated in the technology and life sciences industries. Throughout the survey we compare the top 15 of the SV 150 to the S&P 100 because, as discussed more fully below, the top 15 are more similar in size to the S&P 100 and therefore a more apt comparison group than the full SV 150.

The 2016 constituent companies of the SV 150 range from Apple and Alphabet with revenue of approximately \$235B and \$75B, respectively, to FibroGen and TubeMogul, with revenue of approximately \$181M each, in each case for the four quarters ended on or about December 31, 2016. Apple went public in 1980, Alphabet (as Google) in 2004, and FibroGen and TubeMogul each in 2014. Apple and Alphabet’s peers clearly include companies in the S&P 100, of which they are also constituent members (eight companies were constituents of both indices for the survey in the 2016 proxy season), where market capitalization averages approximately \$142B.<sup>10</sup> FibroGen and TubeMogul’s peers are smaller technology companies that went public more recently and have market capitalizations well under \$1B, many of which went public relatively recently. In terms of number of employees, the SV 150 averages 9,535 employees (with a median of 1,803 employees), ranging from Hewlett Packard Enterprise with 240,000 employees across dozens of countries to companies such as Five Prime Therapeutics with 154 employees all in the United States, as of the end of their respective fiscal years 2015. The S&P 100 averages approximately 150,000 employees and includes Wal-Mart with 2.3 million employees in more than two dozen countries at its most recent fiscal year end. The S&P 100 companies are not necessarily representative of companies in the United States generally,<sup>11</sup> just as the SV 150 companies are not necessarily representative of Silicon Valley generally.

- 9 The standards for a successful IPO evolve constantly depending on a variety of factors related to, among other things, investor risk appetite, economic conditions and recent IPO trends, and are beyond the scope of this report. Fenwick’s survey on technology and life sciences IPO trends is available at <http://fenwick.com/IPOSurvey>. They are considerably different today compared with standards effectively in place at the beginning of the survey period (or in place when those companies went public). Consequently, there are certainly a number of public companies represented in the survey (in prior years and in the most recent proxy season) that would not necessarily meet current IPO standards. Conversely, there are a number of companies that could conduct a successful IPO, but for a variety of reasons (that are also beyond the scope of this report), they have not yet decided to do so. In addition, the desire of companies to access the public capital markets have also evolved as the availability of private capital and the burdens and restrictions attendant to being a public company have changed.
- 10 The average market capitalization of the SV 150 at the time of announcement of the current index list (see footnote 91) was approximately \$19.6B, ranging from Aviat Networks at approximately \$45M to Apple at approximately \$604.3B with a median of \$2.3B. The median revenue of the SV 150 for the four quarters ending on or about December 31, 2015 was approximately \$815M. It is also worth noting that this year 30 SV 150 companies are also constituents of the S&P 500.
- 11 The companies included in the S&P 100 are a cross-section of the very largest public companies in the United States (see footnote 90). As previously noted, the market capitalizations of S&P 100 companies average \$142B, and they have an average of 150,000 employees. They are far larger than a typical public company in the United States and far larger than United States corporations generally.

**Introduction** *(continued)*

It is worth noting that the broad range of companies in the SV 150 (whether measured in terms of size, age or revenue) is associated with a similarly broad range of gender diversity. Comparison of gender diversity statistics and trends for the top 15,<sup>12</sup> top 50,<sup>13</sup> middle 50<sup>14</sup> and bottom 50<sup>15</sup> companies of the SV 150 (in terms of revenue) bears this out,<sup>16</sup> and some examples of such comparisons are included in this report.

**Fenwick Gender Diversity Score™**

Fenwick created the Gender Diversity Score in 2014 as a metric for assessing gender diversity overall and progress made. This composite score is based on data at the board and executive management level in the SV 150, top 15 of the SV 150, and S&P 100 over the 21 years surveyed and in a set of categories selected as representative of the overall gender diversity picture.<sup>17</sup>

A review of the yearly scores across the survey period shows that gender diversity has improved over time, though progress is slow and in some years there may be no progress at all. For the S&P 100, gender diversity has grown slowly but steadily over time. The SV 150 has lower scores overall, but a faster growth rate than the S&P 100, despite a period of fairly limited growth from 2001 to 2007. Over the period surveyed, the S&P 100 grew at a rate of 66% while the SV 150 grew at a rate of 186%. The score and growth rate for the top 15 of the SV 150 has historically been in between the S&P 100 and SV 150 scores (a 157% growth rate over the period surveyed), with strong gains in diversity during the “dot com” technology bubble between the 1998 and 2000 proxy seasons and again between the 2007 and 2008 proxy seasons, as well as over the last three proxy seasons. However, the score for the top 15 of the SV 150 exceeds the S&P 100.

- 12 The top 15 includes companies, eight of which are included in the S&P 100 (see footnote 90), with revenue of approximately \$6.7B or more and market capitalizations averaging \$152.3B, ranging from Synnex at approximately \$3.7B to Apple at approximately \$604.3B at the time of announcement of the current index list (see footnote 91).
- 13 The top 50 includes companies with revenue of approximately \$1.6B or more and market capitalizations averaging \$54.4B, ranging from Super Micro at approximately \$1.6B to Apple at approximately \$604.3B at the time of announcement of the current index list (see footnote 91).
- 14 The middle 50 includes companies with revenue of at least approximately \$400M but less than approximately \$1.5B and market capitalizations averaging \$3.3B, ranging from Rocket Fuel at approximately \$137M to Workday at approximately \$3.9B at the time of announcement of the current index list (see footnote 91).
- 15 The bottom 50 includes companies with revenue of at least approximately \$181M but less than \$400M and market capitalizations averaging \$979M, ranging from Aviat Networks at approximately \$45M to Guidance Software at approximately \$3.9B at the time of announcement of the current index list (see footnote 91).
- 16 Contrasting the top 15 or top 20 SV 150 companies (in the latter case, companies with revenue of approximately \$5.6B or more and market capitalizations averaging \$117.2B at the time of announcement of the current index list) against the remaining SV 150 companies is similarly enlightening (see footnote 91). In 2015, the SV 150 included 22 life sciences companies (broadly defined) and 128 technology companies. There are also some differences between technology and life sciences companies as groups within the SV 150.
- 17 See the “Methodology– Fenwick Gender Diversity Score™” section beginning on p. 71 for a detailed discussion of the calculation of the score for each group.

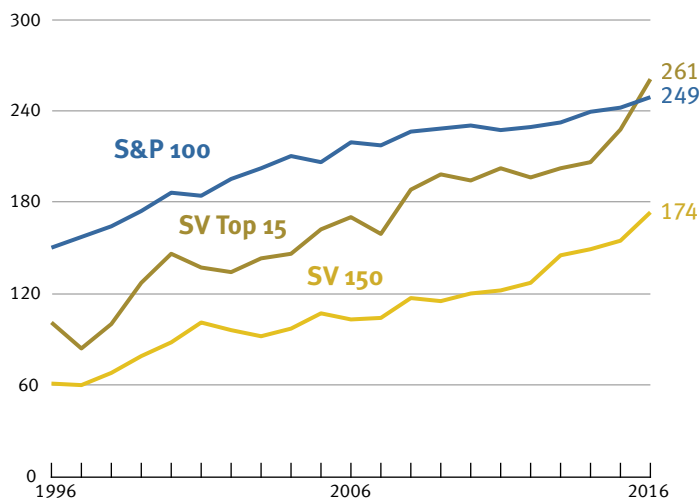
Introduction (continued)

Focusing on the scores for the last 10 proxy seasons (since 2006) shows an increase of 30 points, or 14%, in the S&P 100 compared to an increase of 71 points, or 69%, in the SV 150 (with the score for the top 15 of the SV 150 increasing by 90 points, or 53%).

Similarly, focusing on the scores for the last five proxy seasons (since 2011) shows an increase of 22 points, or 10%, in the S&P 100 compared to an increase of 52 points, or 43% in the SV 150 (with the score for the top 15 of the SV 150 increasing by 59 points, or 29%).

The following graph shows the gender diversity score for each of the SV 150, SV Top 15 and S&P 100 over the period from the 1996 through 2016 proxy seasons.

FENWICK GENDER DIVERSITY SCORE™ — 1996–2016



## Gender Diversity on the Board of Directors

Under applicable SEC disclosure rules, companies are required to disclose whether they consider diversity in identifying nominees to the board of directors. However, companies have the flexibility to define diversity for themselves, and such definitions typically include a wide range of factors, not simply traditional diversity factors such as gender, race and ethnicity.<sup>18</sup>

In fact, one study found that during the four years after the enactment of the SEC's diversity disclosure rule, only half of the companies defined diversity to include traditional factors such as gender, race and ethnicity while over 80% used a definition of diversity that referenced a director's prior professional experience or other nonidentity-based factors. The report noted that to the extent the disclosure rule was intended to produce more diversity on boards along socio-demographic lines, it would be more effective to require companies to include disclosure about identity-based diversity factors such as gender, race and ethnicity rather than allowing companies to define diversity for themselves.

Consequently, it is fairly difficult to measure board diversity in a systematic way when relying primarily on the information in public filings.<sup>19</sup>

As noted in the introduction, we elected to track gender as a measure of board diversity for the technology and life sciences companies in the SV 150 and S&P 100 companies because gender can be more readily measured in public filings than other traditional diversity factors. Although earlier research has suggested a lack of evidence to support a business case for board diversity,<sup>20</sup> an increasing numbers of studies in recent years have drawn a correlation between diversity and positive company performance. In its report on gender diversity as a competitive advantage, Equilar in 2016 reviewed a Morgan Stanley study that looked at lists of stocks that screened well or poorly on gender diversity metrics, along with favorable and unfavorable stock selection model rankings for more than 1,600 stocks globally. That study showed that diverse companies show better returns and outperform their peers. In 2016, the Credit Suisse Research Institute reaffirmed its

18 See current Item 407(c)(2)(vi) of Regulation S-K and SEC Release No. 33-9089 See also “Corporate Reporting under the U.S. Securities and Exchange Commission’s Diversity Disclosure Rule: A Mixed-Methods Content Analysis” by Aaron A. Dhir (2015).

19 However, for a report on traditional diversity factors, see “Missing Pieces: Women and Minorities on Fortune 500 Boards — 2012 Alliance for Board Diversity Census” (August 15, 2013), which “conducted extensive research to confirm the gender, race and ethnicity of directors” and found that white men make up 73.3% of the Fortune 500 board seats in 2012, with white women, minority men and minority women making up 13.4%, 10.1% and 3.2%, respectively. Data for 2016 from Deloitte showed that companies have made only incremental progress in promoting boardroom diversity: Women and minorities comprise nearly 31 percent of the board seats of Fortune 500 companies, which is only a small increase over the previous four years, according to “Missing Pieces Report: The 2016 Board Diversity Census of Women and Minorities on Fortune 500 Boards” by Alliance for Board Diversity and Deloitte (2016).

20 See “When Passionate Advocates Meet Research on Diversity, Does the Honest Broker Stand a Chance?” based on the presidential address by Alice H. Eagly delivered at the 2015 conference of the Society for the Psychological Study of Social Issues (published March 2016). See also “Diversity on Corporate Boards: How Much Difference Does Difference Make?” by Deborah Rhode and Amanda Pachel of Stanford Law School (September 2010) and “Is There a ‘Business Case’ for Board Diversity?” by Yi Wang and Bob Clift, *21 Pacific Accounting Rev.* 88 (2009), which review recent studies on the subject, discussing their inconclusive results and methodological shortcomings.

**Gender Diversity on the Board of Directors** *(continued)*

earlier findings that companies with a higher participation of women in decision-making roles continue to generate higher market returns and superior profits.<sup>21</sup>

On the other hand, a few earlier studies highlighted inconclusive results and methodological shortcomings in reviews of studies on the subject. In 2010, for example, Deborah Rhode and Amanda Packel found in a review of dozens of studies on board diversity “that the relationship between diversity and financial performance has not been convincingly established.” A 2009 report by Yi Wang and Bob Clift found no statistically significant relationship between the percentage of female directors, the percentage of minority directors or the percentage of female and minority directors and subsequent ROA, ROE or shareholder return.

Researchers have also looked at the effect of mandatory quotas. While voluntary inclusion of women directors may provide positive benefits for companies, some studies have suggested a potential negative impact where there is a legally mandated substantial minimum quota for women directors.<sup>22</sup> Still another vein of research has suggested that, while board members believe that board diversity (defined in traditional terms of gender, race and ethnicity) is a valuable outcome that boards should pursue, it is very difficult for them to provide concrete examples from their experience of when gender, race and ethnic diversity has made a tangible difference in board performance.<sup>23</sup>

Globally, European countries are leading in corporate board diversity, with Norway, France and Sweden showing the highest percentage of women on boards. U.S. companies were reported to have tied for 10th place with Australia out of 20 countries surveyed for number of women board members at public companies.<sup>24</sup> A new Equilar Gender Diversity Index (GDI) introduced in January 2017 estimated that it will take nearly 40 years for Russell 3000 boards of directors to reach gender parity if the current pace of growth continues unchanged. As of December 31, 2016, women made up 15.1% of Russell 3000 directorships,

- 21 Other more recent reports have similarly made the case that diversity is good for business. See Equilar’s Gender Diversity As a Competitive Advantage (2016), Women on Corporate Boards Globally by Catalyst (2017) and Credit Suisse Research Institute Releases the CS Gender 3000: The Reward for Change Report Analyzing the Impact of Female Representation in Boardrooms and Senior Management (2016).
- 22 See, e.g., two studies, each of which reviewed company performance in Norway, which passed a law requiring that 40% of directors for all public companies be women since 2003 (with phase-in through 2008): “The Changing of the Boards: The Impact on Firm Valuation of Mandated Female Board Representation” by Kenneth Ahern and Amy Dittmar (May 20, 2011), finding an associated decrease in stock price (as well as finding that “[t]he quota led to younger and less experienced boards, increases in leverage and acquisitions, and deterioration in operating performance, consistent with less capable boards”), and “A Female Style in Corporate Leadership? Evidence from Quotas” by David Matsa and Amalia Miller (December 2, 2011), finding a decrease in short term profitability. More recent research indicates that after a difficult adjustment period, support for the requirement in Norway has increased as participants in corporate culture experienced positive effects of the law, see “Gender Diversity on Boards: The Future Is Almost Here” (March 2016). See also a 2014 Credit Suisse Gender 3000 report, in which the authors observe “that the effect of the quotas and targets for board level participation have positively contributed to the debate, but has so far failed to improve female participation in senior management more broadly and have done nothing to address the pipeline issues.”
- 23 See “The Danger of Difference — Tensions in Directors’ Views of Corporate Board Diversity” by Kimberly Krawiec, John Conley and Lissa Broome, published in the *University of Illinois Law Review* (Vol. 2013), also available on SSRN, which reported on interviews of 50 current and former public board members, as well as seven individuals who serve as consultants or proxy advisors to public boards.
- 24 See “Globally, women gain corporate board seats — but not in the US” (*Fortune* citing 2015 Catalyst study). See also the 2017 Catalyst study.

Gender Diversity on the Board of Directors *(continued)*

according to [the GDI](#), and 738 boards had zero women. While there has been recurring discussion regarding the relatively low number of women directors among public company boards in Silicon Valley relative to public companies generally in the United States,<sup>25</sup> our review of the data suggests that board size is a significant factor affecting the number of women directors, and to some degree that is a function of the relatively small size of many SV 150 companies.<sup>26</sup> For example, while S&P 100 companies tend to have more women directors than SV 150 companies when measured in absolute numbers (S&P 100 average = 2.9 and SV 150 average = 1.2 women in the 2016 proxy season), the difference (while significant) is less pronounced when measured as a percentage of the total number of directors (S&P 100 average = 23.1% of directors and SV 150 average = 14.1% of directors in the 2016 proxy season). In addition, the data for the top 15 of the SV 150 is closer to that of the S&P 100 than to the SV 150 generally (top 15 average = 2.4 in the 2016 proxy season, up from average = 1.9 in the 2011 proxy season), despite having smaller average board size (top 15 of SV 150 average = 10.5; S&P 100 average = 12.4).<sup>27</sup>

When measured as a percentage of the total number of directors, top 15 average = 22.2% in the 2016 proxy season; down from average = 16.7% in the 2011 proxy season. Further, significantly affecting the average in the SV 150 are the 39 companies without any women directors (26% of SV 150 companies, down from 82% in 1996 and 52% as recently as 2011), of which 24 are companies with 7 or fewer total board members (and only 1 of which has more than 9 directors).<sup>28</sup> Overall, 2016 continued the long-term trend in the SV 150 of increasing numbers of women directors (both in absolute numbers and as a percentage of board members) and declining numbers of boards without women members. The rate of increase in women directors for the SV 150 continues to be higher than among S&P 100 companies.

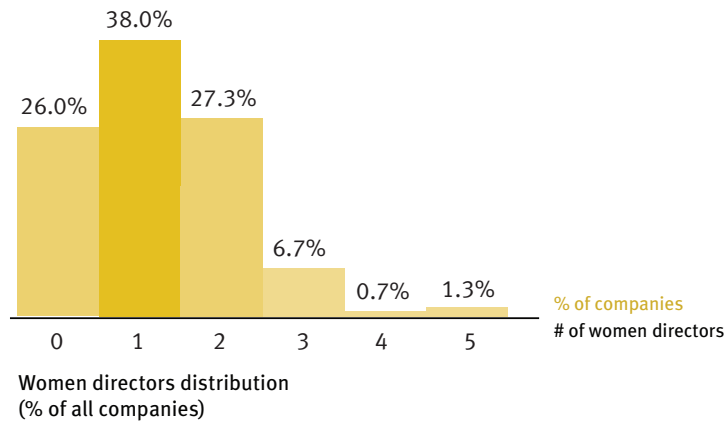
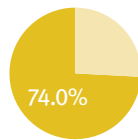
- 25 See [“Boards Will Reach Gender Parity in 2055 at Current Pace,”](#) Equilar blog (February 2017) and [“Searching for Female Board Members in Silicon Valley”](#) by Equilar (January 2017) and [Equilar Gender Diversity Index \(2017\)](#).
- 26 While our data focuses on a limited number of public companies in Silicon Valley and large public companies nationally, this observation appears to be true among the largest companies as well. See the [“Missing Pieces: Women and Minorities on Fortune 500 Boards — 2012 Alliance for Board Diversity Census”](#) (August 15, 2013), which includes data for Fortune 100 and Fortune 500 companies. See also the [“2015-16 UC Davis Study of California Women Business Leaders – A Census of Women Directors and Highest-Paid Executives,”](#) a review of the 400 largest companies headquartered in California, which reaffirmed its earlier findings that size matters and The Boston Club’s [“2016 Census of Women Directors and Executive Officers of Massachusetts Public Companies.”](#)
- 27 As many companies add board seats, their boards generally expand the mix of skills and experiences that they seek to have represented, often into areas where women are more represented than they are in the mix in effect for smaller boards or companies at earlier stages of development.
- 28 This is not simply a Silicon Valley phenomenon. See, e.g., the [2015-16 UC Davis Graduate School of Management study](#), which found that “The number of companies with no women dropped below 100 for the first time in our study, to 92 companies, or 23% of the companies in our sample.”

Gender Diversity on the Board of Directors (continued)

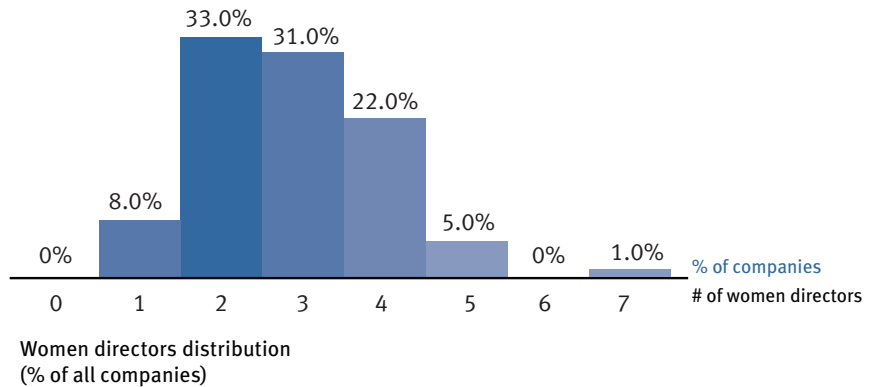
The following graphs show the percentage of companies with at least one woman director and the distributions by number of women directors among the boards of companies in each group during the 2016 proxy season.

WOMEN DIRECTORS — 2016 PROXY SEASON DISTRIBUTION

**SV 150**  
2016  
% of companies with at least 1 woman director



**S&P 100**  
2016  
% of companies with at least 1 woman director

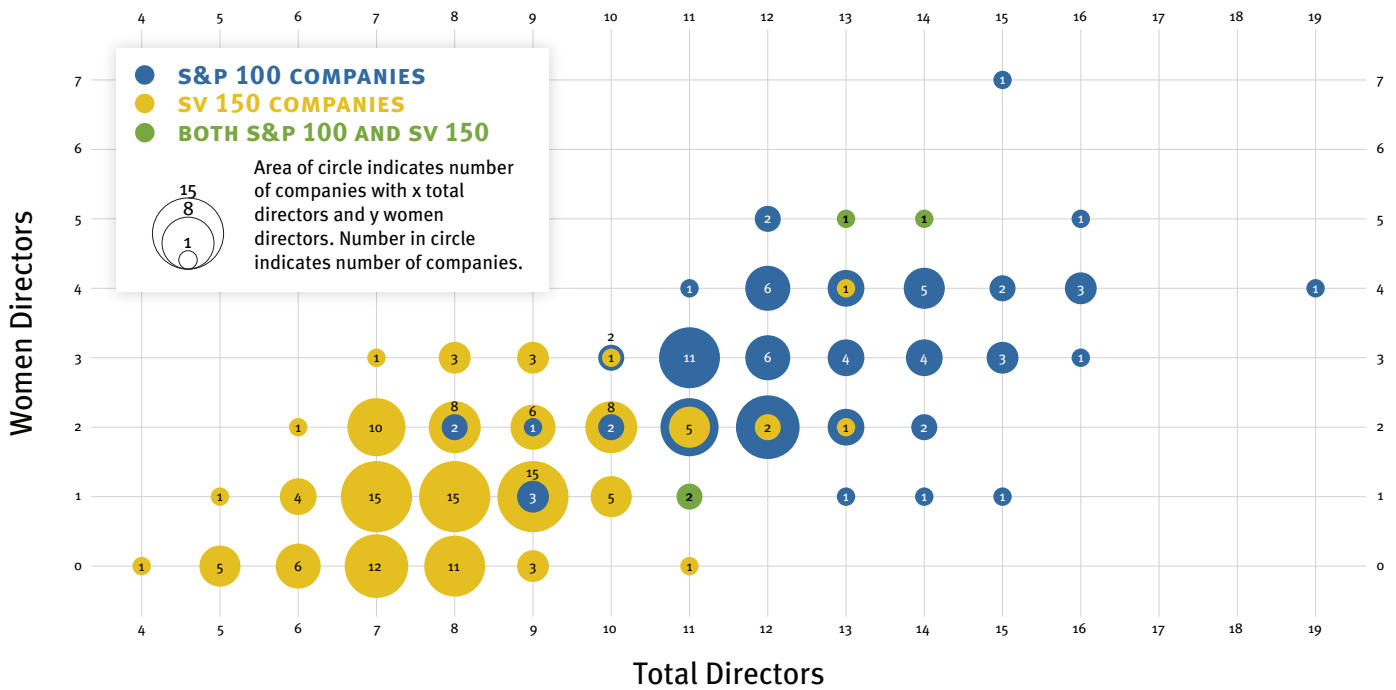


Gender Diversity on the Board of Directors (continued)

The following graph shows the distribution of women directors by number of women directors at each board size among the boards of companies in each group during the 2016 proxy season.

DISTRIBUTIONS BY BOARD SIZE vs. NUMBER OF WOMEN DIRECTORS — 2016 PROXY SEASON

S&P 100 (100 COMPANIES) vs. SV 150 (150 COMPANIES)





## Gender Diversity on the Board of Directors *(continued)*

Based on anecdotal experience and review of biographical information for executive officers, directors and nominees, other factors beyond board size that contribute to much, but perhaps not all, of the relative dearth of women on the boards of the technology and life sciences companies in the SV 150<sup>29</sup> appear to be that:

- CEOs generally serve on their own boards, and women are underrepresented among CEOs.<sup>30</sup>
- venture capitalists, holding sizable shares of the companies' stock and carrying over from the private company boards, tend to represent a sizable portion of the independent directors for companies conducting initial public offerings in Silicon Valley<sup>31</sup> — and women make up a small percentage of such investment professionals;<sup>32</sup>
- turnover on public company boards tends to be very low and has been declining<sup>33</sup> — providing relatively few opportunities for women to be added to boards absent an increase in board size;
- when looking for new board members, nominating committees are generally focused on finding candidates with CEO or other board or executive experience in industries, markets or technologies

29 The 2015-16 UC Davis Graduate School of Management study suggests a more nuanced view of the contribution of industry to the relative dearth of women board members, finding that some of the biggest positive gains in percentage of women directors in 2015 came in the technology hardware and software sectors.

30 See the discussion under “Gender Diversity on the Executive Management Team” beginning on p. 35, including the discussion of executive positions beyond CEO that, in addition to founders, are the pipeline for CEO positions. See also “Silicon Valley’s Diversity Fail Includes White-Male Dominated VCs (And It’s Killing Women And Minority Startups),” which reported in mid-2015 that just 9.7 percent of all partners at venture capital firms are women, 8.3 percent of venture capital-funded U.S. tech startups founded in 2014 were led by women CEOs, citing Pitchbook. See also “Women Entrepreneurs 2014: Bridging the Gender Gap in Venture Capital” by Candida Brush, Patricia Greene, Lakshmi Balachandra and Amy Davis (September 2014), which found that only 2.7% of companies, or 183 of 6,517 companies receiving venture capital funding during 2011-2013 had a woman CEO.

31 Historically, the typical board of a Silicon Valley IPO company has been approximately seven directors, one of which is typically the CEO, three or four of which are representatives of the investors that funded the company prior to the IPO (typically VCs) and the remainder of which typically consist of an audit committee financial expert/chair and one or two directors with experience as a CEO of a similar-growth company and/or executive experience in a relevant industry or market.

32 See, e.g., with “The first comprehensive study on women in venture capital and their impact on female founders,” TechCrunch (April 2016), which found that 7% of partners at the top 100 venture firms globally are women. That study’s authors excluded many women who have a “partner” title but do not invest, though they may have important roles in communications, finance, talent, analysis, administration and other areas. In order to calculate the percentage of female versus male partners at a firm, authors of this study were also careful to filter male “partners” according to the same standards.

33 According to the *Second Quarter 2013 issue of Directors & Boards*, the number of new directors has declined in the prior five and 10 years by 12% and 27%, respectively. However, a 2016 Equilar study found that over the past five years, the number of S&P 500 chief executives who have resigned or retired has increased incrementally over 2015, see “CEO Turnover and Board Changes at S&P 500 Companies.” On the other hand, a 2016 report by Dorsey found that average director tenure remained stable during the previous five years. See “Board Refreshment: Investors Respond to Trends in Mandatory Retirement Age and Tenure with More Stringent Voting Policies.”

Gender Diversity on the Board of Directors *(continued)*

relevant to their company<sup>34</sup> — and women make up a fairly small portion of the pool of potential candidates in the relevant industry (or sector of the industry);<sup>35</sup> and

- nominating committees and board members as a whole often start their search for board candidates by looking in their own networks of contacts (even if a professional search firm is also retained), and smaller companies often do not retain a professional search firm to find board candidates<sup>36</sup> — reducing the chance that women will be represented in the candidate pool for some boards due to idiosyncratic network effects.

To some degree, the relatively small number of companies based in Silicon Valley (the SV 150 captures most of those that are public) and the relatively small size of Silicon Valley boards means that women in Silicon Valley have fewer opportunities to become public company board members and thereby come to be seen as a peer and enter the networks of board members and consultants seeking board candidates.<sup>37</sup> This is further exacerbated by the fact that technology and life sciences companies encompass a vast array of businesses and technologies, and board candidates are often sought with experience in a particular niche within that array (e.g., enterprise software or security technologies or Internet retail or social media, etc.).<sup>38</sup>

- 34 See Study: Diversity, Experience at Odds on Fortune 500 Boards (2016), which cites research showing that Fortune 500 boards are more likely to favor experienced leaders over demographics when bringing on new directors. This is an area of increased focus among institutional investors. See also “Do Independent Expert Directors Matter?” by Ronald Masulis, Christian Ruzzier, Sheng Xiao and Shan Zhao (June 1, 2012), which found that the proportion of independent directors with prior industry experience correlates to positive firm performance.
- 35 See, e.g., the 2015-16 UC Davis Graduate School of Management study found that women account for 10.5% of the 1,823 highest-paid executive positions in the 400 largest public companies in California, representing an increase of six women from the prior year, despite 45 fewer highest-paid executive positions overall, and the Women Entrepreneurs 2014 report finding that of the 6,517 companies that received venture capital funding between 2011 and 2013, 86% had no women at all in management positions and more than 97% of those companies had male CEOs.
- 36 For companies that do retain a search firm, several specialize in recruiting women, such as Trewstar or Chadick Ellig Executive Search Advisors. See also “Searching for Female Board Members in Silicon Valley” by Equilar (January 2017).
- 37 While there are a large number of private companies in Silicon Valley, many of those have not received venture capital funding and, even those that have may not have reached a stage such that their executives or board members might be considered peers for public board candidate searches; and private companies in Silicon Valley, including late-stage startups, generally have smaller boards than those represented in the SV 150. Consequently, even factoring in participation in private companies in Silicon Valley, there are still relatively few opportunities for an individual to come to be seen as a peer and enter the networks of board members and consultants seeking board candidates.
- 38 As covered in more depth in the discussion under “Gender Diversity on the Executive Management Team” beginning on p. 35, women represent a relatively small portion of the top executives in Silicon Valley companies, reflecting the relatively small portion of technology company employees that are women, a likely leading indicator for women in senior management team positions in later years. See “Equal Employment Opportunity Commission says tech industry is underutilizing diverse talent pool” TechCrunch (May 18, 2016), which reported that among the total workers employed at top Silicon Valley tech companies, 47 percent were white, 30 percent were women, 41 percent were Asian American, 3 percent were black and 6 percent were Hispanic. To a degree, this is offset by the desire of technology companies in some sectors to recruit board candidates in particular customer verticals or with relevant non-technology experience (e.g., consumer/retail), sometimes opening up the candidate pool to industries with many more women who are potential candidates (and these searches are also often more likely to involve a professional search firm).

**Gender Diversity on the Board of Directors** *(continued)*

A study published in 2013 explored the lack of significant diversity on corporate boards by pursuing a “qualitative interview strategy,” in which the authors interviewed fifty-seven people with direct experience with corporate boards, as directors, executives, consultants, regulators or proxy advisors, of which fifty had served as directors of publicly traded corporations.<sup>39</sup> The authors noted that during the course of their interviews, they had heard from participants “many concrete ideas for improving [diversity] numbers, including:

- [defining] qualifications more broadly; [including] other C-suite executives besides the CEO as well as division presidents and leaders from government service, accounting, retired military, and academia;
- [not requiring] prior public company board experience;
- [identifying] the skill sets needed for new board members and then look specifically for women or minorities who have that skill set, rather using diversity as a “plus” factor;
- [limiting] some searches to women or minority candidates;
- [valuing] different perspectives that could be provided by someone with different industry experience (e.g., technology or mining firms going outside of these industries), or from a younger person with experience with social media or other emerging technologies that older directors may not be familiar with; and
- [working] on structural issues that may impede the advancement of women and minorities in corporations.”

A 2011 article in *NACD Directorship* reached similar conclusions and suggested that rigorous board evaluations in the interest of increasing board effectiveness will have the salutary result of more diverse boards.<sup>40</sup>

Investors have begun to publicly agitate for concrete steps to increase boardroom gender diversity. For example, in March 2017 State Street Global Advisors publicly stated that it will vote against the chair of a board’s nominating and/or governance committee if a company fails to take action to increase the number of women on its board, appearing to suggest that boards with fewer than 15 percent women are a particular focus.

<sup>39</sup> See “The Danger of Difference — Tensions in Directors’ Views of Corporate Board Diversity” by Kimberly Krawiec, John Conley and Lissa Broome, published in the *University of Illinois Law Review* (Vol. 2013), also available on SSRN, which reported on interviews of 50 current and former public board members, as well as seven individuals who serve as consultants or proxy advisors to public boards.

<sup>40</sup> See “Diversity: Acting on What We Know” by Judy Warner (September 9, 2011), discussing a roundtable of prominent public company directors (also noting that age and term limits, while used by many boards, have become, in some directors’ views, a cop-out for full-board evaluation).

### Gender Diversity on the Board of Directors *(continued)*

During the 20-year period covered by this survey, there has been a general upward trend in both groups of companies in the average percentage of board members that are women (SV 150 average in 1996 proxy season = 2.1% and in 2016 = 14.1%; S&P 100 average in 1996 proxy season = 10.9% and in 2016 = 23.1%), though there was a period of relative stagnation from the 2008 through 2011 proxy seasons. While at all times the S&P 100 has significantly exceeded the SV 150 in terms of average number and average percentage of women directors, the growth rate of women directors, in terms of either the average number of women per board or the average percentage of boards that are women, has been much faster in the SV 150 (approximately 350% growth) than in the S&P 100 (approximately 86% growth) over the survey period.<sup>41</sup>

However, while there has been a distinct downward trend in the percentage of SV 150 companies with no women directors (82.3% in 1996; 26.0% in the 2016 proxy season), there were no such companies in the S&P 100 in the 2016 proxy season (10.6% in 1996).<sup>42</sup> Our data shows that within the SV 150, this fairly closely tracks with the size of company (measured by revenue), which also correlates with board size, with 40.0% of the bottom 50 companies having no women directors in the 2016 proxy season whereas all of the top 15 SV 150 companies have at least one woman director. In addition, both groups have seen marked increases in the percentage of companies with two or more women directors (SV 150 from 1.3% in 1996 to 36.0% in 2016; S&P 100 from 43.6% in 1996 to 92.0% in the 2016 proxy season).<sup>43</sup>

<sup>41</sup> The 2015-16 UC Davis Graduate School of Management study similarly found the biggest positive gains in percentage of women directors came in the technology hardware and software sectors.

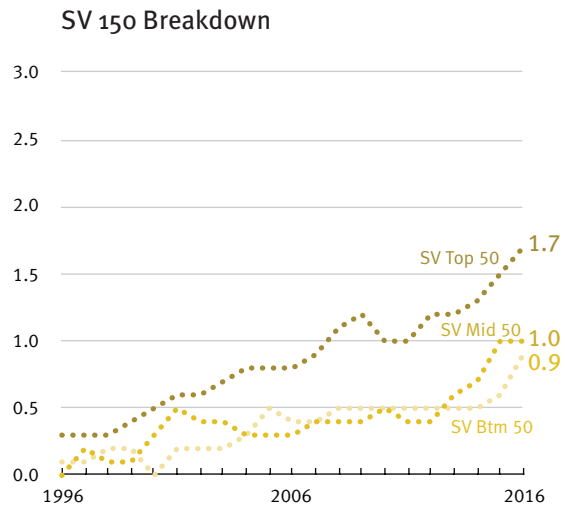
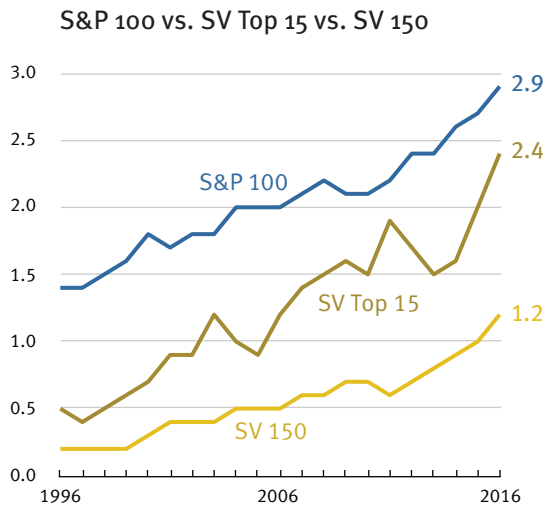
<sup>42</sup> During the period of the survey (1996 to 2016), the top 15 of the SV 150 moved from 50.0% of companies with no women serving as directors in 1996 to 0.0% in 2016 (after dropping to 0.0% in 2011). In fact, the number of companies with no women serving as directors fell meaningfully at all levels of the SV 150.

<sup>43</sup> During the period of the survey (1996 to 2016), the top 15 of the SV 150 moved from 0.0% in 1996 to 80.0% of companies having two or more women directors.

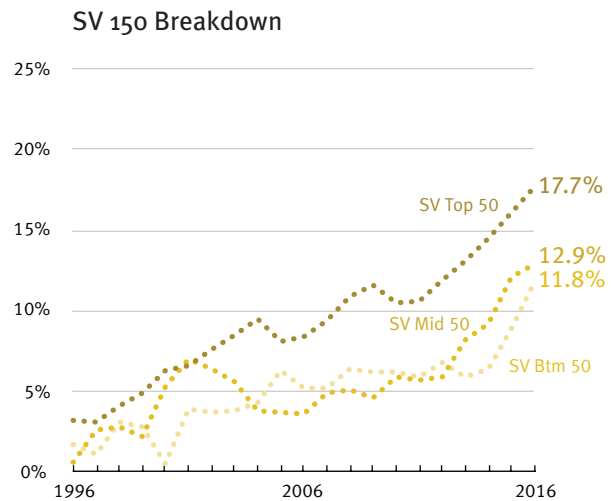
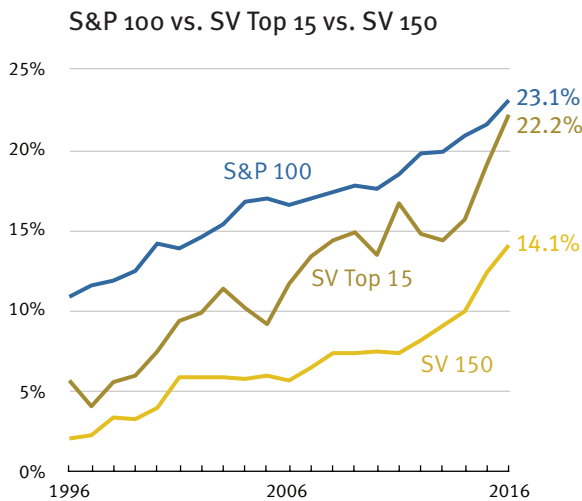
Gender Diversity on the Board of Directors (continued)

The following graphs show the average number and the average percentage of women directors for each of the SV 150, the SV Top 15 and the S&P 100 (and with the SV 150 broken down by the top 50, middle 50 and bottom 50 companies) over the period from the 1996 through 2016 proxy seasons.

AVERAGE NUMBER OF WOMEN DIRECTORS — 1996–2016



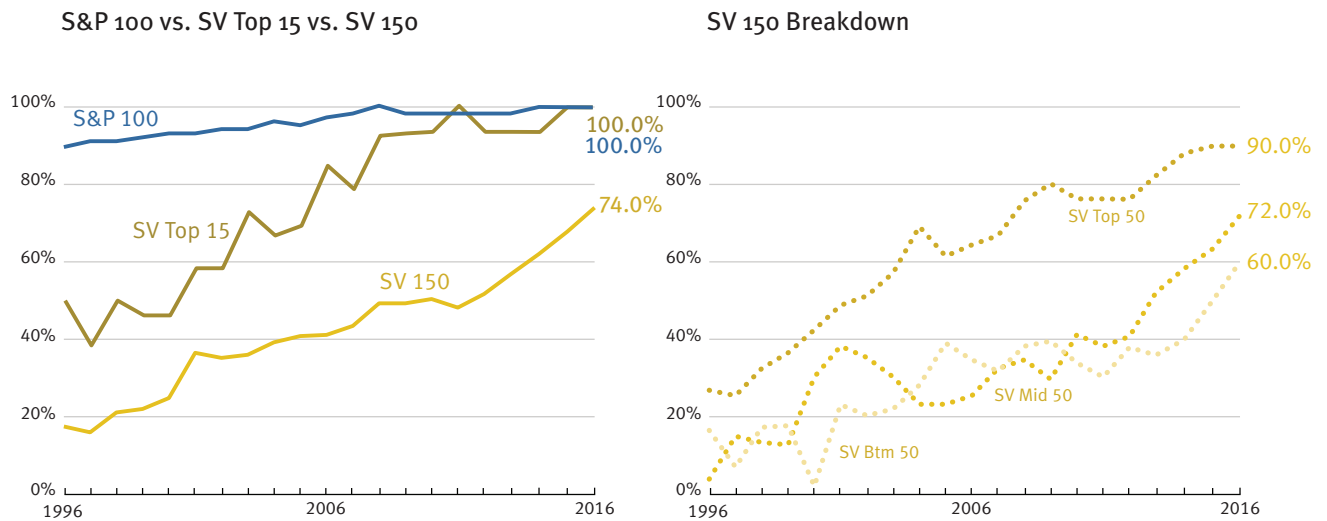
AVERAGE PERCENTAGE OF WOMEN DIRECTORS — 1996–2016



Gender Diversity on the Board of Directors (continued)

The following graphs show the percentage of companies with at least one woman director in each of the SV 150, the SV Top 15 and the S&P 100 (and with the SV 150 broken down by the top 50, middle 50 and bottom 50 companies) over the period from the 1996 through 2016 proxy seasons.

PERCENTAGE OF COMPANIES WITH AT LEAST ONE WOMAN DIRECTOR — 1996–2016



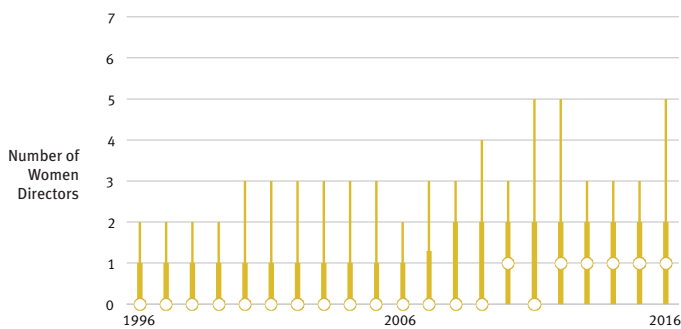
Gender Diversity on the Board of Directors (continued)

The following graphs show the trend in the distribution by number and percentage of women directors in each group (showing both the median number or percentage and the cutoffs for the deciles with the most women directors) over the period from the 1996 through 2016 proxy seasons.

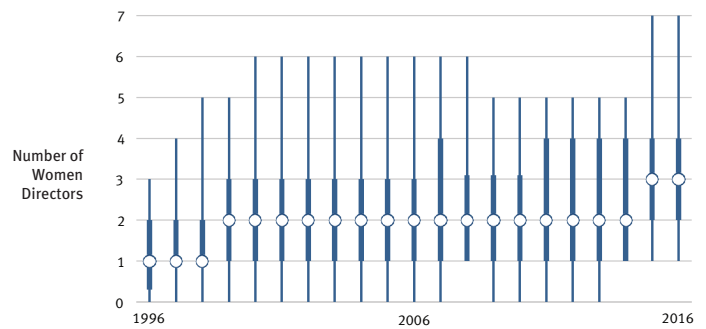
DISTRIBUTION OF NUMBER AND PERCENTAGE OF WOMEN DIRECTORS — 1996–2016

Women Directors: Numbers  
1996-2016

SV 150

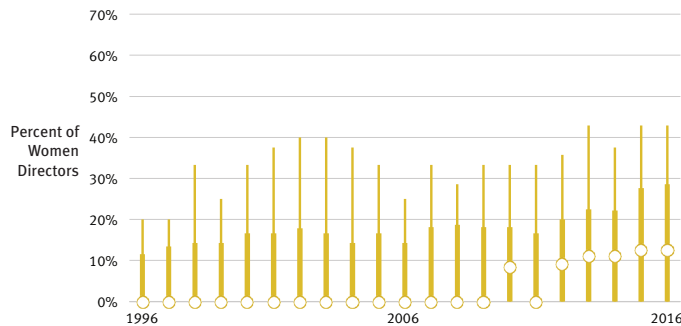


S&P 100

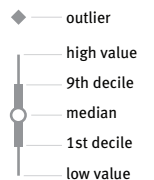
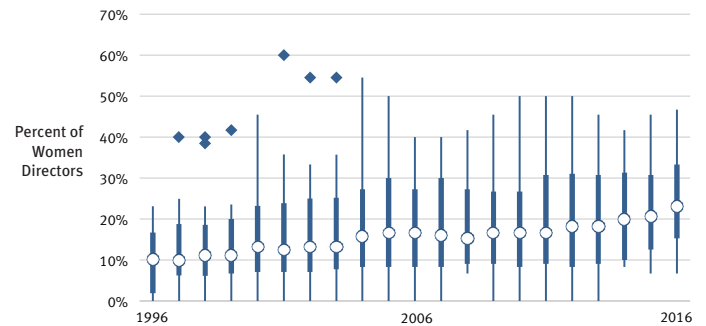


Women Directors: Percentages  
1996-2016

SV 150



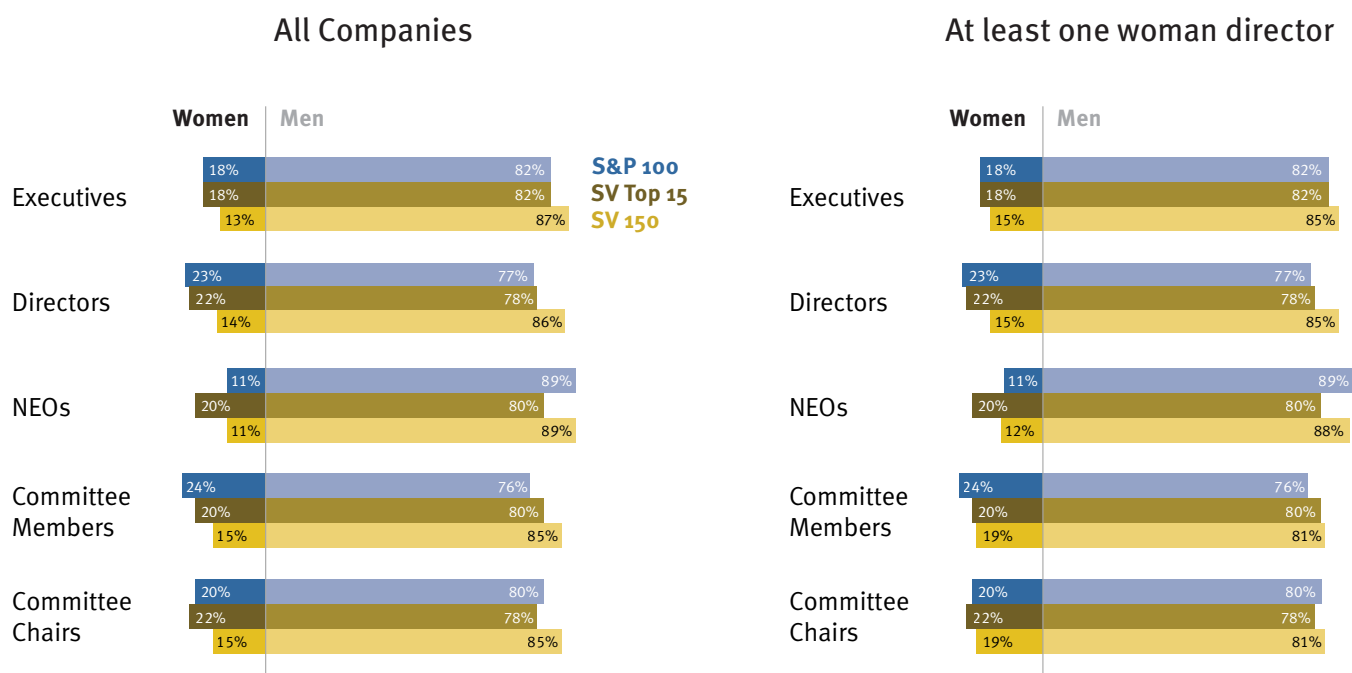
S&P 100



Gender Diversity on the Board of Directors (continued)

The following graphs show the respective imbalances in the percentage of executive officers, named executive officers, board members, committee members and committee chairs that are women among all companies and among companies with at least one woman serving on the board of directors in each of the SV 150, the SV Top 15 and the S&P 100 during the 2016 proxy season.

GENDER IMBALANCES: S&P 100 VS. SV TOP 15 VS. SV 150 — 2016 PROXY SEASON



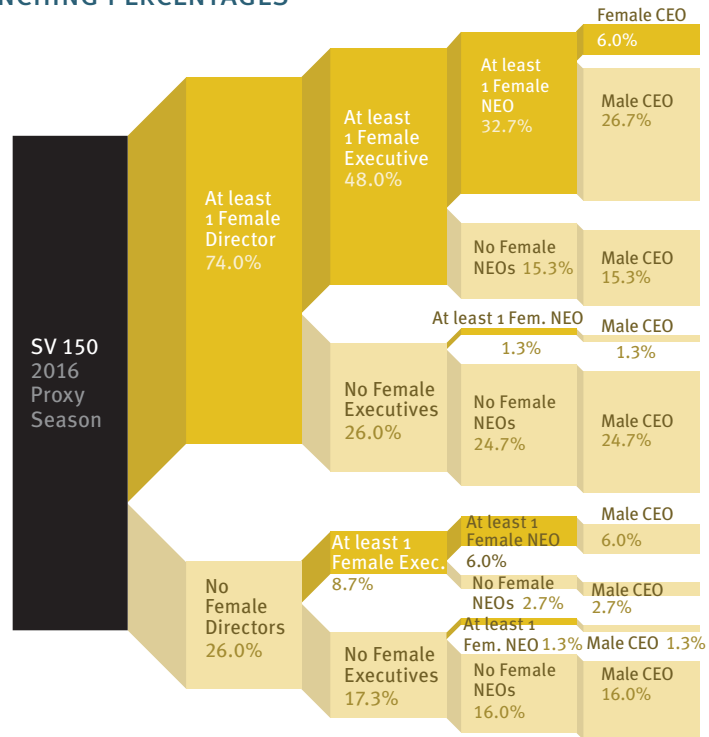


Gender Diversity on the Board of Directors (continued)

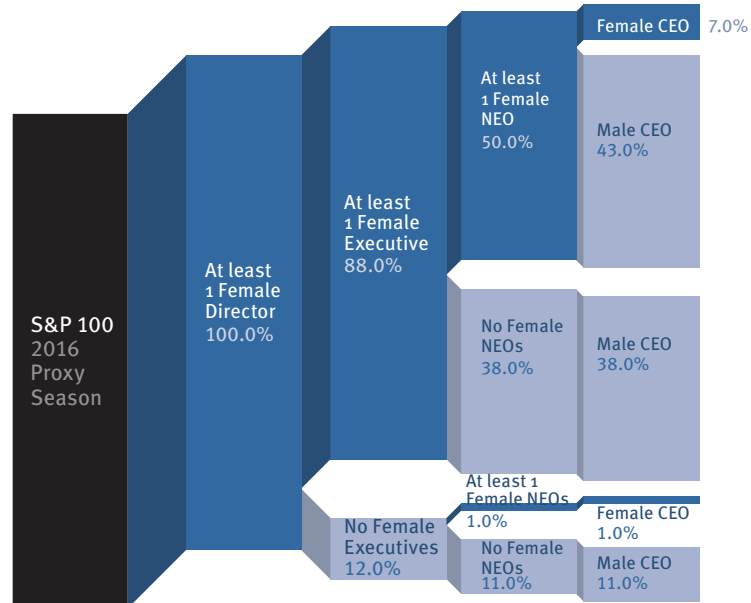
These graphs show the percentage of companies during the 2016 proxy season with and without at least one woman serving on the board, then of those companies, the percentage with at least one woman executive officer, then of those companies, the percentage with at least one woman named executive officer, and then of those companies, the percentage with a woman CEO.

GENDER DIVERSITY — BRANCHING PERCENTAGES

Gender Representation  
SV 150  
2016 Proxy Season



Gender Representation  
S&P 100  
2016 Proxy Season



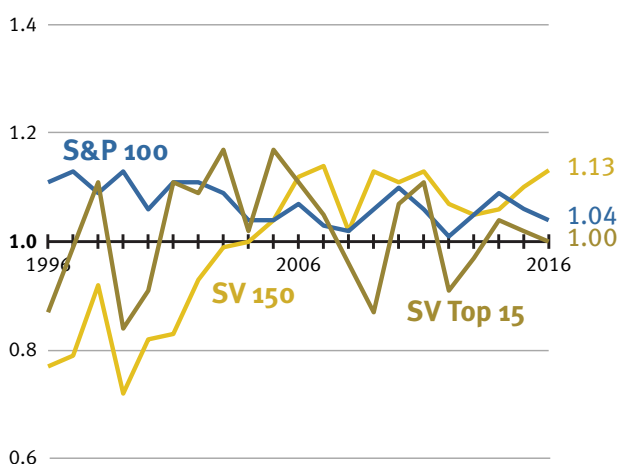
## Gender Diversity on Board Committees

Research continues to show that diverse directors are more likely to be appointed to certain board committees over others. For instance, a recent study found that women and minority directors are more likely to be appointed to the standing audit, nominating, and governance committees.<sup>44</sup> The participation of women in the major functions of a board is an important indicator of whether they are being viewed as equal partners with their male peers. One measurable indicator of that participation is membership on board committees. Our data shows that, in a shift away from the historical perception, the participation of women on board committees generally increased over the period of the survey at a pace faster than the increase in women as a percentage of board memberships in each of the groups surveyed (with women significantly over-represented in the SV 150 primary committees). However, as discussed below, the slope of the trend varies by type of committee (though with a reasonably similar difference between the SV 150 and the S&P 100 companies across the primary audit, compensation and nominating committees).

*The following graph shows the ratio of the average representation of women on the primary board committees (audit, compensation and nominating) to the average representation of women on boards of directors overall in each of the SV 150, the SV Top 15 and the S&P 100 over the period from the 1996 through 2016 proxy seasons.*

### RATIO OF WOMEN PRIMARY COMMITTEE REPRESENTATION TO WOMEN DIRECTOR REPRESENTATION — 1996–2016

*(Average Percentage of Women on Primary Committees divided by Average Percentage of Women on Board)*



<sup>44</sup> See, e.g., “Does diversity pay in the boardroom?” by Laura Casares Field, Matthew E. Souther and Adam S. Yore (November 15, 2016); Compare to Diana Bilimoria and Sandy Kristin Piderit, “Board Committee Membership: Effects of Sex-Based Bias,” 37 Acad. of Mgmt. J. 1453, 1469 (1994), which looked at the audit, compensation, nominating, executive, finance and public affairs committees of the Fortune 300 firms for 1984 and found that men, after controlling for experience-based characteristics, were preferred for the compensation, executive and finance committees, while women were preferred for public affairs committees — though “[f]or the audit and nominating committees, no significant main effect of sex was detected.”

Gender Diversity on Board Committees *(continued)*

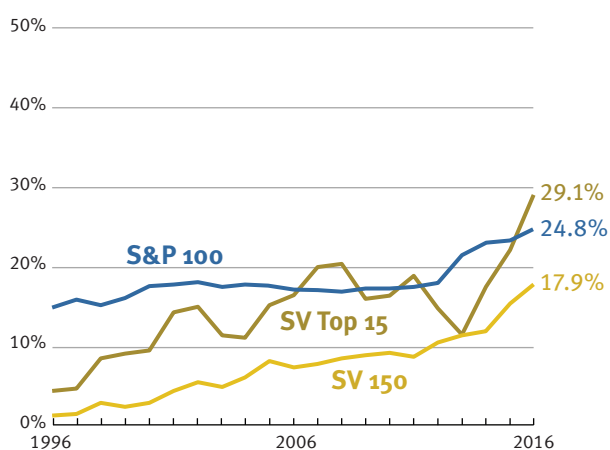
**Audit Committee**

S&P 100 companies tended to have more women as a percentage of the total number of audit committee members over the survey period (S&P 100 moving from 14.9% in 1996 to 24.8% in 2016; SV 150 moving from 1.3% in 1996 to 17.9% in the 2016 proxy season). Since the 2005 proxy season, the data for the top 15 of the SV 150 has generally been closer to that of the S&P 100 than to the SV 150 but has declined sharply in recent years (top 15 moving from 4.4% in 1996 to a high of 20.4% in 2008, before declining to 11.5% in the 2013 proxy season and return to 29.1% in the 2016 proxy season, ahead of the S&P 100). Further, significantly affecting the average in the SV 150 were the 39 companies in 2016 without at least one woman director (larger numbers in prior years). Excluding companies with no women directors, the percentage of the total number of audit committee members that are women for SV 150 companies was similar to S&P 100 companies, particularly since the 2003 proxy season (24.0% in the 2016 proxy season).

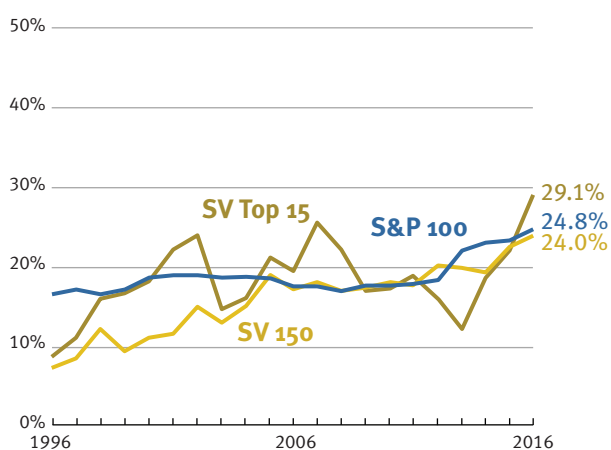
*The following graphs show the percentage of audit committee members that are women for all companies in each of the SV 150, SV Top 15 and the S&P 100, as well as for only those companies in each group that have at least one woman director, over the period from the 1996 through 2016 proxy seasons.*

**PERCENTAGE OF AUDIT COMMITTEE MEMBERS THAT ARE WOMEN — 1996–2016**

All Companies



Companies with at least 1 Woman Director



For a discussion of gender diversity among audit committee chairs, see the applicable discussion and graphics under “Gender Diversity in Board Leadership—Committee Chairs” on pages 33–34.

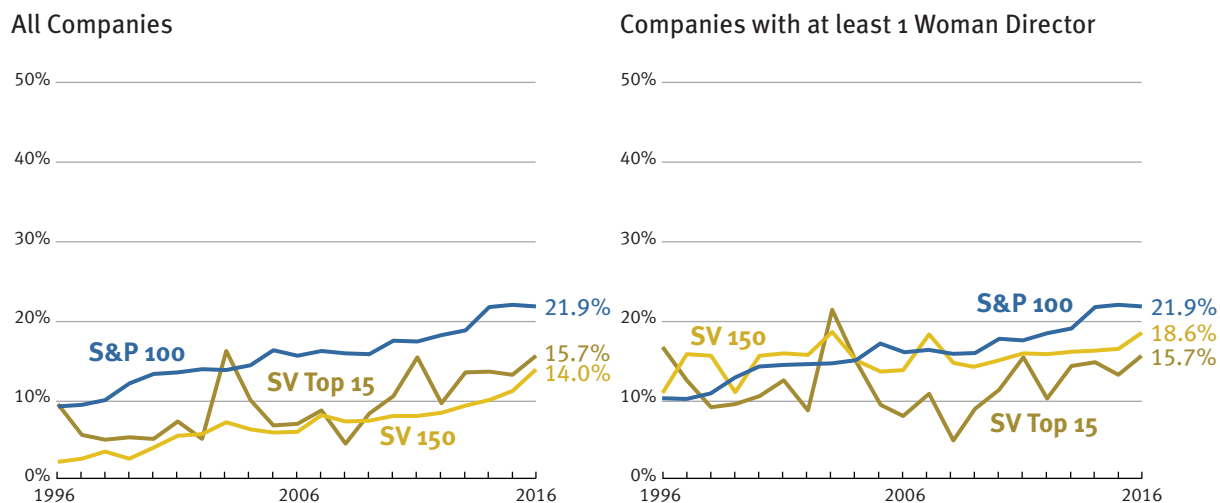
Gender Diversity on Board Committees *(continued)*

**Compensation Committee**

S&P 100 companies tended to have more women as a percentage of the total number of compensation committee members over the survey period (S&P 100 moving from 9.2% in 1996 to 21.9% in 2016; SV 150 moving from 2.2% in 1996 to 14.0% in the 2016 proxy season). The data for the top 15 of the SV 150 was generally closer to that of the SV 150 as a whole, with occasional peaks similar to the S&P 100 (top 15 moving from 9.5% in 1996 to 15.7% in 2016, but with drops to approximately 5% and spikes to above 15% in between). Further, significantly affecting the average in the SV 150 were the 39 companies in 2016 without at least one woman director (larger numbers in prior years). Limiting the data to only those companies with at least one woman on the board eliminated more than three-quarters of the gap between SV 150 companies and S&P 100 companies in the percentage of the total number of compensation committee members that are women (18.6% in the 2016 proxy season).

*The following graphs show the percentage of compensation committee members that are women for all companies in each of the SV 150, SV Top 15 and the S&P 100, as well as for only those companies in each group that have at least one woman director, over the period from the 1996 through 2016 proxy seasons.*

**PERCENTAGE OF COMPENSATION COMMITTEE MEMBERS THAT ARE WOMEN — 1996–2016**



For a discussion of gender diversity among compensation committee chairs, see the applicable discussion and graphics under “Gender Diversity in Board Leadership—Committee Chairs” on pages 33–34.

Gender Diversity on Board Committees *(continued)*

**Nominating Committee**

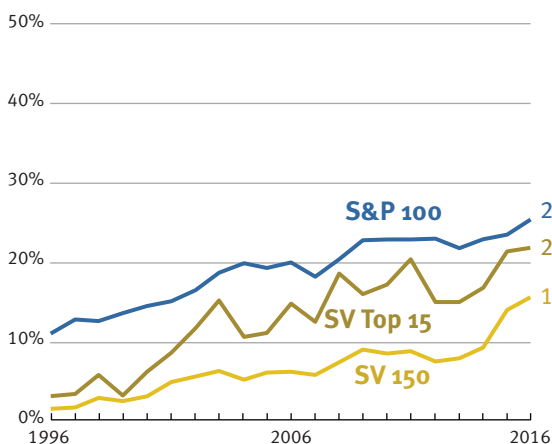
S&P 100 companies tended to have more women as a percentage of the total number of nominating committee members over the survey period (S&P 100 moving from 11.1% in 1996 to 25.3% in 2016; SV 150 moving from 1.6% in 1996 to 15.7% in the 2016 proxy season). The data for the top 15 of the SV 150 started generally closer to that of the SV 150 as a whole, but moved to be more similar to the S&P 100 over the period of the survey (top 15 moving from 3.2% in 1996 up to 20.4% in 2011, before increasing to 21.8% in 2016).

Further, significantly affecting the average in the SV 150 were the 39 companies in 2016 without at least one woman director (larger numbers in prior years). Limiting the data to only those companies with at least one woman on the board eliminated more than half of the gap between SV 150 companies and S&P 100 companies in the percentage of the total number of nominating committee members that are women (14.7% in the 2014 proxy season).

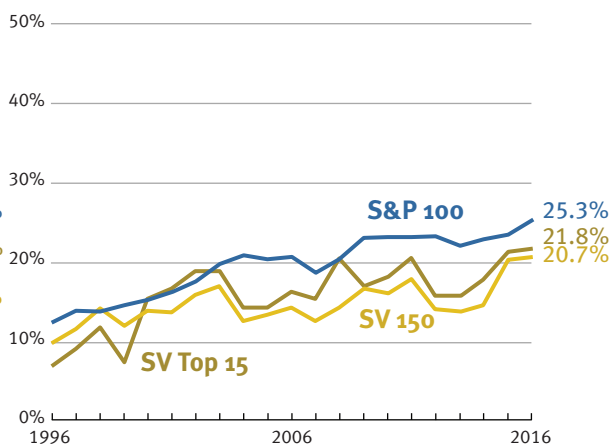
*The following graphs show the percentage of nominating committee members that are women for all companies in each of the SV 150, SV Top 15 and the S&P 100, as well as for only those companies in each group that have at least one woman director, over the period from the 1996 through 2016 proxy seasons.*

**PERCENTAGE OF NOMINATING COMMITTEE MEMBERS THAT ARE WOMEN — 1996–2016**

All Companies



Companies with at least 1 Woman Director



For a discussion of gender diversity among nominating committee chairs, see the applicable discussion and graphics under “Gender Diversity in Board Leadership—Committee Chairs” on pages 33–34.

Gender Diversity on Board Committees (continued)

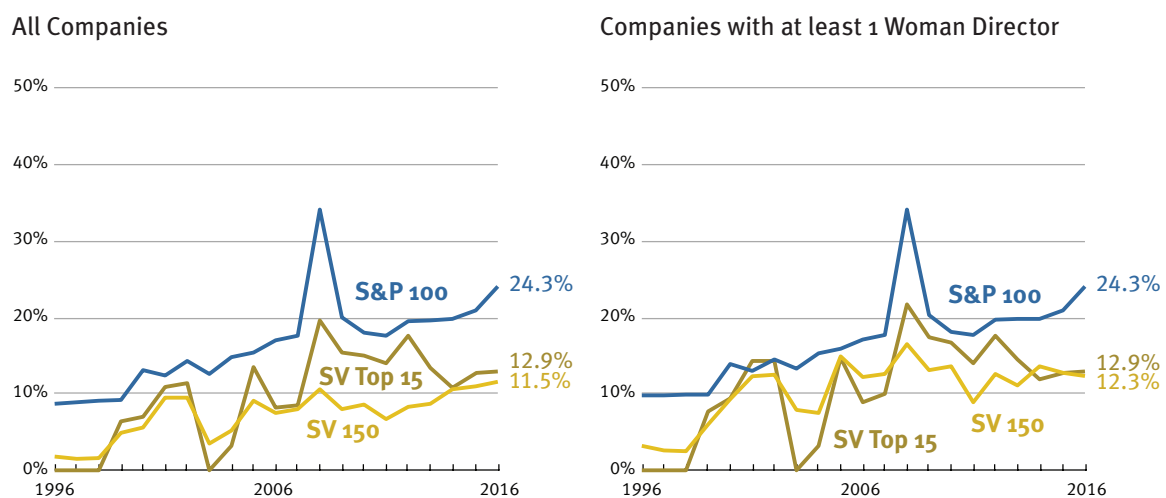
**Other Standing Committees**

Over the survey period, S&P 100 companies tended to have more women as a percentage of the total number of members of standing committees outside of the three primary committees (S&P 100 moving from 8.7% in 1996 to 24.3% in 2016; SV 150 moving from 1.8% in 1996 to 11.5% in the 2016 proxy season). The data for the top 15 of the SV 150 was generally closer to that of the SV 150 as a whole, with occasional peaks similar to the S&P 100 (top 15 moving from 0% in 1996 up to 19.6% in 2008, but dropping to 12.9% in 2016). Further, significantly affecting the percentage in the SV 150 were the 39 companies in 2016 without at least one woman director (larger numbers in prior years). Limiting the data to only those companies with at least one woman on the board eliminated about one-tenth of the gap between SV 150 companies and S&P 100 companies in the percentage of total number of other standing committee members that are women.

The following graphs show the percentage of members of standing committees other than one of the primary committees that are women for all companies in each of the SV 150, SV Top 15 and S&P 100, as well as for only those companies in each group that have at least one woman director, over the period from the 1996 through 2016 proxy seasons.<sup>45</sup>

**PERCENTAGE OF OTHER STANDING COMMITTEE MEMBERS THAT ARE WOMEN — 1996–2016**

(Among those that have Other Standing Committees)



For a discussion of gender diversity among chairs of other standing committees, see the applicable discussion and graphics under “Gender Diversity in Board Leadership—Committee Chairs” on pages 33–34.

<sup>45</sup> Standing committees beyond the primary committees (audit, compensation and nominating) are relatively uncommon in the SV 150 (primarily existing among the largest companies), leading to the significant volatility in the SV 150 data reflected in the graphs.

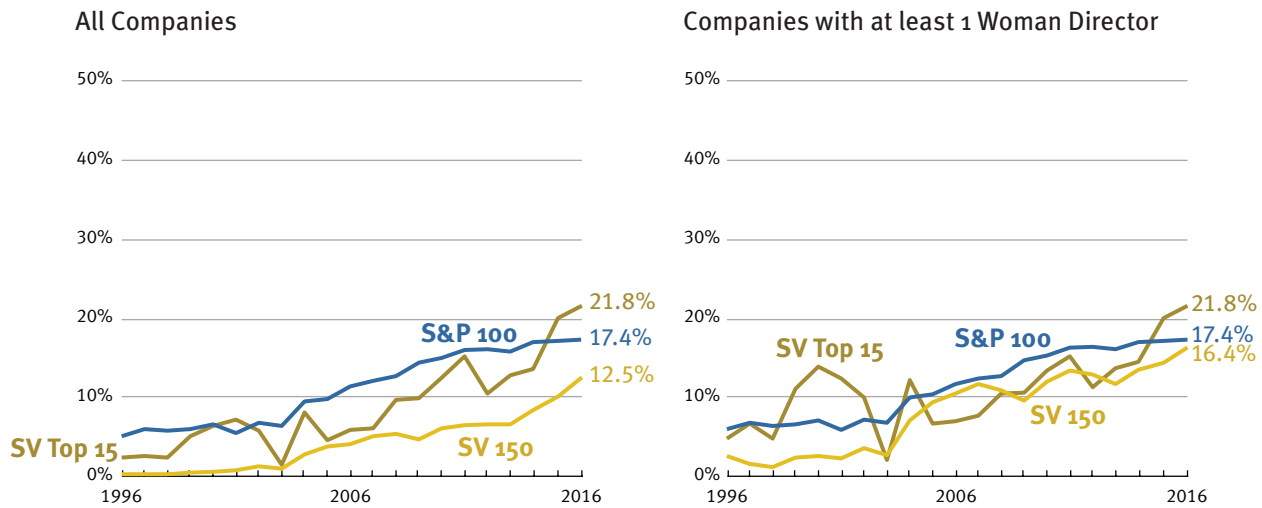
## Gender Diversity in Board Leadership

Historically, women have been underrepresented on boards and in board leadership positions compared to their percentage of the overall population. Research continues to bear this out.<sup>46</sup> Although some progress has been made, a 2015 Government Accountability Office report found that even if a woman filled every newly opened board seat, it would not be until 2024 when women reached equal representation with men at the largest U.S. companies. The 2017 Equilar Gender Diversity Index put that date even further out—estimating that Russell 3000 boards would not reach 50% male and 50% female representation until the final quarter of 2055.<sup>47</sup> In addition to understanding trends in the rate of inclusion of women in board membership, an understanding of trends in the rate of inclusion of women in leadership positions on the board is useful to understanding their opportunities to influence actions at a company (some of which may also influence gender diversity at public companies). Similarly once women are included in board membership, or are included in increasing numbers, the frequency with which women are included in leadership positions on the board (and how that participation rate compares with the percentage of boards that are women) is useful as an important indicator of whether they are being viewed as equal partners with their male peers. The SV 150 and the top 15 of the SV 150 have surpassed the S&P 100 by this measure.

*The following graphs show the percentage of all board leadership positions (chair, lead director or committee chair) that are held by women in each of the SV 150, SV Top 15 and the S&P 100, as well as for only those companies in each group that have at least one woman director, over the period from the 1996 through 2016 proxy seasons.*

### PERCENTAGE OF WOMEN IN ALL BOARD LEADERSHIP POSITIONS — 1996–2016

*(Board Chair, Lead Director, All Committee Chairs)*



46 See e.g., “Does Diversity Pay in the Boardroom?” (2016).

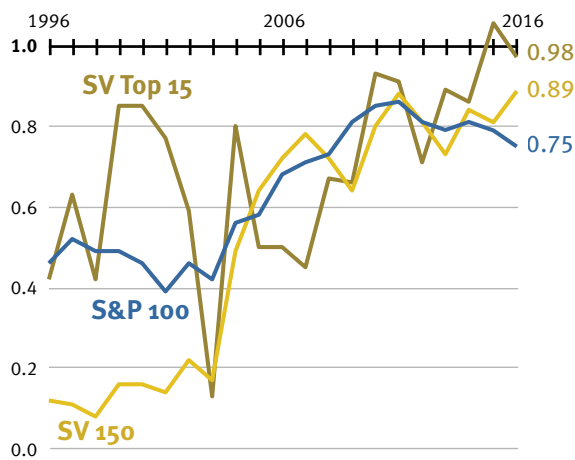
47 See “Gender Parity in the Boardroom Still Decades Away” (January 2016) and “Boards Will Reach Gender Parity in 2055 at Current Pace,” Equilar Blog (January 2017).

Gender Diversity in Board Leadership *(continued)*

The following graph shows the ratio of the average representation of women in board leadership positions to the average representation of women on boards of directors overall in each of the SV 150, SV Top 15 and the S&P 100 over the period from the 1996 through 2016 proxy seasons.

**RATIO OF WOMEN IN BOARD LEADERSHIP POSITIONS TO WOMEN DIRECTOR REPRESENTATION — 1996–2016**

*(Average Percentage of Women in All Board Leadership divided by Average Percentage of Women on Board)*





Gender Diversity in Board Leadership *(continued)*

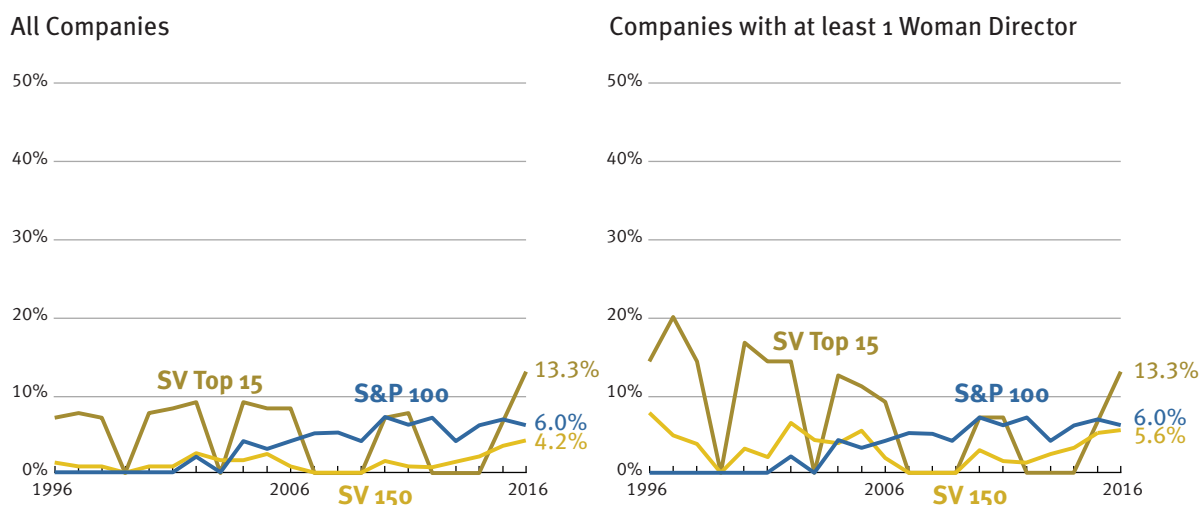
**Board Chair**

The most significant board leadership role is often thought to be the board chair, who typically has the ability to call board meetings and set agendas, coordinates among directors, serves as the board’s primary liaison with the CEO and executive team and often has significant influence on strategy or operations.

Research has shown that women board chairs are rare across U.S. and other public companies around the world.<sup>48</sup> That is true for the SV 150 and the S&P 100 companies, although the top 15 largest companies in the SV 150 have tended to have women board chairs more frequently than the similarly sized S&P 100 companies. A major factor in the dearth of women serving as board chairs is the fact that many CEOs also serve as chair of their board,<sup>49</sup> combined with the fact that, women CEOs are also relatively rare.<sup>50</sup>

*The following graphs show the percentage of companies with a woman serving as board chair for all companies in each of the SV 150, SV Top 15 and the S&P 100, as well as for only those companies in each group that have at least one woman director, over the period from the 1996 through 2016 proxy seasons.*

**PERCENTAGE OF COMPANIES WITH A WOMAN BOARD CHAIR — 1996–2016**



48 See, e.g., “Women On Corporate Boards Globally” by Catalyst (January 2017).

49 See the most recent edition of the Fenwick corporate governance survey for statistics regarding the frequency of combined CEOs/board chairs in the SV 150 and S&P 100.

50 See “Gender Diversity on the Executive Management Team—Chief Executive Officer (CEO)” on p. 48. See also “The Percentage of Female CEOs in the Fortune 500 Drops to 4%” *Fortune* (June 2016).

Gender Diversity in Board Leadership *(continued)*

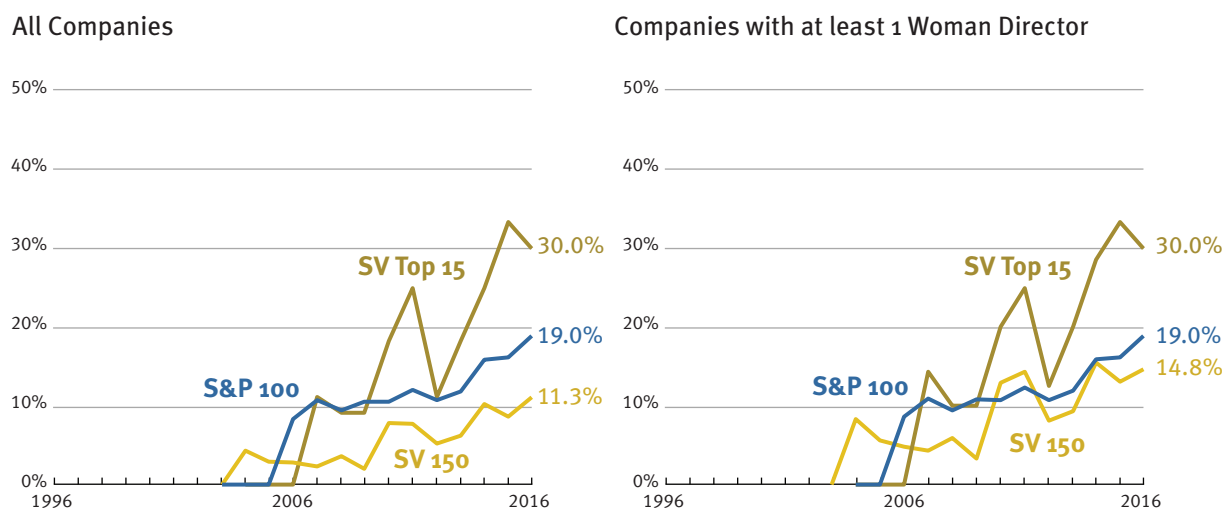
**Lead Director**

Prior to the Sarbanes-Oxley era, which kicked off a number of governance reforms, lead directors were exceedingly rare, with their emergence really commencing in the 2003 proxy season.<sup>51</sup> Lead directors are now often the most significant board leadership role, rivaling the CEO in this regard, often with much the same authority as traditionally held by board chairs. Of companies that have a lead director, S&P 100 companies initially trailed SV 150 companies in terms of percentage of lead directors that are women but have clearly exceeded the SV 150 since the 2006 proxy season. Both sets of companies have appointed a fairly small percentage of women lead directors (in 2016, SV 150 = 11.3% and S&P 100 = 19.0%). Further, significantly affecting the percentage in the SV 150 were the 39 companies in 2016 without at least one woman director (larger numbers in prior years). Excluding companies with no women directors, the percentage of lead directors that are women in the SV 150 companies has been more similar to S&P 100 companies, particularly since the 2009 proxy season (14.8% in the 2016 proxy season). The top 15 of the SV 150 has generally exceeded their S&P 100 peers in appointing women as lead director (30.0% v. 19.0%).

*The following graphs show the percentage of companies with a woman serving as lead director for all companies in each of the SV 150, SV Top 15 and the S&P 100, as well as for only those companies in each group that have at least one woman director, over the period from the 1996 through 2016 proxy seasons.*

**PERCENTAGE OF COMPANIES WITH A WOMAN LEAD DIRECTOR — 1996–2016**

*(Among companies that have a Lead Director)*



<sup>51</sup> During the period from the 1996 through the 2002 proxy season, none of the SV 150 companies had a lead director, and the same was true for the S&P 100 for most proxy seasons (the exception was one company with a lead director in 2001).

Gender Diversity in Board Leadership *(continued)*

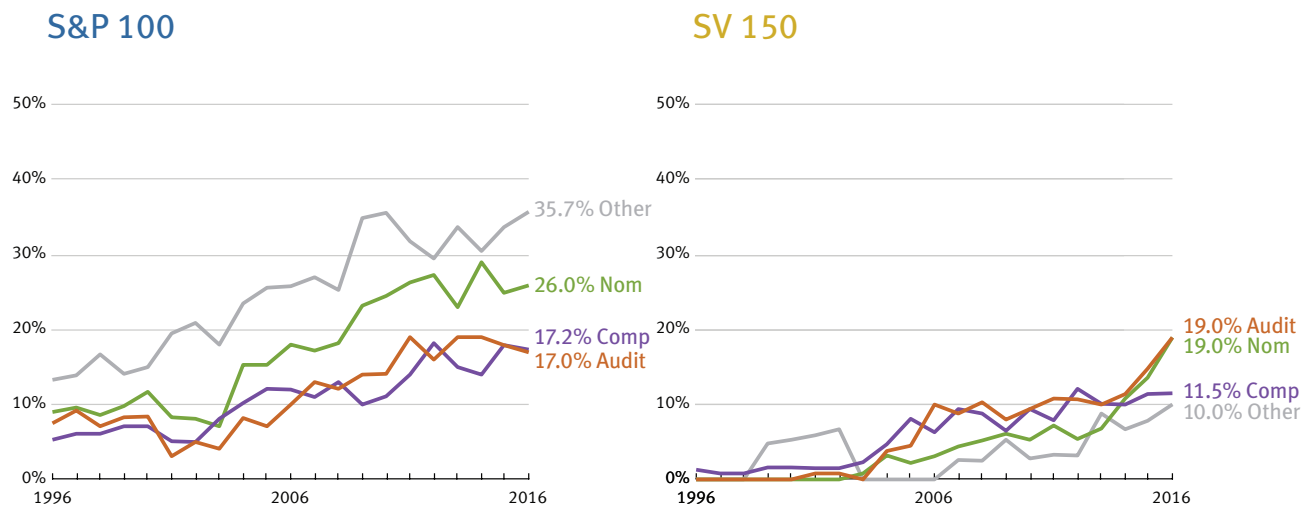
**Committee Chairs**

Among the three primary committees that are common across almost all companies (audit, compensation and nominating committees), the percentage of women chairs when measured across all such committees has risen steadily in both groups of companies, particularly since the 2003 proxy season. However, throughout the survey period, that percentage has averaged about seven percentage points higher in the S&P 100 compared with the SV 150 (but has narrowed among primary committee chairs). Excluding companies with no women directors, the percentage of women chairs when measured across the primary committees in the SV 150 was more similar to S&P 100 companies (18.9% in the 2016 proxy season).

Looking at the three committees separately, the two groups of companies have experienced somewhat different trends. For the S&P 100, the percentage of nominating committee chairs that are women is highest and increased most over the period (S&P 100 Audit moved from 7.5% in 1996 to 17.0% in 2016; Compensation moved from 5.3% in 1996 to 17.2% in 2016; Nominating moved from 9.0% in 1996 to 26.0% in the 2016 proxy season), while the opposite was true for the SV 150 until the last four proxy seasons (SV 150 Audit moved from 0.0% in 1996 to 19.0% in 2016; Compensation moved from 1.3% in 1996 to 11.5% in 2016; Nominating moved from 0.0% in 1996 to 19.0% in the 2016 proxy season, a 76% increase from 2014).

*The following graphs show the percentage of audit, compensation, nominating and other standing committee chairs that are women in each of the SV 150 and the S&P 100 over the period from the 1996 through 2016 proxy seasons (among those companies in each group identifying such chairs in their public filings in each such proxy season).*

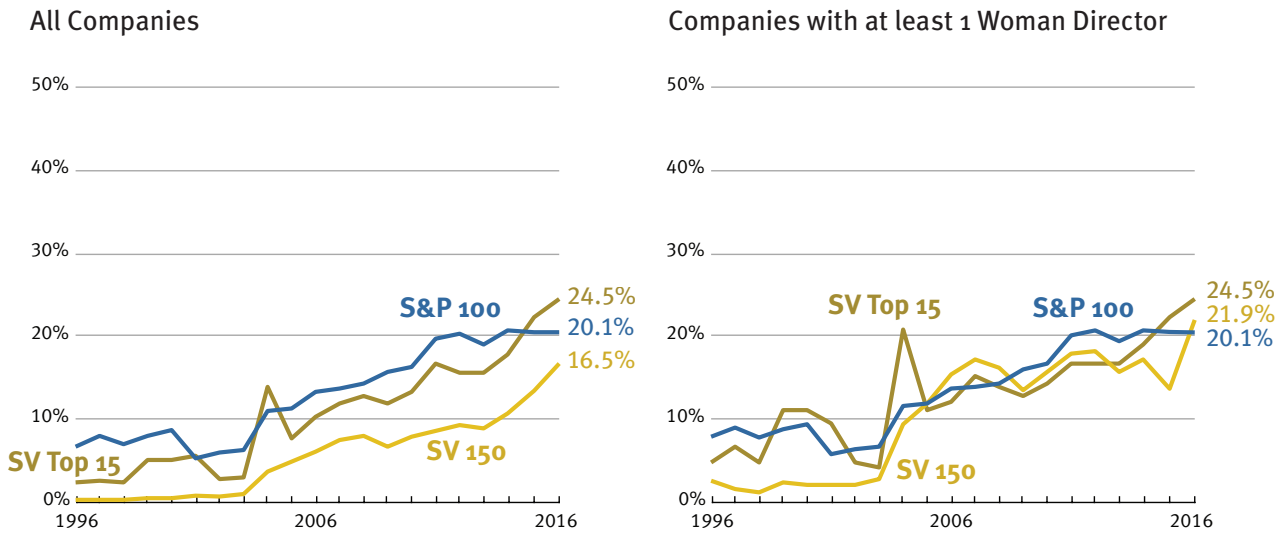
**PERCENTAGE OF COMMITTEE CHAIRS THAT ARE WOMEN — 1996–2016**



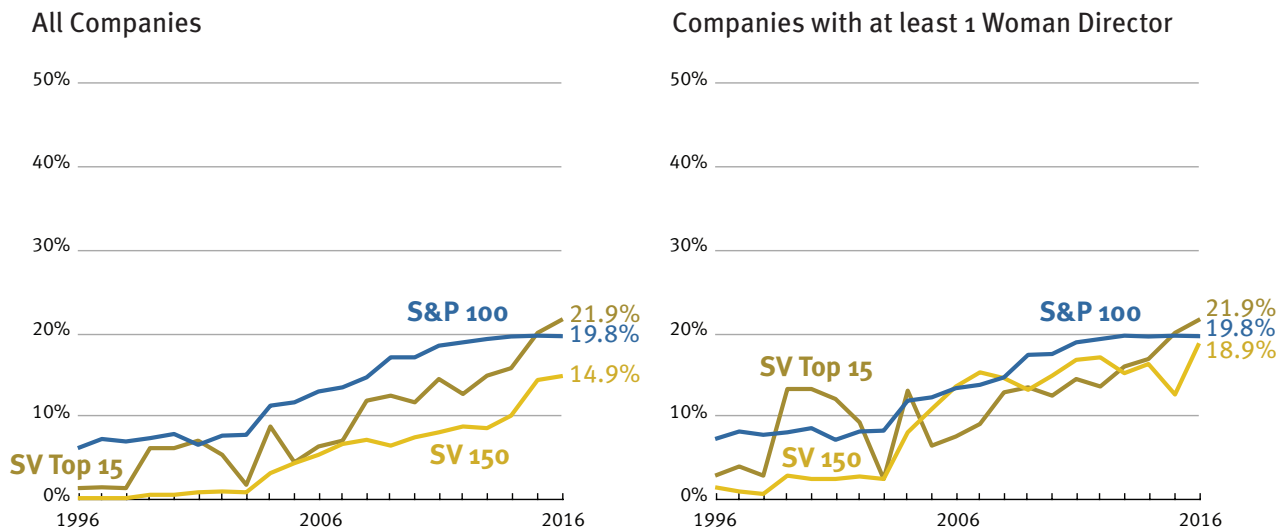
Gender Diversity in Board Leadership *(continued)*

The following graphs show the percentage of chairs of primary committees (audit, compensation and nominating) and all committees, that are women for all companies in each of the SV 150, SV Top 15 and the S&P 100, as well as for only those companies that have at least one woman director, over the period from the 1996 through 2016 proxy seasons.

PERCENTAGE OF WOMEN COMMITTEE CHAIRS: PRIMARY COMMITTEES — 1996–2016



PERCENTAGE OF WOMEN COMMITTEE CHAIRS: ALL COMMITTEES — 1996–2016



## Gender Diversity on the Executive Management Team

### Executive Officers

Public companies are not required to provide disclosure specific to diversity on their executive teams under applicable SEC disclosure rules. While some companies disclose some diversity statistics in some contexts (e.g., outside of SEC filings, perhaps on their websites or in responses to inquiries), that is a far from universal practice, and where it does take place, the coverage and depth of that disclosure vary widely.<sup>52</sup> However, companies are required to identify and provide limited biographical information regarding their executive officers. We have used this biographical information to collect data on gender diversity regarding executive officers. The rules for determining who is an “executive officer” are imprecise and leave significant room for judgment by a company and its board when making that determination.<sup>53</sup> The judgments that companies apply to their specific facts and circumstances can result in a significant variance between the number of executive officers identified by companies (even by companies that, when viewed externally, seem reasonably similar). For example, in the 2016 proxy season, the number of executive officers identified per company in the SV 150 ranged from 2 to 12, with a median of 6 (and an average of 6.4), while in the S&P 100, the number ranged from 3 to 21 executive officers, with a median of 10 (and an average of 10.4).

During the two-decade period of the survey, the average number of women executive officers per company increased in each group of companies (SV 150 moved from an average of 0.4 in 1996 to 0.8 in 2016; S&P 100 moved from an average of 0.6 in 1996 to 1.8 in 2016; and the top 15 of the SV 150 moved from an average of 0.4 in 1996 to 1.5 in 2016). The average percentage of women executive officers, which takes into account the variable number of executive officers per company, has increased over the survey period (SV 150 moved from 4.9% in 1996 to 12.5% in 2016; S&P 100 moved from 4.3% in 1996 to 18.0% in 2016; and the top 15 of the SV 150 moved from 4.5% in 1996 to 18.2% in 2016). While the SV 150 initially slightly exceeded the S&P 100 in terms of average percentage of women executive officers, the growth rate of women executive officers, in terms of either the average number of women executive officers per company or the average percentage of executive officers that are women, has been faster in the S&P 100 (approximately 321% growth) than in the SV 150 (approximately 226% growth) over the survey period. 43.3% of SV 150 companies, 13.3% of the Top 15 of the SV 150 and 12.0% of S&P 100 companies had no women executive officers in the 2016 proxy season (decreasing from 58.5%, 65.8% and 64.3%, respectively, of companies with no women executive officers in the 1996 proxy season).

<sup>52</sup> In 2014, in a move toward more transparency, several large Silicon Valley based technology companies released workplace diversity statistics for the first time. Such companies included Apple, Google and HP, which had previously resisted disclosure. Since then, more companies have issued such reports. See “Tech Companies Delay Diversity Reports to Rethink Goals” *Wall Street Journal* (December 2016) and “Why Nike’s Diversity Disclosure Is Just the First Step” *Fortune* (May 2016).

<sup>53</sup> See “Methodology—Executive Officers (and NEOs)” beginning on p. 68 for a discussion of such determinations.

### Gender Diversity on the Executive Management Team *(continued)*

In addition to the wide variation in the number of executive officers, including the disparity in the average number of executive officers between the SV 150 and the S&P 100, it should be noted the number of executive officers tends to be substantially lower among the technology and life sciences companies in the SV 150 (average = 6.4 executive officers) than among S&P 100 companies (average = 10.4 executive officers). This generally reflects the scale differences between the groups of companies. In both groups there has been a general decline in the average number of executive officers per company (a trend that continued in the 2016 proxy season), as well as a narrowing of the range of that number in each group (SV 150 max = 20 and min = 4 in the 1996 proxy season compared to max = 12 and min = 2 in the 2016 proxy season; S&P 100 max = 41 and min = 5 in 1996 proxy season compared to max = 21 and min = 3 in the 2016 proxy season).

While a wealth of long-term, large-scale research on the effect of women executives on company performance has not historically been available, observers have hypothesized that the women who have broken through a “glass ceiling” impeding the promotion of women to the executive level and then ultimately become CEO will possess superior skills compared with male CEOs on average, leading to superior performance on objective measures for women CEOs on average.<sup>54</sup> Research also suggests that the proportion of women in top management jobs and at all levels of a corporation tends to have positive effects on company performance.<sup>55</sup> However, other research has suggested that there is no difference in stock price performance or leverage levels in public companies led by women, and that women-led technology startup companies have underperformed by some measures (although that may be a reflection of women having access to inferior opportunities or of how women leaders are judged by the media and investors).<sup>56</sup>

It is important to observe that overall there appear to be relatively few women working in Silicon Valley companies, and not just at the executive level. According to the U.S. Equal Employment Opportunity Commission’s 2014 Diversity in High Tech report, among the total number of workers employed at 75 leading Silicon Valley tech companies, 30 percent were women. As in companies elsewhere, there are many possible

54 See, e.g., “Does Gender Matter?: A Comparative Study of Performance of American CEOs” by Jelena Strelcova at the Stern School of Business at New York University (April 1, 2004). A 2016 study by the Peterson Institute for International Economics and EY found that women CEOs did not significantly underperform or overperform when compared with male chief executives, see “Is Gender Diversity Profitable? Evidence from a Global Survey,” (February 2016).

55 See, e.g., “Companies Where More Women Lead Are More Profitable, a New Report Says” *Wall Street Journal* (February 2016); “Gender Diversity As a Competitive Advantage” Equilar blog (July 2016); “Credit Suisse Research Institute Releases the CS Gender 3000: The Reward for Change Report Analyzing the impact of Female Representation in Boardrooms and Senior Management” (September 2016), which reported that, as in its prior findings, companies with a higher participation of women in decision-making roles continue to generate higher market returns and superior profits (September 2016); and “Women On Corporate Boards Globally” Catalyst (January 2017), which found that companies that had more women on boards had better financial results than those who had fewer.

56 See, e.g., “Diagnosing Discrimination: Stock Returns and CEO Gender” by Justin Wolfers in the *Journal of the European Economic Association* (2006), which found “no systematic differences in returns to holding stock in female-headed firms” and “Sources of Financing for New Technology Firms: A Comparison by Gender” by the Ewing Marion Kauffman Foundation (July 2009), which found that women-owned high-tech firms lag behind the men-owned firms in critical performance measures. See also Jelena Strelcova’s research in “Does Gender Matter?: A Comparative Study of Performance of American CEOs,” which found that “female CEO run companies significantly underperform male CEO run companies in the year following the female CEO appointment.” Some researchers ask whether women CEOs are judged differently than men; see “Do Activist Investors Target Female C.E.O.s?” *WSJ* (February 2015) and “When A Company Is Failing, Female CEOs Get Blamed More Frequently Than Men” *Huffington Post* (October 2016).

Gender Diversity on the Executive Management Team *(continued)*

career paths leading to serving as CEO or as an executive officer of a technology or life sciences company in Silicon Valley, beyond being the founder of a startup company<sup>57</sup>— and such career paths often start during college or graduate school and stretch over many years before arriving at the executive officer level.<sup>58</sup> One contributing factor to the lower numbers of women serving as executive officers for the companies in the SV 150 is scale, both in terms of the relatively smaller size of the executive management teams, which means there are fewer opportunities for advancement to the executive officer level, and in terms of the smaller employee bases at SV 150 companies from which to develop and promote women internally to an executive officer position. Other factors that may contribute to much, but perhaps not all, of the low number of women serving as executive officers for the technology and life sciences companies in the SV 150 (many of which are common to companies outside of Silicon Valley and interact with each other in complex ways) include, among others, gender differences in:

- education levels, particularly historically;
- areas of education, particularly in science, technology, engineering and math (STEM) majors, MBAs and other subjects relevant to Silicon Valley, as well as perseverance in such educations, particularly among those pursuing specialized skills or elite education;
- career field or industry selection, particularly among those with specialized skills or elite education;
- risk-taking on the job and in careers, as well as pursuing Silicon Valley entrepreneurship;
- representation in the Silicon Valley ecosystem beyond the technology and life sciences companies themselves (including venture capital firms, investment banks, law firms, accounting firms and others);

57 There is sometimes an impression left when discussing Silicon Valley that founder-CEOs are the norm or that many of the executive officers in companies were also founders. While not carefully studied, and clearly beyond the scope of the research reported in this paper, anecdotal experience and long-time observation of Silicon Valley would suggest that it is far from the norm. It appears that most executive officers of public companies in Silicon Valley never founded a company, let alone the company at which they currently serve. The same appears to be true of public company CEOs — even when limited to only considering IPO companies. Very different sets of skills and temperament may be needed by executives, including CEOs, at different stages in the life cycle of a company. While a founder may have the skills necessary for the very early stage of a company, they may lack those necessary as the company develops further, often resulting in the hiring of more experienced executives to move the company through the next phase (this is often iterative, with those executives being replaced by executives having skills appropriate to later phases). Analyses that focus solely on founders may miss the full picture of how Silicon Valley companies develop.

58 According to “Want To Be A CEO? Stay Put” by Wendy Todaro in *Forbes* (March 31, 2003), “across industries, the average [rookie] CEO is 50 years old upon taking office.” Similarly, “The Changing Path to Corporate Leadership” by Matthew Davis of the National Bureau of Economic Research noted that “the average age of executives — high-level figures who include company presidents, chief executive officers, chief financial officers, and senior vice presidents, among others — was 56 in 2001.” Leading executive search consulting firm Spencer Stuart noted in “US Board Index 2012” that the average age of S&P 500 company CEOs was 56.5 in 2012. But see “Young CEOs: Are They Up to the Job?” by Spencer Ante and Joann Lublin in *The Wall Street Journal* (February 7, 2012), which noted that “[e]ight of the 42 technology and Internet companies that held initial public offerings in the U.S. in 2011 were led by CEOs who were under 40 at the time, according to a review of data from capital-markets data firm Dealogic.”

Gender Diversity on the Executive Management Team *(continued)*

- the effect of societal and cultural factors in the United States and in the many countries around the world from which Silicon Valley draws that affect education or career pursuit; and
- career interruption, including for child rearing, which may have a greater impact on entrepreneurship or at the professional/executive level.<sup>59</sup>

It is very difficult to separate the interplay of these and other factors. For example, research has shown that women-owned firms had a significantly lower probability of using outside equity to finance a startup.<sup>60</sup> But that same research also found that “older owners, owners who worked longer hours, owners with higher levels of education, and owners who had previous startup experience had a significantly higher probability of using outside equity.”<sup>61</sup> Obviously, gender differences may underlie each of these factors, which may contribute to the gender disparity in equity fundraising. To the extent that founders are a source of public company CEOs, these differences will obviously lead to increased gender disparity.

59 Motherhood presents a different challenge for elite women. The careers that pay the most and require the most education, like business and law, also have the most gender inequality. Economists have found that it’s a result of the long hours and limited flexibility. It’s among the reasons the top of corporate America is still so male; 4 percent of the chief executives of companies in the S&P 500 are women (Catalyst 2017). See also the materials referenced in “Additional Resources” and elsewhere in these footnotes for information and analysis related to, and underlying, these factors.

60 See “Sources of Financing for New Technology Firms: A Comparison by Gender” by the Ewing Marion Kauffman Foundation (July 2009). Women start companies with 50% less capital than male counterparts, according to “Access to Capital by High-Growth Women-Owned Businesses” (2014). See also “Is Change In The Wind For Women Entrepreneurs Raising Capital?” *Forbes* (April 2016).

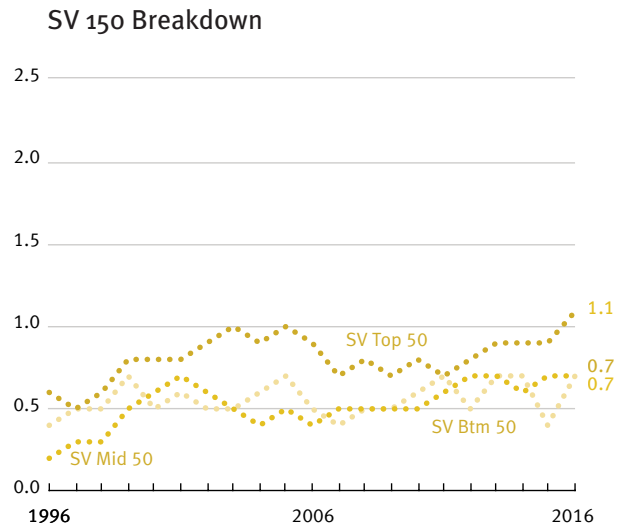
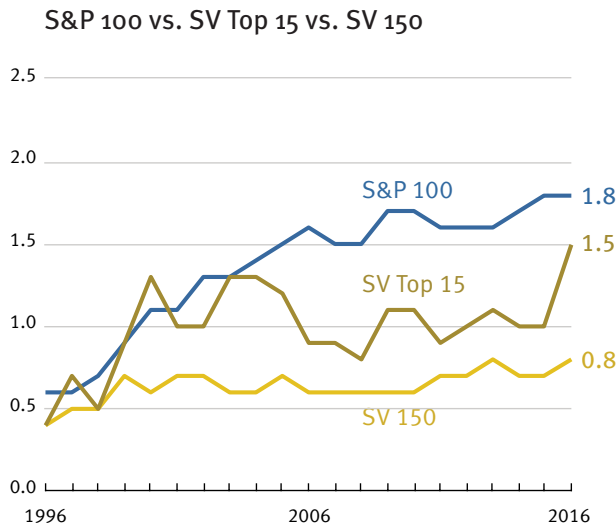
61 See “Sources of Financing for New Technology Firms: A Comparison by Gender” by the Ewing Marion Kauffman Foundation (July 2009) which observed that “[s]ome of the differences between women- and men-owned firms at startup can be explained by differences in financing strategy. ... Men’s greater reliance on outside equity to fund their firms may suggest that they were more open to sharing ownership and control with outsiders.



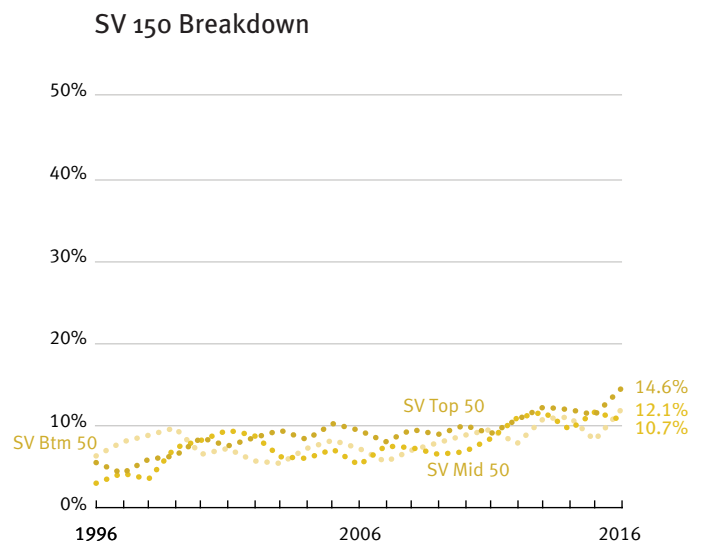
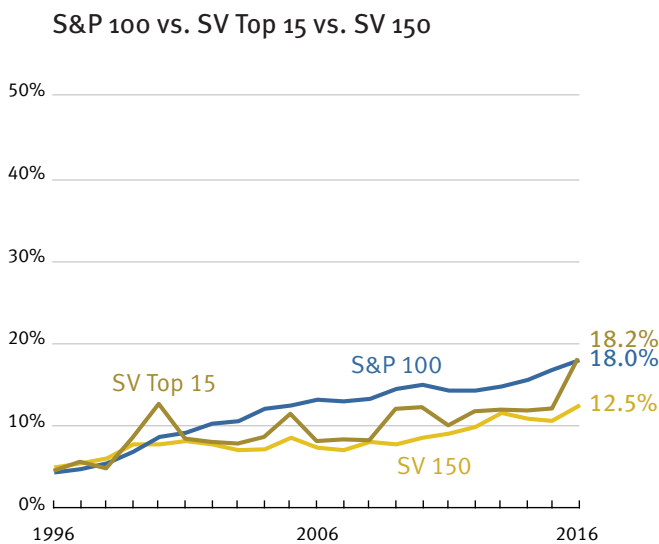
Gender Diversity on the Executive Management Team (continued)

The following graphs show the average number and the average percentage of executive officers that are women in each of the SV 150, SV Top 15 and the S&P 100 (and with the SV 150 broken down by the top 50, middle 50 and bottom 50 companies) over the period from the 1996 through 2016 proxy seasons.

AVERAGE NUMBER OF WOMEN EXECUTIVE OFFICERS — 1996–2016



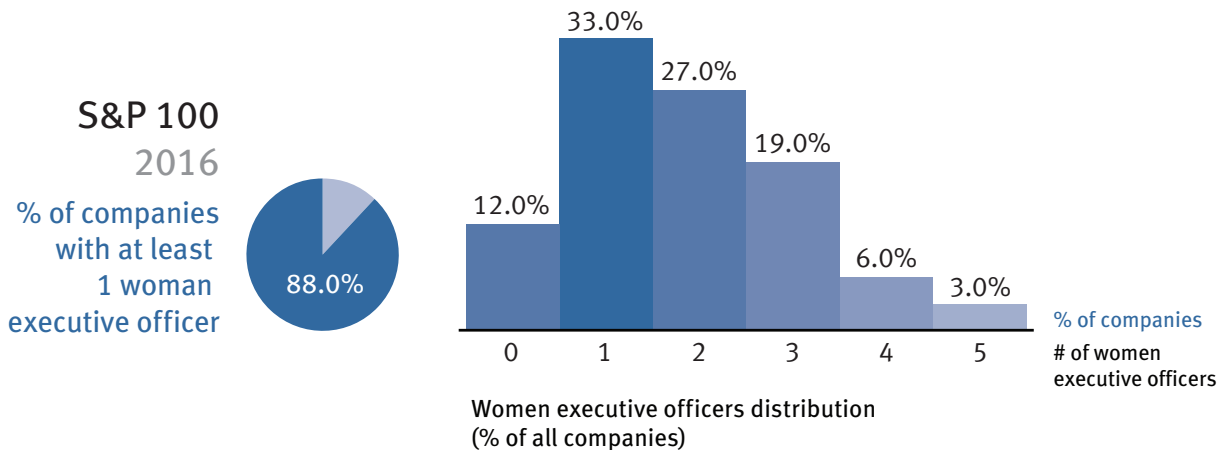
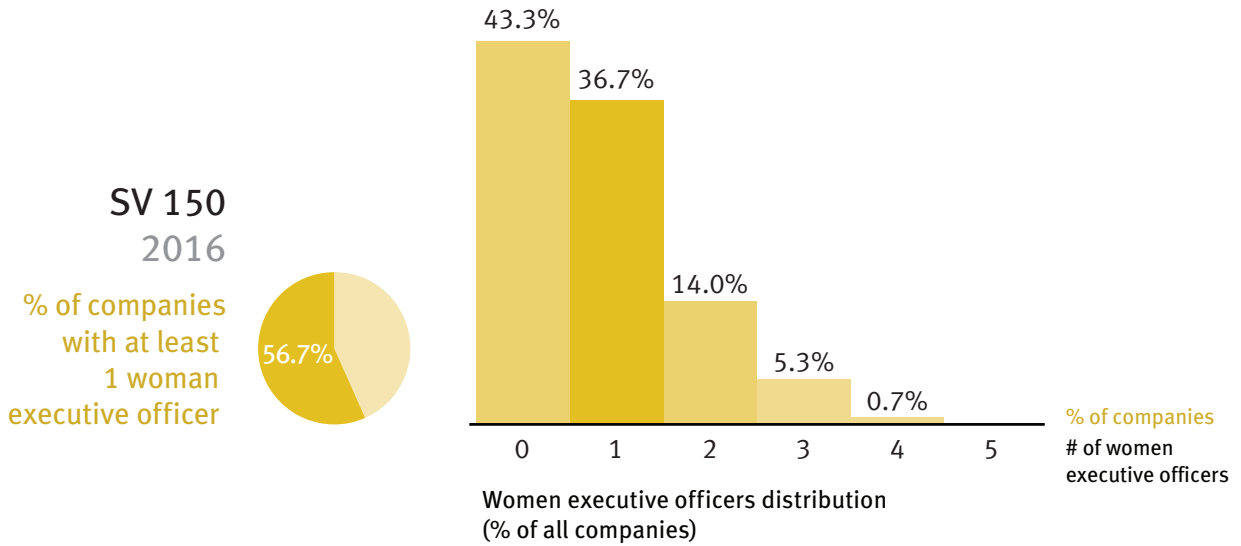
AVERAGE PERCENTAGE OF WOMEN EXECUTIVE OFFICERS — 1996–2016



Gender Diversity on the Executive Management Team (continued)

The following graphs show the percentage of companies with at least one woman executive officer and the distributions by number of women executive officers among the companies in each group during the 2016 proxy season.

WOMEN EXECUTIVE OFFICERS DISTRIBUTION — 2016 PROXY SEASON

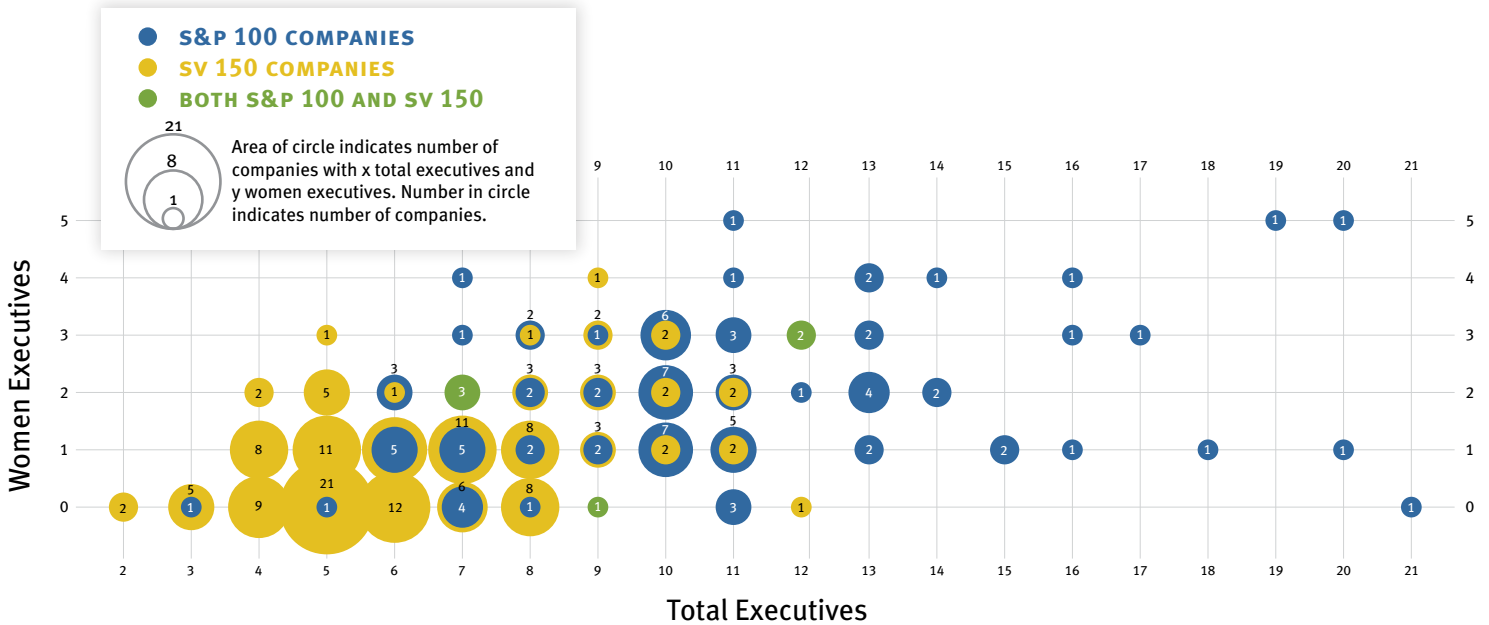


Gender Diversity on the Executive Management Team (continued)

The following graph shows the distribution of women executive officers by number of women executive officers at each executive management team size among companies in each group during the 2016 proxy season.

DISTRIBUTIONS BY TOTAL EXECUTIVE OFFICERS vs. NUMBER OF WOMEN EXECUTIVE OFFICERS  
— 2016 PROXY SEASON

S&P 100 (100 COMPANIES) vs. SV 150 (150 COMPANIES)



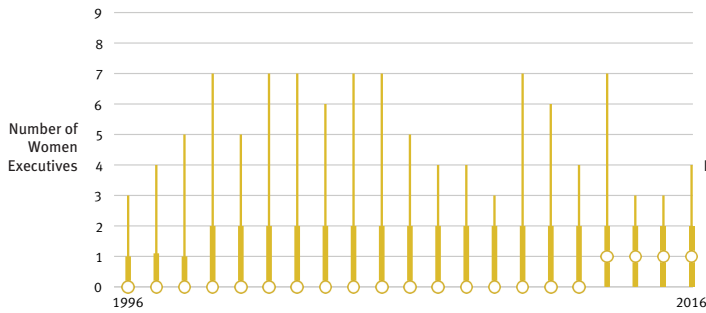
Gender Diversity on the Executive Management Team (continued)

The following graphs show the trend in the distribution by number and percentage of women executive officers in each group over the period from the 1996 through 2016 proxy seasons (showing both the median number or percentage and the cutoffs for the deciles with the most women executive officers).

DISTRIBUTION OF NUMBER AND PERCENTAGE OF WOMEN EXECUTIVE OFFICERS — 1996–2016

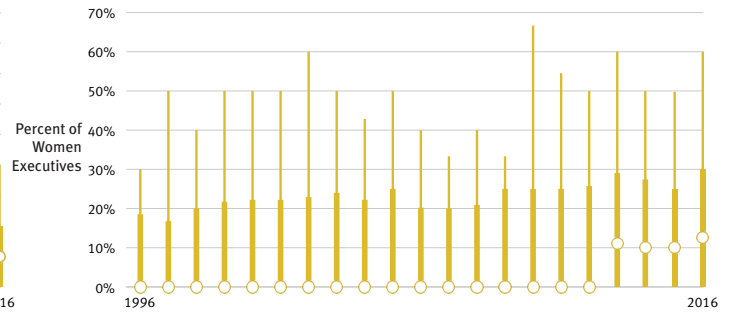
Women Executive Officers: Numbers  
1996-2016

SV 150

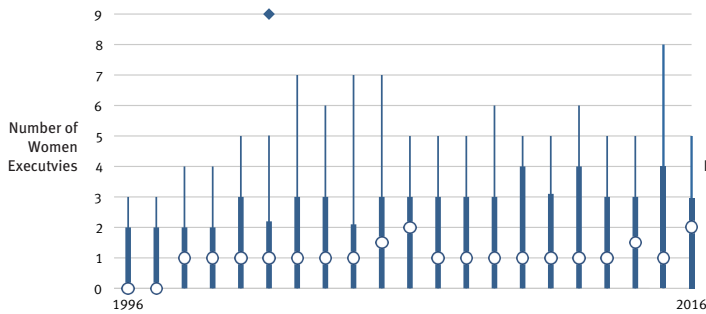


Women Executive Officers: Percentages  
1996-2016

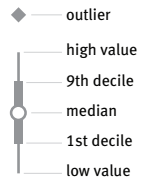
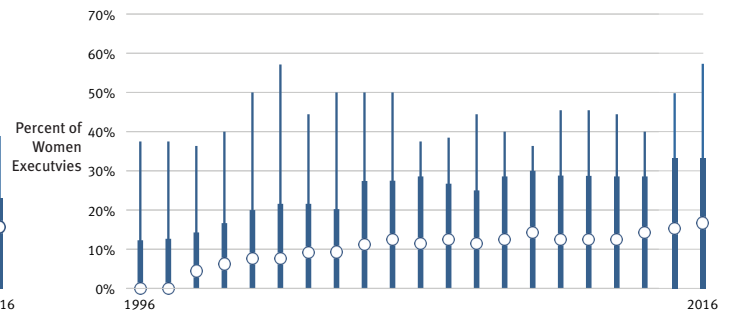
SV 150



S&P 100



S&P 100



Gender Diversity on the Executive Management Team *(continued)***“Named Executive Officers”**

SEC rules require that each public company identify and provide detailed disclosure and analysis regarding the compensation paid to the company’s principal executive officer (generally CEO), principal financial officer (generally CFO) and three most highly compensated executive officers other than those specified individuals, in each case as of the end of the most recently completed fiscal year.<sup>62</sup> The term of art “named executive officers” (or “NEOs”) is somewhat confusingly used in SEC rules (and consequently by practitioners) to refer to such individuals,<sup>63</sup> despite the fact that other/additional executive officers may be disclosed by name in the proxy statement and other SEC filings as discussed above in the subsection “Executive Officers” beginning on page 35.<sup>64</sup> This report continues such usage.

We have analyzed the gender diversity of NEOs because this group represents, to a degree, the executive officers that each company considers most important—insomuch as that is where they’re putting their money—and because reviews of diversity often focus on this group. However, NEOs are an imperfect indicator, potentially deeply flawed in individual cases. There are major idiosyncrasies in the rules for determining “most highly compensated” that can significantly skew membership.

For instance, with Silicon Valley companies, the value of equity-based compensation must be considered, and can be misleading because the highest remuneration by that standard may reflect how early an employee was hired, and their vesting status, rather than the significance of their present role. The most significant idiosyncrasy for Silicon Valley companies is the requirement to include the full grant date fair value of stock options and other equity-based compensation in the “total compensation” of individuals when determining which are the most highly compensated. Such equity-based compensation is typically subject to time-based vesting (typically four years) or to substantial performance-based vesting requirements (that may also be measured over a period of years — often three years). However, the rules require the entire value of such grants (i.e., the accounting charge that would be recognized over the entire vesting period) to be treated as compensation in the year of grant. This component of compensation often leads to changes in the makeup of NEOs from year to year because initial (i.e., new hire) stock grants that typically vest (or are earned) over four years are generally much larger than typical annual “refresh” stock grants (if any are made at all). The treatment of such grants causes a spike in deemed compensation for the employee in the year of hire, causing new hires to be included as NEOs in that year, even

62 This describes the generally applicable current definition (the specific requirement is in Item 402(a)(3) of Regulation S-K, but the definition and calculation of NEOs has evolved over time, and some companies need only disclose CEO and the two next most highly compensated). For more, see the discussion in the “Methodology—Executive Officers (and NEOs)” on pp. 68-71.

63 The individuals are sometimes loosely referred to in lay discussion simply as the “most highly compensated [or paid]” officers of a company. As the more fulsome discussion in “Methodology—Named Executive Officers” shows, that is also something of a misnomer, as two members of the group (under the current rule) must be included irrespective of their level of compensation relative to that of others in their company (CEO and CFO). Consequently, a CEO who is paid \$1 per year in compensation (and awarded no options), which has sometimes happened with founders or to set an example in companies facing fiscal difficulties; or a relatively low-paid CFO would be included in a population inaccurately described as “most highly paid.” In addition, former executive officers are required to be added as NEOs in certain circumstances. For more details see footnotes 66 and 116.

64 The term originated as a reference to being required to be “named” in certain tables disclosing compensation details required to be included in proxy statements and certain other SEC filings, but has since been used to refer to this group of individuals in a number of other contexts in SEC rules. To be clear, “named executive officers” are an imperfect subset of the “executive officers” that are required to be identified and for which limited biographical information is required to be disclosed (the difference being that additional disclosure related to compensation is required for NEOs). See “Methodology—Executive Officers (and NEOs)” beginning on p. 68 for a more fulsome discussion.

Gender Diversity on the Executive Management Team *(continued)*

if when viewed objectively in full context, such individuals would not be considered one of the most highly compensated employees. Similar impacts result where companies do not make annual “refresh” grants (often for philosophical reasons) and instead make sporadic large grants similar in scale to initial/new-hire grants as required by retention needs. Given that there are disproportionately more male executive officers, this effect is likely to skew NEO makeup toward men.

Even when such variances do not have a material impact, there are other reasons why executive officers might be “underpaid” relative to their importance and value to the company.<sup>65</sup> In addition, the requirement to include not only the CEO and CFO at the end of the fiscal year, but also any other person that held either of those positions during the fiscal year can also skew NEO membership.<sup>66</sup>

Subject to these meaningful qualifications, our data shows that during the two-decade period of the survey, the average number of women NEOs per company increased in each group of companies (SV 150 moved from an average of 0.1 to 0.5; S&P 100 moved from 0.1 to 0.6). Taking into account the variable number of NEOs per company, the average percentage of women NEOs increased meaningfully (SV 150 moved from 1.5% in 1996 to 10.6% in 2016; S&P 100 moved from 2.1% in 1996 to 11.3% in the 2016 proxy season).<sup>67</sup> While the S&P 100 initially exceeded the SV 150 in terms of average percentage of women NEOs, the growth rate of women NEOs, in terms of the average percentage of NEOs that are women, has been faster in the SV 150 (approximately 705% growth) than in the S&P 100 (approximately 544% growth) over the survey period. However, 58.7% of SV 150 companies and 49.0% of S&P 100 companies had no women NEOs in the 2016 proxy season.

When viewed over time, it does not appear that the technology and life sciences companies of the SV 150 are any less likely than the large public companies of the S&P 100 to have women NEOs. Further, when measured in terms of likelihood of being a NEO among women that serve as executive officers, the SV 150 is significantly more likely to include women as NEOs.<sup>68</sup> There also does not appear to be any meaningful correlation between the percentage of women NEOs and company size.

65 A significant example of this is the trend toward reliance on peer benchmarking when setting compensation, particularly in the wake of the requirement to include a Compensation Discussion and Analysis (CD&A) section in annual meeting proxy statements and certain other public filings beginning in late 2006. To the extent that women are overrepresented in functions for which compensation is generally lower than other executive officers of similar internal stature, NEO makeup may be skewed toward men.

66 To the extent that men are overrepresented in CEO and CFO positions (and consequently more likely to be added to the set of NEOs as former CEOs and CFOs), NEO makeup may be skewed toward men (such former officer additions also have the effect of increasing the number of NEOs beyond the typical five per company). See the “—Chief Executive Officer (CEO)” subsection beginning on p. 48 and the “—Chief Financial Officer (CFO)” subsection on p. 52. To the extent that men are overrepresented among executive officers generally, similar effects may result from the requirement to include as NEOs up to two additional individuals for whom disclosure would have been provided as one of the most highly compensated officers but for the fact that the individual did not happen to still be serving as an executive officer at the end of the fiscal year (i.e., they were an executive officer with the company for some portion of the year and, even without extrapolating their pay received during the fiscal year, were more highly paid than one of the three most highly compensated non-CEO/CFO executive officers who were with the company as of the end of the applicable fiscal year).

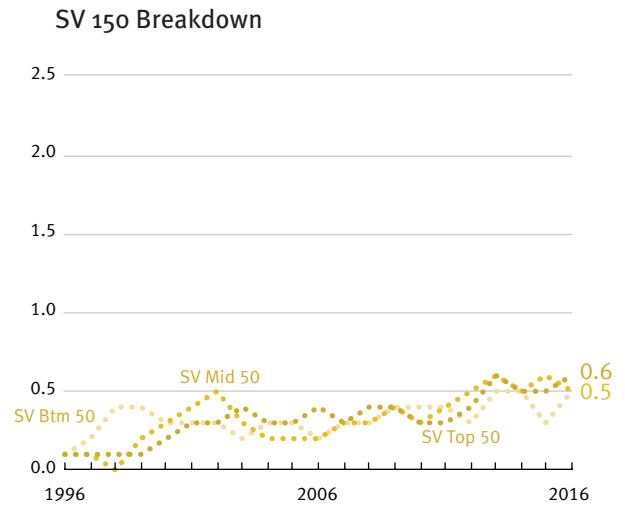
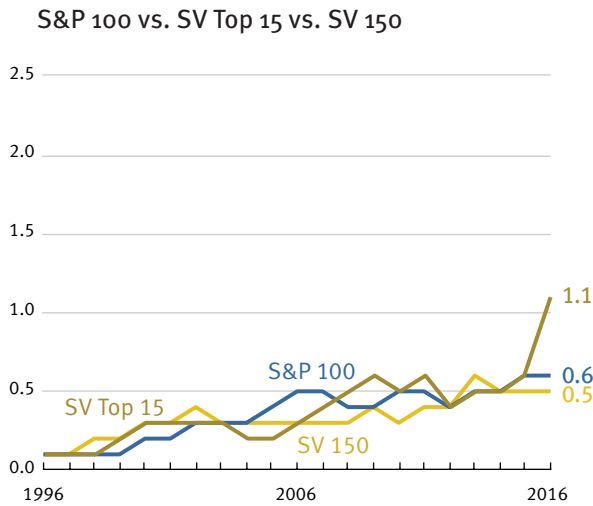
67 This appears to be representative of companies generally. See, e.g., the UC Davis Graduate School of Management study of the 400 largest public companies in California (2015-16), which found that of the 1,823 highest-paid executives reported by California’s 400 largest companies, 191 (10.5%) are women and 1,632 (89.5%) are men.

68 The 2015-16 UC Davis Graduate School of Management study of the 400 largest public companies in California study suggests a more nuanced view of the contribution of industry to the inclusion of women among “highest paid executives,” finding that among industries represented by at least 10 companies, the software sector has the greatest proportion of women directors (15.5%), and the financial services sector has the greatest percentage of women among highest-paid executives (14.1%). When it came to gains made between 2006 and 2015 by women directors, the industry responsible for the biggest share of this change is technology hardware, followed by technology software and consumer goods. Both technology software and technology hardware have shown improvement since 2010, when they were both near the bottom of the industry list.

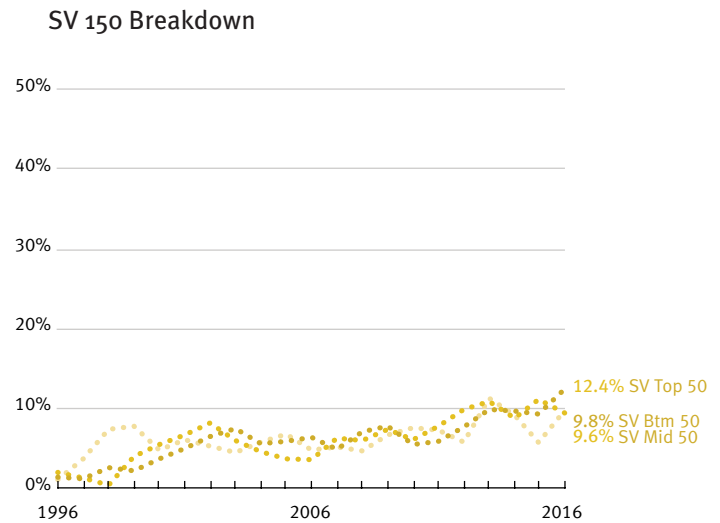
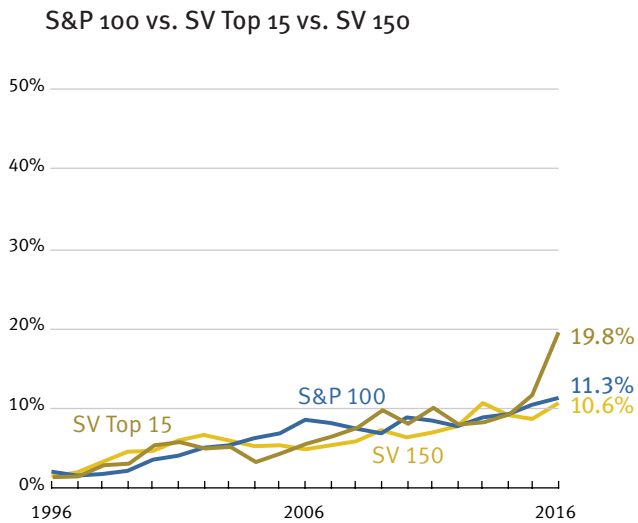
Gender Diversity on the Executive Management Team (continued)

The following graphs show the average number and the average percentage of “named executive officers” that are women in each of the SV 150, SV Top 15 and the S&P 100 (and with the SV 150 broken down by the top 50, middle 50 and bottom 50 companies) over the period from the 1996 through 2016 proxy seasons.

AVERAGE NUMBER OF WOMEN NAMED EXECUTIVE OFFICERS (NEOS) — 1996–2016



AVERAGE PERCENTAGE OF WOMEN NAMED EXECUTIVE OFFICERS (NEOS) — 1996–2016

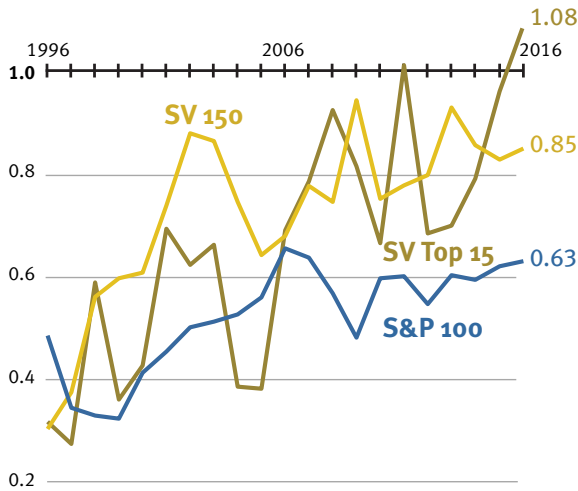


Gender Diversity on the Executive Management Team (continued)

The following graph shows the ratio of average representation of women among “named executive officers” to the average representation of women among all executive officers overall in each of the SV 150, SV Top 15 and the S&P 100 over the period from the 1996 through 2016 proxy seasons.

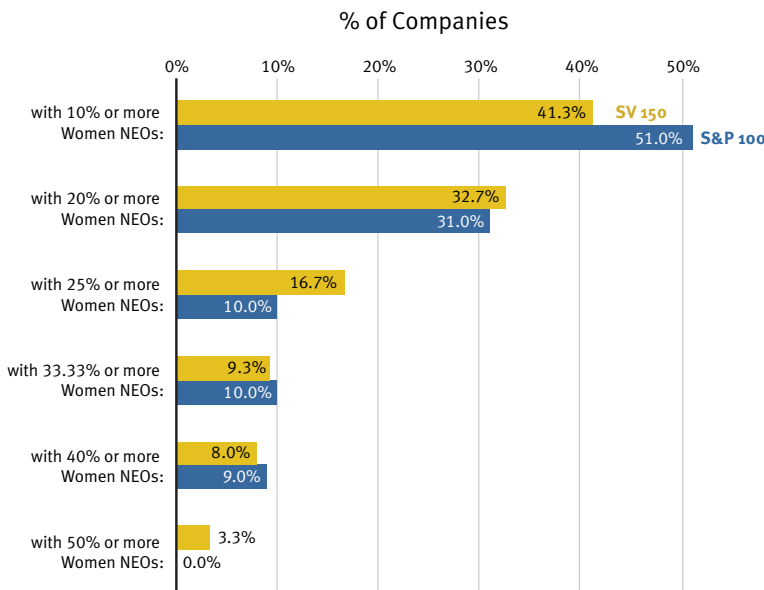
RATIO OF WOMEN NEO REPRESENTATION TO WOMEN EXECUTIVE REPRESENTATION — 1996–2016

(Average Percentage of Women NEOs divided by Average Percentage of Women Executives)



The following graph shows the percentage of companies in each group with women representing at least a variety of minimum threshold percentages of “named executive officers” during the 2016 proxy season.

WOMEN NEO REPRESENTATION: S&P 100 vs. SV 150 — 2016 PROXY SEASON





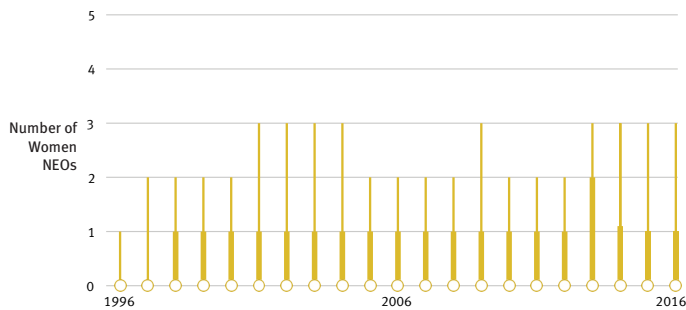
Gender Diversity on the Executive Management Team (continued)

The following graphs show the trend in the distribution by number and percentage of women named executive officers in each group over the period from the 1996 through 2016 proxy seasons (showing both the median number or percentage and the cutoffs for the deciles with the most women named executive officers).

DISTRIBUTION OF NUMBER AND PERCENTAGE OF WOMEN NAMED EXECUTIVE OFFICERS — 1996–2016

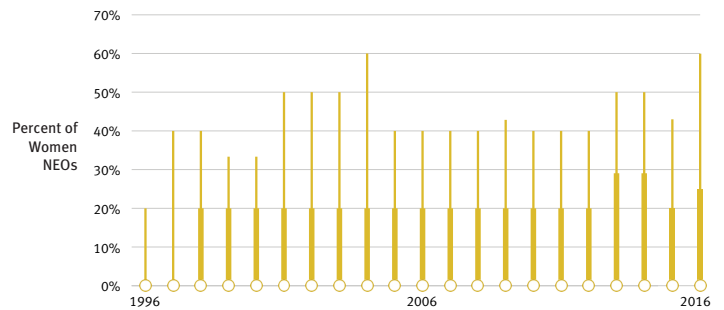
Women Named Executive Officers: Numbers  
1996-2016

SV 150

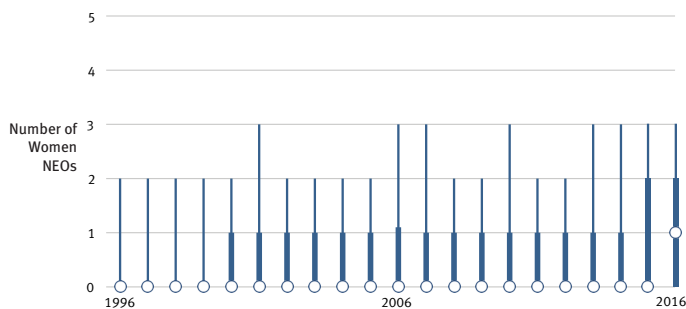


Women Named Executive Officers: Percentages  
1996-2016

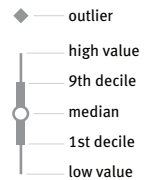
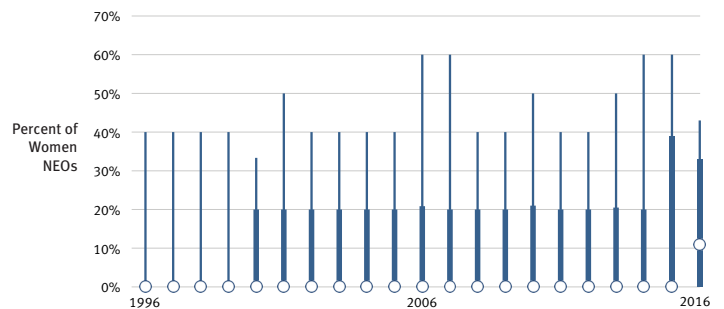
SV 150



S&P 100



S&P 100



Gender Diversity on the Executive Management Team (continued)

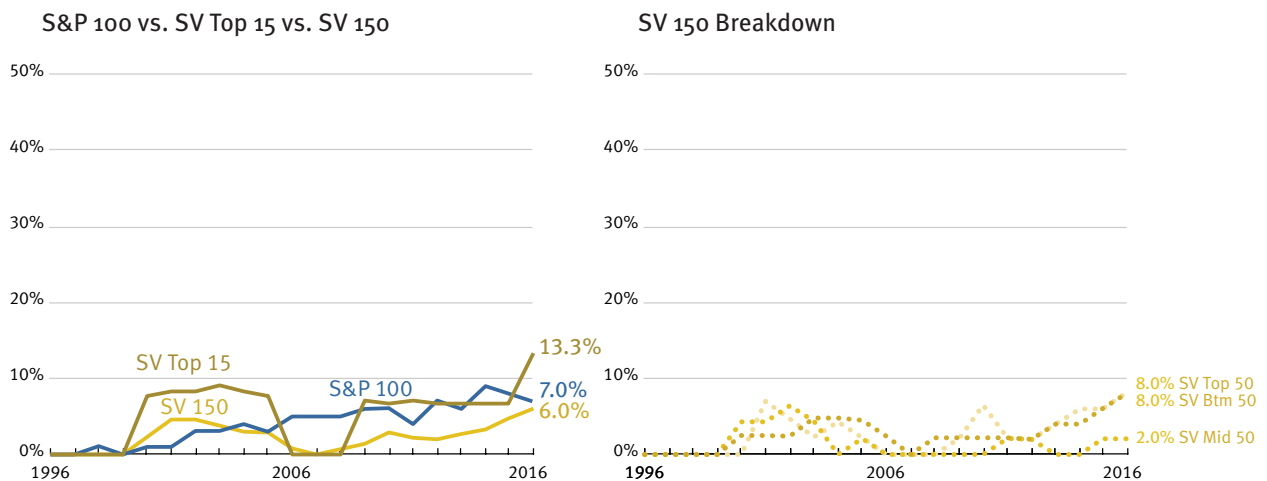
**Chief Executive Officer (CEO)**

The large public companies of the S&P 100 have tended to more frequently have a woman serving as CEO than the technology and life sciences companies of the SV 150 (S&P 100 = 7.0% and SV 150 = 6.0% in the 2016 proxy season), although both groups have very few women serving as CEOs. The companies of the SV 150 and the S&P 100 appear to slightly exceed the general norm in this regard. Catalyst reported in “Women CEOs Of The S&P 500” that women currently held 22 (4.4%) of CEO positions at S&P 500 companies based on its October 2015 S&P 500 list. Among California’s 400 largest public companies, the UC Davis Graduate School of Management 2015-16 study counted 17 women CEO’s, representing only 4.3 percent of the positions. And in its 2016 CS Gender 3000 report looking at 27,000 senior managers at over 3,000 companies globally, Credit Suisse found that women made up 3.9% of CEOs.

Since CEOs often serve on their own company’s board and are often sought as board members for other companies, the small number of women CEOs is a factor that contributes to the relatively low number of women serving on boards of directors. In addition, CEOs exert a great deal of influence on the recruitment of new board members and executives to their company. To the extent that women CEOs are more likely to recruit other women for those roles or have more women in their network to refer for those roles, the scarcity of women CEOs further contributes to the relative infrequency of women on boards and on executive management teams. According to the UC Davis School of Management 2015-16 study, companies with women at the helm have, on average, 38 percent more female leaders than companies with a male CEO. Our data appears to show a similar effect for the SV 150 and S&P 100 in the 2016 proxy season.

*The following graphs show the percentage of companies with a woman serving as the chief executive officer in each of the SV 150, SV Top 15 and the S&P 100 (and with the SV 150 broken down by the top 50, middle 50 and bottom 50 companies) over the period from the 1996 through 2016 proxy seasons (among those companies in each group identifying such an executive in their public filings in each such proxy season).*

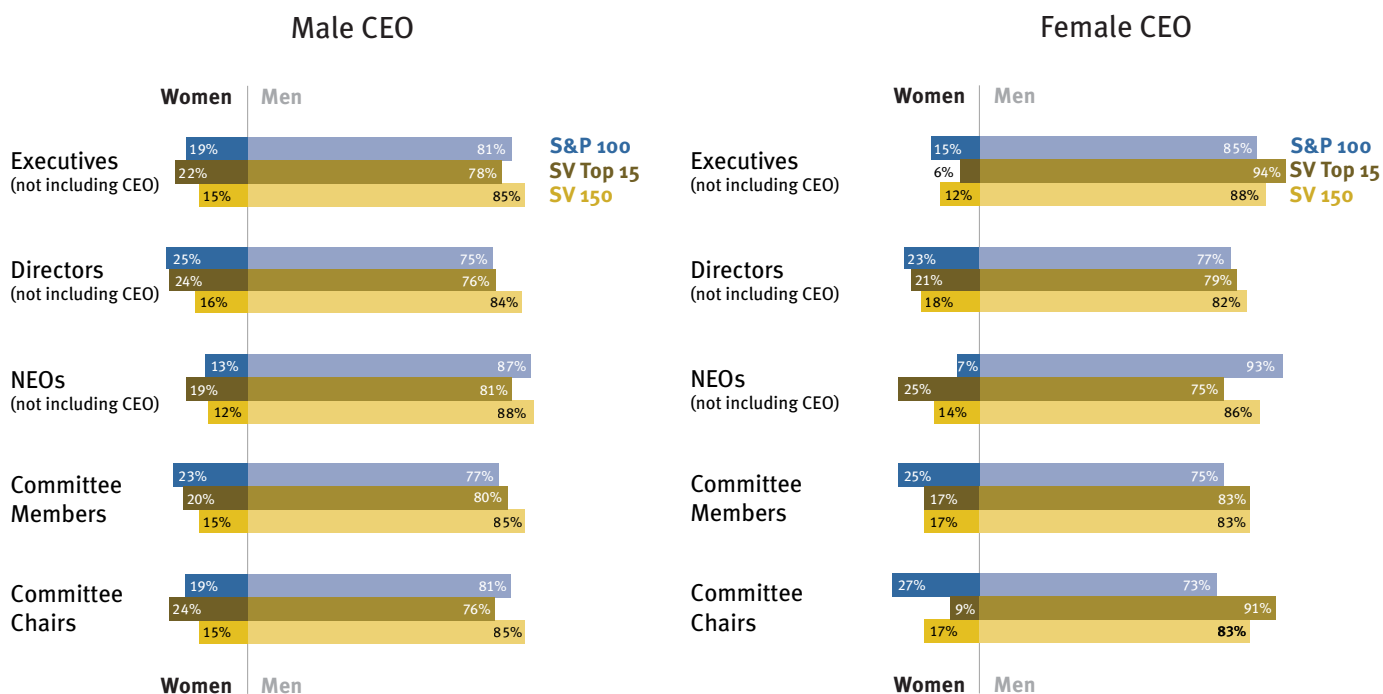
**PERCENTAGE OF COMPANIES WITH A WOMAN CEO — 1996–2016**



Gender Diversity on the Executive Management Team (continued)

The following graphs show the respective imbalances in the percentage of executive officers, named executive officers, board members, committee members and committee chairs that are women among companies with a woman serving as CEO compared with companies with a man serving as CEO in each of the SV 150, SV Top 15 and the S&P 100 during the 2016 proxy season.

GENDER IMBALANCES: S&P 100 VS. SV TOP 15 VS. SV 150 — 2016 PROXY SEASON



Gender Diversity on the Executive Management Team *(continued)***President/Top Operations Executive (separate from CEO)**

In the 2016 proxy season, the technology and life sciences companies of the SV 150 had a woman serving as the president (separate from the CEO)<sup>69</sup> and/or the top operations executive (often COO) more frequently than the large public companies of the S&P 100 (SV 150 = 9.7% and S&P 100 = 16.7%). Eight of the top 15 of the SV 150 had a president and/or top operations executive (separate from the CEO) during the 2016 proxy season, and two (or 25.0%) of such positions were held by women. Overall, both the SV 150 and the S&P 100 have few women serving in these roles — although women serve in these roles more frequently than they serve as CEO.

As with CEOs, the companies of the S&P 100 and the SV 150 do not appear to be outliers in this regard. For example, the [2015-16 UC Davis Graduate School of Management study of California's 400 largest public companies](#) found that 17 women served as CEOs, representing only 4.3 percent of the study's CEO positions. Of the highest-paid executives, 10.5% were women. Only 17 companies had a female CEO, while 52 had a female CFO.

A company's president or senior operations executive is often a potential successor to the CEO (or candidate for outside CEO positions).<sup>70</sup> Consequently, the relatively low number of women serving in these roles contributes to the paucity of women CEOs, as well as to the relatively low number of women serving on boards of directors — although the increasing frequency over time (and comparison to the frequency of women serving as CEO) suggests that gains may be made in the number of women CEOs and board members in coming years.

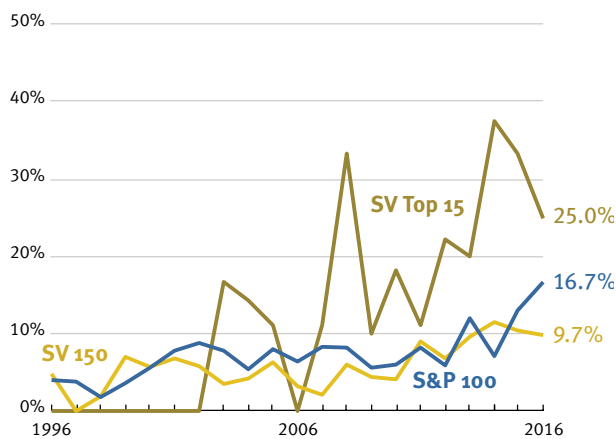
69 For purposes of this survey, we have counted only the president and/or the top operations executive where they are separate from the CEO. Many companies combine the roles. The data for CEO includes such combined roles.

70 In "Still missing: Female business leader," CNNMoney (March 2015) analyzed the four executive positions just under chief executive officer, namely chief financial officers, chief operating officers and other key roles in the S&P 500 and found that women held just 16.5% of the four positions, a very small pool. That article also observed that women lag in landing the critical profit-and-loss (P&L) jobs that serve as grooming roles for future leaders but viewed the increasing percentage of women directors as a positive sign, noting that an increase in their numbers is important because directors are the ones in charge of hiring CEOs and identifying future leaders in the pipeline.

Gender Diversity on the Executive Management Team (continued)

The following graph shows the percentage of companies with a woman serving as the president or top operations executive (that is separate from the CEO) in each of the SV 150, SV Top 15 and the S&P 100 over the period from the 1996 through 2016 proxy seasons (among those companies in each group identifying such an executive in their public filings in each such proxy season).

**PERCENTAGE OF COMPANIES WITH A WOMAN PRESIDENT OR COO/TOP OPERATIONS EXECUTIVE — 1996–2016**



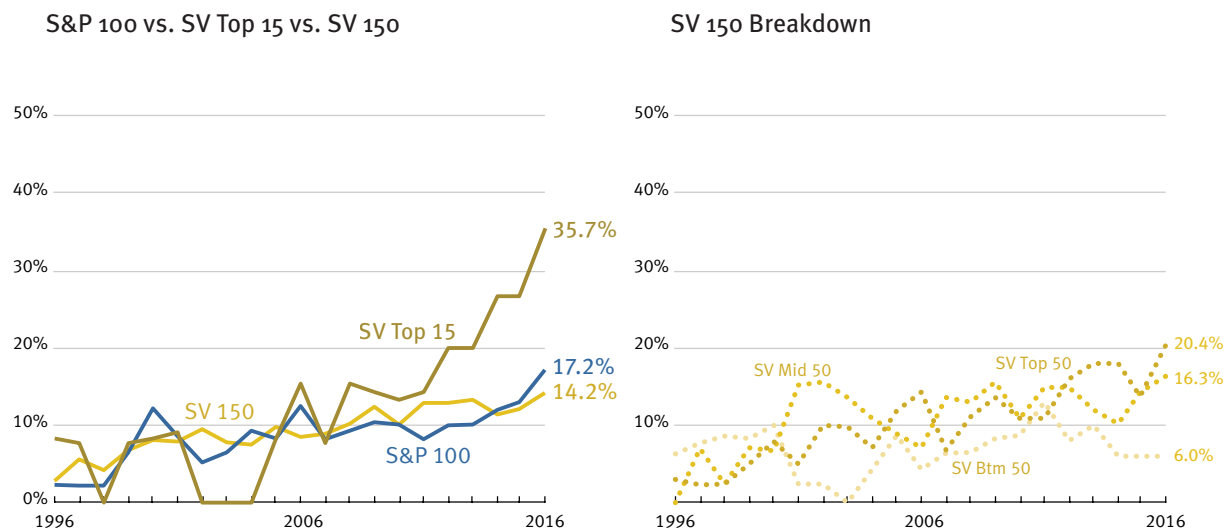
Gender Diversity on the Executive Management Team *(continued)*

**Chief Financial Officer (CFO)**

The technology and life sciences companies of the SV 150 were slightly less likely than the large public companies of the S&P 100 to have a woman serving as CFO<sup>71</sup> in the 2016 proxy season (SV 150 = 14.2% and S&P 100 = 17.2%). Five of the 14 companies in the top 15 of the SV 150 with a CFO, or 35.7%, had a woman CFO during the 2016 proxy season. Over the period of the survey, companies in both groups have been more likely to have a woman serving as CFO than either CEO or president/top operating executive, although both groups still have relatively few women serving as CFOs. The SV 150 and the S&P 100 appear to exceed the norm in this regard. According to the [UC Davis Graduate School of Management 2015-16 study of the 400 largest public companies in California](#), for instance, only 17 companies had a female chief executive officer (CEO), while 52 had a female chief financial officer (CFO).<sup>72</sup>

*The following graph shows the percentage of companies with a woman serving as the chief financial officer in each of the SV 150, SV Top 15 and the S&P 100 (and with the SV 150 broken down by the top 50, middle 50 and bottom 50 companies) over the period from the 1996 through 2016 proxy seasons (among those companies in each group identifying such an executive in their public filings in each such proxy season).*

**PERCENTAGE OF COMPANIES WITH A WOMAN CFO — 1996–2016**



71 Includes the top financial officer identified if no CFO was identified.

72 See also “58 women CFOs in the Fortune 500: Is this progress?” (February 2015), in which Fortune reported its analysis in collaboration with S&P Capital IQ that counted 58 female CFOs serving at Fortune 500 companies as of February 2015. That’s compared to the plus-or-minus 20 women CEOs at the largest companies in recent years; see “The Percentage of Female CEOs in the Fortune 500 Drops to 4%” (June 2016).

**Gender Diversity on the Executive Management Team** *(continued)***General Counsel (GC)**

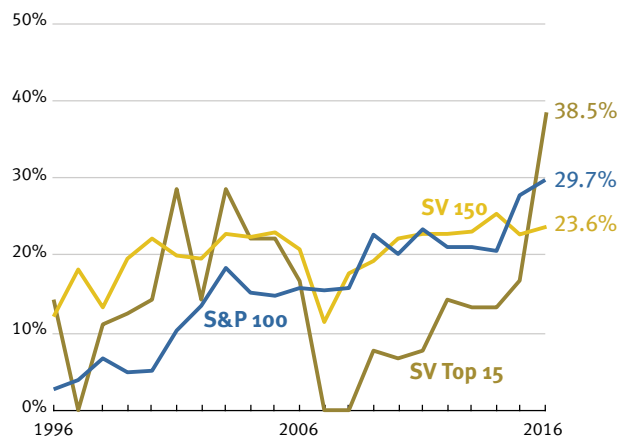
Historically, the technology and life sciences companies of the SV 150 have more frequently had a woman serving as the senior legal executive, usually the general counsel (GC), than the large public companies of the S&P 100. However, the growth rate has been faster in the S&P 100 companies during the two decades of the survey, more than closing the gap (SV 150 = 23.6% and S&P 100 = 29.7% in the 2016 proxy season). The percentage of GCs that are women in the SV 150 and the S&P 100 is somewhat higher than the 22.3% of GCs that are women in the Fortune 1000 according to the Minority Corporate Counsel Association's 17th Annual General Counsel Survey. The percentage in the S&P 100 is similar to the 24.8% of GCs that are women in the Fortune 500, while the percentage in the SV 150 also exceeds that group's percentage as well as the 9.9% of GCs that are women in the Fortune 501-1000 companies, according to the MCCA survey. Among SV 150 companies, the GC has been the senior executive role most likely to be filled by a woman during the 20-year survey period. Five of the 13 companies in the top 15 of the SV 150 with a GC identified, or 38.5%, had a woman GC during the 2016 proxy season.

Because women make up more than one-third of the legal profession, the authors of the MCCA survey concluded that there should be no shortage of female job candidates for the GC role, which cannot be said for other leadership roles. The higher number of women GCs may also be symptomatic of the challenges that leading law firms have in retaining top-performing women, particularly in corporate transactional and high-stakes litigation practices. Partnership track in a leading law firm is often the primary alternative to choosing an in-house career path for such women in Silicon Valley. The career paths of large public company GCs outside of Silicon Valley appear to have a much greater degree of variation — including many arriving via government service.

Gender Diversity on the Executive Management Team *(continued)*

The following graph shows the percentage of companies with a woman serving as the general counsel in each of the SV 150, SV Top 15 and the S&P 100 over the period from the 1996 through 2016 proxy seasons (among those companies in each group identifying such an executive in their public filings in each such proxy season).

PERCENTAGE OF COMPANIES WITH A WOMAN GENERAL COUNSEL — 1996–2016





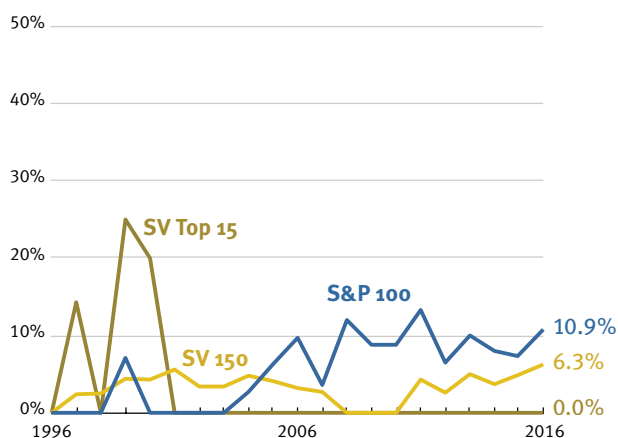
Gender Diversity on the Executive Management Team (continued)

**Top Technology/Engineering/R&D Executive**

It is difficult to compare the frequency of women serving as the top technology/engineering/research and development executive<sup>73</sup> between the technology and life sciences companies of the SV 150 and the large public companies of the S&P 100. While this is often a central, leading role at SV 150 companies, it is less common at, and appears to have less importance to, S&P 100 companies — although its importance and centrality do appear to be increasing in that group.<sup>74</sup> Subject to those limitations, during the course of the 20-year survey, women have served as the top technology/engineering/research and development executive at similar (low) levels, although the percentage in the S&P 100 has exceeded the percentage in the SV 150 in recent years (S&P 100 = 10.9% and SV 150 = 6.3% in the 2016 proxy season (compared to 10.0% and 5.0%, respectively, in 2013). Eight of the top 15 of the SV 150 had one or more top technology/engineering/R&D executives during the 2016 proxy season, none of whom were women. A woman has not served as a top technology/ engineering/R&D executive of the SV Top 15 since 2001. There appears to be an upward trend in women in these roles in the S&P 100 and the SV 150, while the data for the SV Top 15 does not suggest such a trend.

*The following graph shows the percentage of companies with a woman serving as the top technology, engineering or research and development executive in each of the SV 150, SV Top 15 and the S&P 100 over the period from the 1996 through 2016 proxy seasons (among those companies in each group identifying such an executive in their public filings in each such proxy season).*

**PERCENTAGE OF COMPANIES WITH A WOMAN CTO OR OTHER TOP TECHNOLOGY/ENGINEERING/R&D EXECUTIVE — 1996–2016**



73 This role may carry the title of CTO, VP of Engineering or VP of Research and Development, among others. These roles are often thought of as being quite distinct. However, each of these terms is used with a wide variation of meaning, with CTO often being the broadest sometimes also encompassing a sales-focused or product development role. For purposes of this survey, the roles have been grouped together.

74 A much wider range of titles has been counted in the S&P 100 for purposes of this survey. For example, in the S&P 100, we have included chief information officers (CIOs). CIOs are generally a much less central role in the SV 150 and are meaningfully dissimilar to CTO or vice president of engineering or of research and development in Silicon Valley companies (often not thought of as one of the most senior executive roles).

**Gender Diversity on the Executive Management Team** *(continued)***Top Sales Executive**

Comparisons of the frequency of women serving as the top sales executive between the technology and life sciences companies of the SV 150 and the large public companies of the S&P 100 are difficult. This is often a central leading role at SV 150 companies, where revenue growth is a principal driver of valuation, organizations are smaller and organizational structures are much less complex. S&P 100 companies are much less likely to identify a top sales executive among their executive officers.<sup>75</sup> Subject to those limitations, during the course of the two-decade survey, more women have served as the top sales executive in the SV 150 than in the S&P 100 in absolute numbers, but in some years, including in the 2014 and 2015 proxy seasons, the S&P 100 exceeded in terms of the percentage of all sales executives that are women, due to the small number of companies in the S&P 100 with sales executives. However, that reversed in the most recent proxy season. (SV 150 = 11.7% of 77 companies with a senior sales executive and S&P 100 = 11.1% of 18 companies with a senior sales executive in the 2016 proxy season).

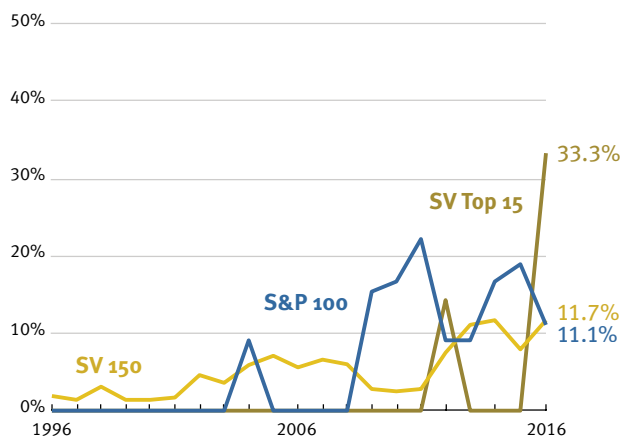
Three of the top 15 of the SV 150 had a top sales executive during the 2016 proxy season, one of whom was a woman. There has only been one other woman top sales executive among the SV Top 15 in the 21 years surveyed (in 2012). There appears to be a steady upward trend in women in these roles in the SV 150 (but not in the SV Top 15), while the data for the S&P 100 does not clearly suggest such a trend. The volatility of the percentage of top sales executives that are women in the S&P 100 appears to be a function of both the very low number of top sales executives identified among their executive officers and changes in the makeup of that index. The increase of women in such roles in the S&P 100 in recent years may develop into a clearer trend over time.

<sup>75</sup> During the course of the 20-year survey, the SV 150 companies have identified generally five to ten times more top sales executives among their executive officers than have the S&P 100 companies.

Gender Diversity on the Executive Management Team (continued)

The following graph shows the percentage of companies with a woman serving as the top sales executive in each of the SV 150, SV Top 15 and the S&P 100 over the period from the 1996 through 2016 proxy seasons (among those companies in each group identifying such an executive in their public filings in each such proxy season).

PERCENTAGE OF COMPANIES WITH A WOMAN TOP SALES EXECUTIVE — 1996–2016



Gender Diversity on the Executive Management Team *(continued)***Top Marketing Executive (separate from Sales)**

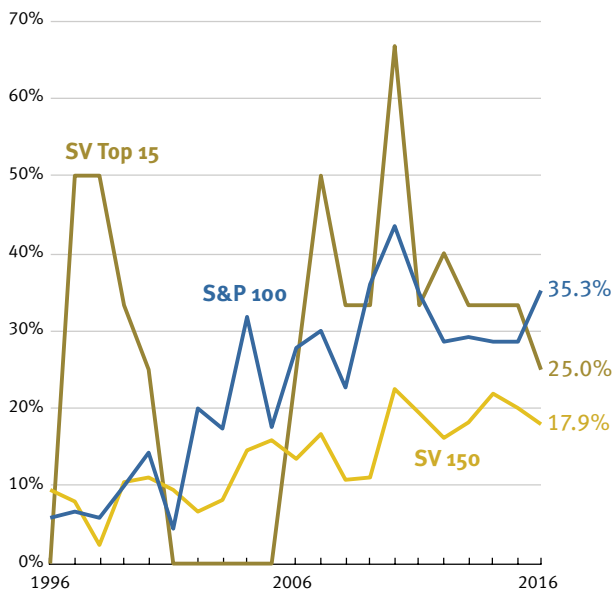
Over the course of the two-decade survey period, the large companies of the S&P 100 have been substantially more likely to have a woman serving as the top marketing executive than the technology and life sciences companies of the SV 150, although both groups have shown substantial growth in the percentage of women serving in such roles (S&P 100 grew from 5.9% to 35.3% in 2016; SV 150 grew from 9.5% to 17.9% in 2016, each with individual higher peaks in prior proxy seasons). Four of the top 15 of the SV 150 had a top marketing executive (separate from sales) during the 2016 proxy season, one of whom was a woman. Although there are relatively few top marketing executives among the SV Top 15, three on average over the years surveyed, in most years, a woman has held at least one or more of such marketing positions. In the S&P 100, the top marketing executive has been by far the senior executive role most likely to be filled by a woman during the 20-year survey period. In the SV 150, the frequency of women serving as top marketing executive has grown near that of general counsel. The relatively high number of women in top marketing executive positions may be a function of women disproportionately choosing marketing as a discipline within business education as noted by various reports, including a November 2015 *Fortune* article that found women made up the majority of applicants in three MBA programs: Master in Marketing and Communications, Master of Accounting and Master in Management.<sup>76</sup>

<sup>76</sup> See also “Fewer Women Are Choosing College Business Programs” by Erin Zlomek in *Bloomberg BusinessWeek* (March 22, 2013), which noted that “In *Bloomberg Businessweek*’s survey, women were 1.3 times more likely than men to concentrate on health-care management and policy and international business. They were 1.6 times more likely to concentrate in marketing. Men, on the other hand, outnumbered women 2 to 1 in finance, entrepreneurship, information management, and environmental policy and management.

Gender Diversity on the Executive Management Team *(continued)*

The following graph shows the percentage of companies with a woman serving as the top marketing executive (that is separate from the top sales executive) in each of the SV 150, SV Top 15 and the S&P 100 over the period from the 1996 through 2016 proxy seasons (among those companies in each group identifying such an executive in their public filings in each such proxy season).

PERCENTAGE OF COMPANIES WITH A WOMAN TOP MARKETING EXECUTIVE — 1996–2016



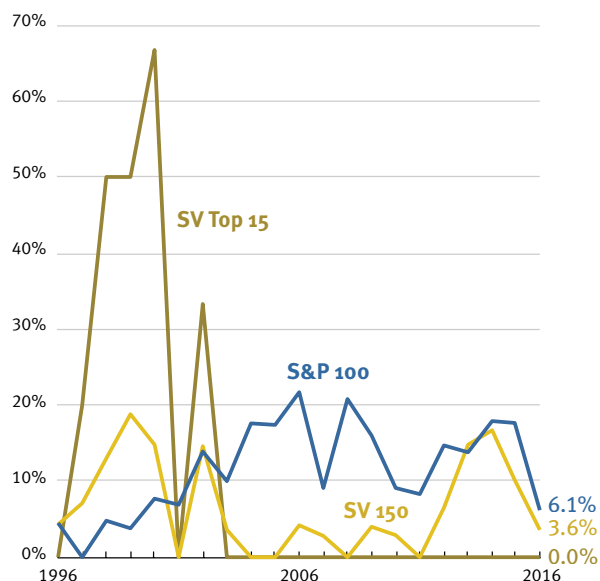
Gender Diversity on the Executive Management Team (continued)

**Top Corporate/Business Development Executive**

The percentage of women serving as the top corporate/business development executive<sup>77</sup> in the large companies of the S&P 100 generally exceeded the percentage in the technology and life sciences companies of the SV 150 during the period of the two-decade survey – though with more similar rates in the two groups over the last four proxy seasons. Four of the top 15 of the SV 150 had a top corporate/ business development executive during the 2016 proxy season, none of whom was a woman. A woman has not served as a top corporate/business development executive of the SV Top 15 since 2003, although in 2000, two of the three top corporate/business development executives in the SV Top 15 were women. There has been significant volatility in the percentage of women serving in such roles, and the SV 150 companies and the S&P 100 companies now have very low rates of women in the role (SV 150 = 3.6% and S&P 100 = 6.1% in the 2016 proxy season). It is not clear that the data for either group of companies represents a trend.<sup>78</sup>

*The following graph shows the percentage of companies with a woman serving as the top corporate development or business development executive in each of the SV 150, SV Top 15 and the S&P 100 over the period from the 1996 through 2016 proxy seasons (among those companies in each group identifying such an executive in their public filings in each such proxy season).*

**PERCENTAGE OF COMPANIES WITH A WOMAN TOP CORPORATE/BUSINESS DEVELOPMENT EXECUTIVE — 1996–2016**



77 These roles are often thought of as being quite distinct. However, these terms are used with a wide degree of meaning, with “business development” in particular being expanded to encompass much of what is meant by corporate development. In a number of instances, the roles are explicitly combined (e.g., “Senior Vice President of Corporate and Business Development”). For purposes of this survey, the roles have been grouped together.

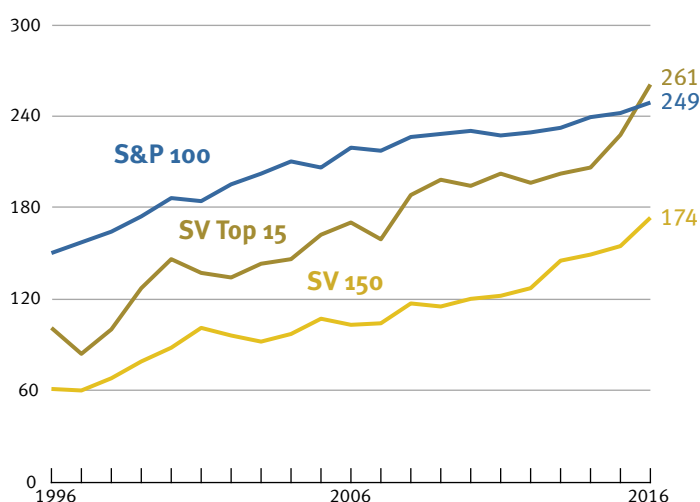
78 To some degree, the volatility of the percentage of top corporate/business executives that are women in both groups is a function of both the relatively low number of top corporate/business development executives identified among their executive officers and changes in the makeup of each index.

## Conclusion

As discussed in the introduction, for some time now media coverage and commentary, as well as much discussion among participants in the Silicon Valley ecosystem, has focused on the relative lack of gender diversity here. Much of this discussion has been based on anecdotal observation or relatively limited statistical information.<sup>79</sup> Commentary that is unduly negative or pessimistic, even if well intended, runs the risk of discouraging talented women in all disciplines from initiating, pursuing or maintaining careers in the Silicon Valley technology and life sciences industries. This would be a real loss for Silicon Valley and all those who benefit from its innovations and economic contributions. While the data presented in this survey shows that women are significantly underrepresented relative to their percentage of the general population and as a percentage of the national workforce (and in a number of ways when compared with their percentage in very large public companies), it also shows that the past two decades (and, in particular, the years since the depth of the financial crisis) has been a time of progress for women in leadership roles in Silicon Valley public companies. The data may also suggest that periods of particularly strong growth in Silicon Valley may have been accompanied by periods of especially good opportunity for women. It also suggests caution when considering the data for any one point in time or trends for a relatively short period.

*The following graph shows the gender diversity score for each of the SV 150, SV Top 15 and S&P 100 over the period from the 1996 through 2016 proxy seasons.*

### FENWICK GENDER DIVERSITY SCORE™ — 1996–2016<sup>80</sup>



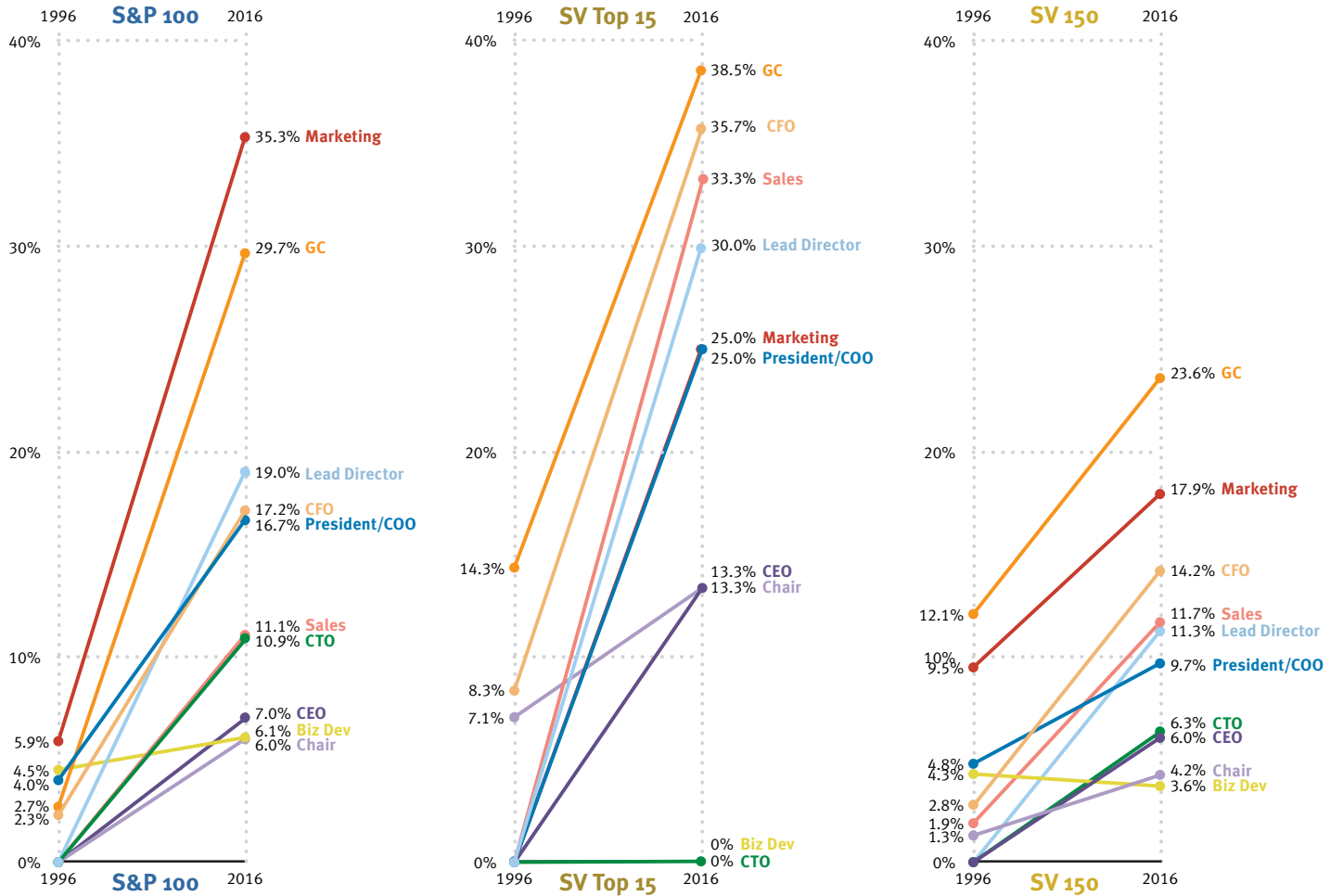
<sup>79</sup> A similar point has been made in “Closing The Tech Industry’s Gender Gap Requires Better Data” by Catherine Bracy on NPR’s *All Tech Considered* blog (June 25, 2013) and “Where Are The Numbers?” (October 21, 2013). That said, see “Diversity Matters: Is Trump Or Silicon Valley Worse For Women? And More November News” *Forbes* (November 2016), which reported on statistics released about gender diversity in Silicon Valley, including by tech giants like Apple and Microsoft, which publish annual diversity reports on the state of diversity in their workplaces. Other new sources of numbers come from companies like HiringSolved, an HR tech company that used data science and machine learning to collect and analyze gender diversity figures for the top 25 tech companies in Silicon Valley; see HiringSolved’s study “21st Century Hiring Report: Women in Tech” (November 2016).

<sup>80</sup> See the “Introduction– Fenwick Gender Diversity Score™” section beginning on p. 8 and the “Methodology– Fenwick Gender Diversity Score™” section on p. 71 for a discussion of the score for each group and how they are calculated.

Conclusion (continued)

The following graphs show the percentage of board and executive leadership positions that were held by women in each of the SV 150, SV Top 15 and the S&P 100 in the 1996 proxy season compared with the percentage in the 2016 proxy season.

PERCENTAGE OF TOP POSITIONS FILLED BY WOMEN: 1996 vs. 2016



Silicon Valley companies — from startups to very large public companies — whose customers and users are often a diverse array of men and women from across the nation and globally (this is especially the case for Internet businesses),<sup>81</sup> need teams and leadership that can create and thrive in diverse environments addressing diverse needs.

81 See “How Women Are Influencing the Future of eCommerce” Huffington Post (September 2013) and “Why Women Rule The Internet” by Aileen Lee, Partner at Kleiner Perkins Caufield & Byers, in *TechCrunch* (March 20, 2011).



**Conclusion** *(continued)*

Diversity, including gender diversity, at the executive officer and board levels of corporate leadership (and at all levels of an organization) can provide a number of potential benefits, including:

- access to a significant part of the potential relevant talent pool that can contribute to and lead in a variety of technical and other functional areas;
- unique and tangible contributions, resulting from different perspectives, experiences, concerns and sensibilities, in product development, marketing, customer relations, mentoring and employee relations in a world of diverse customers and workforces;
- the potential for richer discussion and debate at the executive and board level (and at other levels of management) that may ultimately increase effectiveness in their decision-making and advising functions;
- executive teams and boards with diverse backgrounds increase the likelihood that the perspectives and concerns of often-ignored constituencies are represented in discussions, while at the same time reducing the risk of “groupthink”; and
- signaling to various constituencies, including employees at all levels, customers, communities, regulators and other government actors, and the public, about a company’s values.

As discussed above,<sup>82</sup> major contributors to the difference in gender diversity measures between the technology and life sciences companies of the SV 150 and the large public companies of the S&P 100 appear to be the difference in scale between the companies in the two groups and the concentration of technology companies in the SV 150, which, as a sector, appears to have relatively less gender diversity irrespective of geography.<sup>83</sup> A wide array of factors contributes to the under-participation of women in the technology sector,<sup>84</sup> and the relative lack of gender diversity at the most senior levels of leadership in public companies often reflects conditions that existed and individual decisions that were made 20 or more years ago.

As anyone who lives and works in the technology and life sciences industries in Silicon Valley can readily attest, Silicon Valley is quite diverse in terms of ethnicity and culture as well as in many other ways, drawing talent from across the United States and around the world. And, as a general matter, Silicon Valley companies embrace open-mindedness and meritocracy as core values and are interested in attracting the best, most talented workforce possible, in the belief that it is essential to the success of their

<sup>82</sup> See the discussion on pp. 10-23 and graph on p. 14 in “Gender Diversity on the Board of Directors” and on pp. 35-38 and graph on p. 41 in “Gender Diversity on the Executive Management Team.”

<sup>83</sup> See, e.g., the breakdown for technology companies in The Boston Club’s “The 2016 Census of Women Directors and Executive Officers of Massachusetts Public Companies,” study and the Spencer Stuart “U.S. Technology Board Index 2016” report.

<sup>84</sup> See the materials referenced in “Additional Resources” and elsewhere in these footnotes for information and analysis related to, and underlying, these factors.

**Conclusion** *(continued)*

businesses. In 2014, several of the SV 150 and some large private Silicon Valley companies publicly released gender and ethnicity data about their workforces as a way to stimulate discussion and drive change along socio-demographic lines within their organizations.<sup>85</sup> Most of the companies that released data publicly acknowledged that the numbers reveal ample room for improvement,<sup>86</sup> and many of them committed to increasing the number of women and minorities in the workplace. We hope that such data, and the information in this survey, and the many resources to which it refers, will spur and inform additional thought and discussion among the participants and leaders in the Silicon Valley ecosystem on how to create and sustain a more diverse workplace.

In addition to the endeavors internal to companies and initiatives nationally<sup>87</sup> and in California<sup>88</sup> to advance gender and other diversity, there are a number of organizations dedicated to increasing gender diversity in technology and Silicon Valley, including:

- Watermark, a “non-profit membership and development organization” that helps “top executive women accelerate their careers and tap into the power of networking with other top women;”
- Astia Silicon Valley, a “global not-for-profit organization that propels women’s full participation as entrepreneurs and leaders in high-growth businesses, fueling innovation and driving economic growth;”
- Anita Borg Institute for Women and Technology, a non-profit organization that seeks to “increase the impact of women on all aspects of technology, and increase the positive impact of technology on the world’s women;”
- Women 2.0, “a media company at the intersection of women, entrepreneurship and technology” that offers “content, community and conferences for aspiring and current innovators in technology;”
- Sheryl Sandberg’s “Lean In” campaign, a non-profit organization “committed to offering women the ongoing inspiration and support to help them achieve their goals,” that seeks to develop an active and supportive community for women, offers a “library of free online lectures on topics including leadership and communication” and encourages the organization of “small peer groups that meet regularly to learn and share together;”

85 In 2014, in a move toward more transparency, several large Silicon Valley based technology companies released workplace diversity statistics for the first time. Such companies included Apple, Google and HP, which had previously resisted disclosure. Since then, more companies have issued such reports. See “Tech Companies Delay Diversity Reports to Rethink Goals” *Wall Street Journal* (December 2016) and “Why Nike’s Diversity Disclosure Is Just the First Step” *Fortune* (May 2016).

86 See, e.g., “Tech Companies Delay Diversity Reports to Rethink Goals” *Wall Street Journal* (December, 2016).

87 E.g., the National Center for Women & Information Technology, Catalyst and the Thirty Percent Coalition.

88 E.g., the Diverse Director DataSource (3D) commissioned by the California Public Employees’ Retirement System and the California State Teachers’ Retirement System, which offers shareowners, companies and other organizations a resource from which to recruit diverse individuals whose experience, skills and knowledge qualify them to be a candidate for a director’s seat.

**Conclusion** *(continued)*

- The Club, “an organization dedicated to helping women accelerate their leadership journeys by providing an environment that inspires and tools that empower;”
- CodeChix, “a non-profit public benefit organization run by local women developers for local women developers” to “educate, promote and mentor female developers, engineers and students;”
- Girls Who Code, which “was founded with a single mission: to close the gender gap in technology;”
- ChIPs, a non-profit corporation with the mission of “support[ing], educat[ing] and promot[ing] the advancement, development and retention of women in patent- and intellectual property-related fields; and
- Leading Women in Technology, “a non-profit dedicated to unleashing the potential of professionals who advise technology businesses and executives [by connecting] similarly situated women across business organizations and offer[ing] them an opportunity to develop their critical business skills through integrated multi-workshop programs and mentorship.”

## Methodology

### Group Makeup

We collected the gender diversity data presented in this report in connection with our review of the corporate governance practices<sup>89</sup> of the companies included in the Standard & Poor's 100 Index (S&P 100)<sup>90</sup> and the technology and life sciences companies included in the Silicon Valley 150 Index (SV 150).<sup>91</sup> The makeup of the indices has changed over time as determined by their publishers,<sup>92</sup> with the SV 150 makeup being updated generally once annually and the S&P 100 changing more frequently.<sup>93</sup> For analytical purposes, companies are included in the survey if they appeared in the relevant index as determined as of the most recent calendar year-end.<sup>94</sup> Further, in past years, to focus the survey on the industries most relevant to Silicon Valley, companies were excluded from the SV 150 data set for purposes of the survey if they were not

- 89 A copy of the 2016 edition of *Corporate Governance Practices and Trends: A Comparison of Large Public Companies and Silicon Valley Companies*, covering the data through the 2016 proxy season, is being published as a complement to this report and is available at <http://fenwick.com/CorporateGovernance>.
- 90 *Standard & Poor's* has stated that "[t]he S&P 100 consists of 100 companies selected from the S&P 500. To be included, the companies should be among the larger and most established companies in the S&P 500, and must have listed options. Sector balance is considered in the selection of companies for the S&P 100." (*Standard & Poor's* states that "[t]he S&P 500 focuses on the large-cap sector of the market; however, since it includes a significant portion of the total value of the market, it also represents the market; [c]ompanies in the S&P 500 are considered leading companies in leading industries" and that constituents of the S&P 100 are selected for sector balance and represent over 57% of the market capitalization of the S&P 500 and almost 45% of the market capitalization of the U.S. equity markets.)
- 91 In the past, the *San Jose Mercury News* had stated that "[t]he Silicon Valley 150 ranks [public] companies headquartered in Santa Clara, Santa Cruz, southern San Mateo and southern Alameda counties [in California] on the basis of worldwide revenue for the most recent available four quarters ended on or near [the most recent December 31]." However, in recognition of the continued geographic spread of technology and life sciences companies beyond the traditional Silicon Valley area, beginning in the 2012 proxy season, the *San Jose Mercury News* expanded the definition for purposes of the index to "include [the entirety of] the five core Bay Area counties: Santa Clara, San Mateo, San Francisco, Alameda and Contra Costa." (According to local lore, the term "Silicon Valley" was coined in 1971 to describe the concentration of semiconductor companies in what was then the northern portion of Santa Clara County. The term has since expanded to include all technology and life sciences companies and their geographic spread in the region.) For a discussion of the change in geographical area and its history, see "O'Brien: Welcome to the new and expanded Silicon Valley" in the *San Jose Mercury News* (April 22, 2012). The most recent determination of the makeup of the SV 150, based on the revenues of public companies in Silicon Valley for the most recent available four quarters ended on or near December 31, 2015, was announced by the *San Jose Mercury News* in April 2016. That group was used for purposes of the 2016 proxy season in this report. In 2014, the *San Jose Mercury News* made an unpublished correction to the SV 150, following its initial publication, and added Fair Isaac Corporation to the list at number 64. As Fair Isaac Corporation was not included in the original publication of the SV 150, in April 2014, it was similarly excluded from the SV 150 data set analyzed in this report as it discusses the 2014 proxy season. Similar exclusions occurred in some prior years.
- 92 The constituents of the Standard & Poor's 100 (S&P 100) Index are now determined by S&P/Dow Jones Indices LLC (a subsidiary of The McGraw-Hill Companies, Inc. that was originally launched by Standard & Poor's) and the constituents of the Silicon Valley 150 Index (SV 150) are determined by the *San Jose Mercury News* (part of the Bay Area News Group, a MediaNews Group company).
- 93 However, while changes are more frequent, *Standard & Poor's* has noted that "in past years, turnover among stocks in the S&P 100 has been even lower than the turnover in the S&P 500." Given the relative rapidity of acquisitions and the volatility of the technology business, constituent turnover in the SV 150 is somewhat greater than the S&P 100 in terms of the number of companies changing.
- 94 I.e., the Fenwick & West survey for the 2016 proxy season included companies constituent in the S&P 100 as of December 31, 2015, and constituent in the SV 150 as published on April 25, 2016, based on "the most recent available four quarters ended on or near December 31, 2015."

**Methodology** *(continued)*

primarily in the technology or life sciences industries (broadly interpreted).<sup>95</sup> To some degree, the volatility in the statistical trends within each of the indices is a reflection of changes in the constituents of the index over time.<sup>96</sup> Finally, some companies are constituents of both indices.<sup>97</sup> Those companies are included in the data sets of both groups for purposes of this survey.

**Proxy Season / Proxy Statements**

To be included in the data set for a particular “proxy season,” the definitive proxy statement for a company’s annual meeting generally must have been filed by the company with the Securities and Exchange Commission (SEC) during the year ended June 30, irrespective of when the annual meeting was actually held.<sup>98</sup> In some instances, a company may not have consistently filed its annual meeting proxy statement on the same side of the cutoff date each year. In such cases, we have normalized the data by including only one proxy statement per year for a company (and including a proxy statement in a “proxy season” year even though it was filed beyond the normal cutoff).<sup>99</sup> In some instances, a company may not have filed an annual meeting proxy statement during a year at all (or held any annual meeting).<sup>100</sup> In such instances, data was gleaned for that company from other SEC filings to the extent available.<sup>101</sup>

Generally, where a trend graphic identifies a year, it presents information as of the time of the proxy statement (such as the number of directors or whether the company has a woman CEO), in which event the data speaks as to circumstances in effect at the time of the proxy statement (rather than at some particular

95 E.g., for the 2011 proxy season, the following companies were excluded from the SV 150 data set for purpose of the survey (in order of rank within the index): Franklin Resources (14), Con-Way (17), Robert Half (25), Granite Construction (38), West Marine (66), California Water (74), Essex Property (79), SJW (105), Financial Engines (138), Coast Distribution (141) and Mission West (142). However, beginning with the 2012 proxy season, the *San Jose Mercury News* removed all of the non-technology/life sciences companies from the SV 150 and created a parallel Bay Area 25 (BA 25) index made up of the 25 largest such companies ranked by revenue. While not presented in this report, Fenwick does collect and analyze the same set of data for the BA 25 (and companies that we excluded from the SV 150 for purposes of this survey prior to the 2012 proxy season), which can be obtained by consulting your Fenwick & West Securities Partner. In addition, companies are not included in the data set (on a subject-by-subject basis) if information is not available because no SEC filing with the relevant data was made (generally as a result of acquisition). For example, in the 2015 proxy season, one such company was not included in the SV 150 data set for all subjects. Similar exclusions occurred in prior years.

96 Other factors include changes in board membership and turnover in the chief executive officer of constituent companies.

97 For example, for the 2016 proxy season, the following companies were included in each of the S&P 100 and the SV 150 (in order of rank within the SV 150 index): Apple (1), Alphabet (2), Intel (3), Cisco (6), Oracle (7), Gilead (8), Facebook (9), PayPal Holdings (12).

98 I.e., the proxy statements included in the 2016 proxy season survey were generally filed with the SEC from July 1, 2015 through June 30, 2016.

99 E.g., several companies generally filed proxy statements in June each year, but in a particular year filed in July (or later). The data for such a proxy statement was “moved” into the data set for the “proxy season” year before the cutoff.

100 This can occur for a variety of reasons, including among others instances where: (a) a company could fail to timely file its periodic reports due to a pending or potential accounting restatement (such as during the so-called “stock option backdating scandals” that afflicted several Silicon Valley companies), or (b) a company was acquired or had agreed to be acquired (and determined to defer an annual meeting during the pendency of the acquisition).

101 Generally Forms 10-K or S-4 and Schedules 14D-9 or TO as well as proxy statements for mergers (Schedules 14A) when the company is in the process of being acquired. These sources generally provide only a subset of the data available in an annual meeting proxy statement (Schedule 14A). Sometimes these filings were made beyond the standard cutoff for the relevant proxy season for purposes of the survey, but were nonetheless included in the survey data set for that proxy season if they generally presented data for the period that would have been covered by the proxy statement for that company if it had been filed.

**Methodology** *(continued)*

time during the preceding year or immediately following the annual meeting) and is presented by “proxy season” (as defined for purposes of the survey). Generally, any discussion of the data will be by “proxy season” and will be shown in graphics with a “2014” statistic representing the most recent “proxy season” (and so on for each preceding proxy season shown).

**Nominating and Governance Committees / Other Standing Committees**

Generally, the companies surveyed have a unified committee with responsibility for both nominating and governance functions. However, a small number of companies have separate committees for nominating functions and for governance functions.<sup>102</sup> For statistical purposes, where separate committees existed, the data for the nominating committee was included (and data for the governance committee ignored) for the information presented in this report. Such separate governance committees were also ignored for purposes of the statistics for “Other Standing Committees” included in this report. Similarly, an exceedingly small number of companies have had a committee that combined the nominating function with the function of one of the other primary committees in a single committee.<sup>103</sup> In such rare instances, the data for that committee was included in the data set for each of the primary committees it comprised.<sup>104</sup> In addition, some companies have not formed a nominating committee,<sup>105</sup> and instead nomination decisions are made by the independent directors as a group.<sup>106</sup> In such instances, our statistics have treated that group as the nominating committee. Further, with respect to the statistics regarding “Other Standing Committees” included in this report, we have disregarded “Stock Option,” “Equity Incentive” and other committees whose sole (or almost exclusive) function is to approve grants to non-executive employees and consultants of the company.<sup>107</sup>

**Executive Officers (and NEOs)**

SEC regulations define the term “executive officer” as a company’s “president, any vice president of the [company] in charge of a principal business unit, division or function (such as sales, administration or finance), any other officer who performs a policy making function, or any other person who performs similar policy making functions for the [company].”<sup>108</sup> A company’s determination of executive officers under this

<sup>102</sup> While always rare, it has become increasingly less common over time.

<sup>103</sup> Such as a unified “Compensation and Corporate Governance Committee” that the proxy statement described as having nominating functions.

<sup>104</sup> E.g., data for a unified “Compensation and Corporate Governance Committee” that the proxy statement described as having nominating functions was included in the data for the Compensation Committee and the Nominating Committee with respect to that company.

<sup>105</sup> This was considerably more common, particularly in the SV 150, prior to the wave of governance reforms in the wake of the Sarbanes-Oxley Act of 2002.

<sup>106</sup> In some instances, particularly before the wave of governance reforms in the wake of the Sarbanes-Oxley Act of 2002, the nominating decisions were made by the board as a whole.

<sup>107</sup> These “committees” generally consist of the CEO as the sole member or are made up of members of the company’s management team operating with delegated authority in order to relieve the board of the burden of routine grants of stock-based compensation. Consequently, they are not really indicative of general board operations.

<sup>108</sup> See Rule 3b-7 under the Securities Exchange Act of 1934, as amended. The rule goes on to provide that “[e]xecutive officers of subsidiaries [of a company] may be deemed executive officers of the [parent company] if they perform such policy making functions for the [parent company].”

**Methodology** *(continued)*

definition is an inherently factual one, with the focus less on a person’s title and more on their actual duties or substantive role within the company. The SEC staff will not provide advice or concurrence regarding a determination. So companies, with the advice of their counsel, must apply the facts, judicial decisions and various statements by the SEC staff when applying the rule.<sup>109</sup> We have not tried to second-guess these inherently subjective conclusions, and have simply accepted the executive officer determinations made by companies and/or their boards as reflected in their SEC filings.<sup>110</sup> It is possible that the number of executive officers is effectively systematically under-reported due to the timing of executive departures.<sup>111</sup>

In addition to the requirement to identify and provide the limited biographical information regarding their executive officers referenced in “Gender Diversity on the Executive Management Team,” companies that are going public are also required to provide similar disclosure regarding employees “such as production managers, sales managers, or research scientists who are not executive officers but who make or are expected to make significant contributions to the business of the [company].”<sup>112</sup> While not required, some companies continue the practice of listing “key employees” in their periodic public filings.<sup>113</sup> Where such information is provided, while not included for purposes of the statistical information for “executive officers” and any related analysis, the information regarding “key employees” was used for statistics and the related analysis to the extent it covered particular positions.<sup>114</sup>

While the definition of “executive officer” has been constant for many years (albeit with the subjective judgments and other factors discussed above), the definition of “named executive officers,” in addition to being more complex, has changed over time (both directly and indirectly in the form of changes to the way total compensation is calculated).<sup>115</sup> In its current form, the definition includes the company’s

<sup>109</sup> As noted in “Study: Benchmarking the Number of ‘Executive Officers’ by TheCorporateCounsel.net and LogixData, “[i]n particular, determining whether a business unit, division or function is a ‘principal’ one — or whether a person’s sphere of responsibility involves significant policymaking — can be challenging. Internal company politics can play a role too. Sometimes people are deemed to be ‘executive officers’ even though they really do not have important functions or policymaking responsibilities, but are deemed as such because the company doesn’t want to tell them that their stature isn’t equal to others at the same level on the organization chart, etc.” Companies and their advisers often use as a starting point in this analysis an informal rule of thumb that any officer that reports directly to the CEO (or sometimes president) should be presumed to be an executive officer, absent meaningful substantive indicia to the contrary.

<sup>110</sup> As a practical matter, the judgment of who is an executive officer is made annually by the board of directors of most companies at the time the board approves the list of executive officers in connection with the filing of their Forms 10-K (or proxy statement).

<sup>111</sup> For example, if an executive officer resigns shortly prior to the filing of the company’s proxy statement and the company has not yet hired a replacement (even though it intends to do so — and for most of the years preceding and succeeding the filing in fact has a person filling the position of the departed executive), then that company may list one fewer executive officer in its proxy statement than it generally has in practice.

<sup>112</sup> The specific requirement is in Item 401(c) of Regulation S-K.

<sup>113</sup> Inclusion as a “key employee” in an IPO prospectus or in subsequent public filings may be for internal political reasons such as those described in footnote 109.

<sup>114</sup> I.e., when providing data regarding gender diversity among CEOs, CFOs, GCs, top sales executives, etc.

<sup>115</sup> The current definition is in [Item 402\(a\)\(3\) of Regulation S-K](#), which goes on to provide detailed instructions regarding how the determination of “most highly compensated” is made (which are further elaborated in a number of [Compliance and Disclosure Interpretations](#) and other guidance from the SEC staff).

*Methodology (continued)*

principal executive officer (generally CEO), principal financial officer (generally CFO) and three most highly compensated executive officers other than those specified individuals.<sup>116</sup> However, for many years prior to 2007,<sup>117</sup> the definition did not require the inclusion of the CFO (rather, it required the CEO and the four most highly compensated executive officers other than the CEO). In addition, at that same time, the definition of compensation used to determine the most highly compensated executive officers was changed from simply aggregating the base salary and bonus of an officer to also including the accounting charge recorded with respect to outstanding stock-based compensation for the year for that officer, any non-equity plan compensation and the value of a bucket of “all other compensation.”<sup>118</sup> Further, in early 2009, the definition of total compensation was again revised to require inclusion of the aggregate grant date accounting fair value for stock awards, even if subject to vesting requirements (rather than just the amount recorded as an expense for accounting purposes in the year being reported — which had the effect of taking into account such vesting requirements).<sup>119</sup> We did not attempt to adjust the data in any way for these changes, which to a degree limits comparability across the proxy seasons covered in this report (and leads to some discrepancy within proxy seasons, as the different companies followed different rules depending on timing of proxy filing within the season for those seasons in which a rule transition occurred).<sup>120</sup>

In this survey, we have presented data for a number of specific executive officer positions (CEO, CFO, etc.). In a number of instances across the period of the survey, companies have combined two or more of the executive officer positions.<sup>121</sup> Except where noted,<sup>122</sup> we have counted an executive serving in multiple roles in the data for each of the positions presented separately.<sup>123</sup> The determination of roles is almost always based simply on the titles of the executive officers (and in a few cases, key employees) listed in the

116 In a small number of cases, the SV 150 has included companies that qualify as “smaller reporting companies” or, recently, as “emerging growth companies” (EGCs were introduced as part of the JOBS Act, effectively beginning with IPOs on or after December 9, 2011), and consequently are only required to include a company’s CEO and two next most highly compensated executive officers (as well as any other person that served as CEO during the fiscal year and up to two additional individuals for whom disclosure would have been provided as one of the most highly compensated officers but for the fact that the individual did not happen to still be serving as an executive officer at the end of the fiscal year). See Regulation S-K, Item 402(m)(2). This may exacerbate the potential skewing of NEO membership discussed in “Gender Diversity on the Executive Management Team—‘Named Executive Officers’” discussed on pp. 43–44 and footnotes 65 and 66.

117 Technically the requirement started very late in 2006, but effectively for most companies in the 2007 proxy season. See SEC Release No. 33-8732A and SEC Release No. 33-8765.

118 This bucket includes, among other things, any perks (that exceed \$10,000 in value), tax “gross-ups” or reimbursements, stock discounts, amounts contributed by the company to defined compensation plans, life insurance premiums paid by the company and dividends on stock awards. See Item 402(c)(2)(ix) of Regulation S-K.

119 See SEC Release No. 33-9089, which reversed the wisdom of SEC Release No. 33-8765 (which had required only inclusion of the “proportionate amount of an award’s total fair value that is recognized in the company’s financial statements for the fiscal year”).

120 The impact of the idiosyncrasies in the rules for determining “most highly compensated” executive officers discussed in “Gender Diversity on the Executive Management Team—‘Named Executive Officers’”, which can cause swings in NEO membership within a company from year to year, even where there has been neither a change in the management team nor a material change in their compensation, could also affect comparability across periods.

121 E.g., “General Counsel and Senior Vice President, Corporate Development.”

122 I.e., for the president/top operations executive and the top marketing executive.

123 E.g., a “General Counsel and Senior Vice President, Corporate Development” has been counted in the numerator (if female) and/or the denominator for statistics related to general counsels and to corporate/business development executives.



**Methodology** *(continued)*

applicable SEC filings,<sup>124</sup> and a general understanding of the roles such titles encompass. Naturally, there is a degree of judgment involved in these determinations, and views may differ. It is certainly possible that our determinations are at variance from the actual roles performed by particular executive officers.

**Gender**

In almost all cases, the proxy statement or other SEC filings of a company clearly identify the gender of each of its executive officers and directors.<sup>125</sup> In a small number of instances, we resorted to limited supplemental research (apart from reviewing SEC filings) to identify gender. This supplemental research generally took the form of researching a relevant individual on freely available public sources.<sup>126</sup> We accepted the gender identifications in SEC filings or such supplemental sources at face value.

**Fenwick Gender Diversity Score™**

In 2014, we created the Fenwick Gender Diversity Score™ as a way to assess the overall picture of gender diversity at the companies in the S&P 100, SV 150 and top 15 of the SV 150 over the 21 years surveyed. The baseline score for each index was created by adding the percentage of companies with at least one woman on the board to the percentage of companies with at least one woman on the executive management team to the average percentage of women on boards and the average percentage of women on executive management teams. Additional points were given for the leadership positions held by women. We also counted board chairs, primary committee chairs (in the aggregate), CEOs, CFOs and NEOs.<sup>127</sup>

To create the numerical score, full point value was given to the baseline categories (i.e., if 50% of companies had women on the executive management team in a given year, then 50 points would be scored). The individual positions of board chair, CEO and CFO were given a 25% value (i.e., if 3% of CEOs were women in a given year, then 0.75 points would be scored) because these positions paint a relatively limited picture of diversity by virtue of the fact that so few of them are available. The percentage of primary committee chairs was given a 33% value because of the slightly increased number of available positions (generally three possible positions on a board), and the percentage of NEOs was given a 50% value because on average S&P 100 and SV 150 companies have had five or more NEOs over the period surveyed.

<sup>124</sup> In a very small number of cases, companies have included some description of the roles of executive officers beyond simply stating the titles (e.g., in the brief biography of each executive presented in the filing).

<sup>125</sup> Most typically these involved instances in which the prefix “Dr.” was consistently used (and the prefix “Mr.” or “Ms.” was not).

<sup>126</sup> I.e., the bio for such individual on the relevant company’s web page or the web pages of other companies for which the individual serves as an executive officer or director, LinkedIn profiles, biographical profiles prepared by reputable online sources, etc.

<sup>127</sup> For purposes of scoring, we only used positions for which more than half of the companies in each index had data points over the period surveyed. For example, in most years, only a small percentage of companies in each group identified a senior marketing executive, such as a CMO. Consequently that position is not included in the score.

## Additional Resources

In addition to the many resources referenced or cited in the footnotes to this report, which contain a wealth of information and analysis on the subject of gender diversity (as well as other traditional aspects of diversity), the following resources may be helpful to anyone interested in the subject of gender diversity in Silicon Valley (and in the technology and life sciences industries):

### Technology Industry

[Silicon Valley Workplace Diversity Reports](#)

“Tech Companies Delay Diversity Reports to Rethink Goals” *Wall Street Journal* (December 2016)

“Why Nike’s Diversity Disclosure Is Just the First Step” *Fortune* (May 2016)

[Women in IT: The Facts](#) by the National Center for Women & Information Technology (NCWIT) (March 10, 2016)

[NCWIT Scorecard: A Report on the Status of Women in Information Technology](#) (April 18, 2014)

“How many H-1B workers are female? U.S. won’t say” by Sharon Machlis and Patrick Thibodeau in *Computer World* (April 1, 2016)

[U.S. Technology Board Index 2016](#) report by Spencer Stuart, December 2016

[Women Technologists Count: Recommendations and Best Practices to Retain Women in Computing](#) by the Anita Borg Institute for Women and Technology (September 24, 2013)

“The Truth About Marissa Mayer: An Unauthorized Biography” by Nicholas Carlson in *Business Insider* (August 24, 2013)

“Report: 60 Percent of Tech Jobs Created This Year Filled by Women” by Levi Sumagaysay in *SiliconBeat* (November 12, 2013)

### Education

[Girls in IT: The Facts](#) by the NCWIT (November 30, 2012)

“What’s Holding Back Women in Tech?” by Lindsay Gellman and Georgia Wells, *Wall Street Journal*, March 22, 2016

“Why We Need More Women In Computer Science,” by Terri Williams, *Her Magazine* (January 25, 2017)

[Women in STEM](#), ScienceNewsforStudents.org

“Women falling behind in STEM bachelor’s degrees,” by Catherine Rampell, *Washington Post* (January 27, 2015)

**Additional Resources** *(continued)*

[“Educators, Tech Industry Leaders Collaborate to Develop K-12 Computer Science Framework,”](#) by Antoinette Siu, EdSurge News (October 19, 2016)

[“The Women’s Leadership Gap”](#) by Judith Warner, Center for American Progress (August 4, 2015)

[Basics: Mystery of the Missing Women in Science](#) by Natalie Angier in *The New York Times* (September 2, 2013)

[“Out of the Loop in Silicon Valley”](#) by Claire Cain Miller in *The New York Times* (April 17, 2010)

[“Fewer Women Are Choosing College Business Programs”](#) by Erin Zlomek in *Bloomberg BusinessWeek* (March 22, 2013)

[Women’s Share of MBAs Earned in the U.S.](#) by Catalyst (July 8, 2014)

**Business schools that feed into Silicon Valley:**

[Stanford University Graduate School of Business: School Profile](#)

[University of California, Berkeley Haas School of Business: Class Profile](#)

[Harvard Business School: Class Profile](#)

[UC Davis Graduate School of Management: Class Profile](#) [Santa Clara University Leavy School of Business](#)

[“Opting Out among Women with Elite Education”](#) by Joni Hersch in *Review of Economics of the Household* (April 24, 2013)

[Quick Take: Women in Law in Canada and the U.S.](#) by Catalyst (2015)

**Law schools that feed into Silicon Valley:**

[Stanford Law School: 2013-2014 Enrollment Profile](#)

[University of California Berkeley School of Law: Profile for Class of 2019](#)

[Harvard Law School: Profile for Class of 2019](#)

[UC Davis School of Law: Student Body Profile](#)

[UC Hastings College of the Law: Profile for Class of 2017](#)

[Santa Clara University School of Law: 2016 Class Profile](#)

Additional Resources *(continued)***Venture Capital and Entrepreneurship**

“The first comprehensive study on women in venture capital and their impact on female founders” by Gene Teare, Ned Desmond, TechCrunch (April 19, 2016)

“Silicon Valley’s Diversity Fail Includes White-Male Dominated VCs (And It’s Killing Women And Minority Startups)” by Salvador Rodriguez, *International Business Times*, August 4, 2015

NVCA-Deloitte Human Capital Survey: A New Approach to Diversity & Inclusion Research by the National Venture Capital Association and Deloitte

“Venture Capital Still Has a Big Problem With Women” by Dan Primack in *Fortune* (April 1, 2016)

“Angels Change The Ratio For Women Entrepreneurs” by Geri Stengel in *Forbes* (May 27, 2015)

UNH Center for Venture Research: Angel Investor Market in 2015 a Buyer’s Market by the University of New Hampshire Center for Venture Research

“The first comprehensive study on women in venture capital and their impact on female founders” by Gene Teare and Ned Desmond, TechCrunch (April 19, 2016)

“Do Women Take as Many Risks as Men?” by Doug Sundheim in *Harvard Business Review’s* HBR Blog Network (February 27, 2013)

“Are Women Really More Risk-Averse than Men?” a working paper by Julie A. Nelson of Tufts University (September 2012)

**Service Providers**

Women In Canadian, US, And Global Financial Services by Catalyst (December 2, 2015)

“Women in Investment Banking: Why Such A Big I-banking Gender Gap?” by Susan Lyon (December 26, 2015)

Quick Take: Women in Accounting by Catalyst (2016)

The American Lawyer’s 2016 Diversity Scorecard: The Rankings

Diversity rankings for law firms are also published by The American Lawyer and Vault. See also The NALP Directory of Legal Employers, which allows you to search for demographic data on law firms, including major Silicon Valley firms.

**Additional Resources** *(continued)*

“Survey Finds High-Level Women In-House Lawyers Paid Less” by Rebekah Mintzer in *Corporate Counsel* (September 9, 2013), which references the 2013 Law Department Compensation Benchmarking Survey sold by ALM Legal Intelligence, which reported that female GCs make approximately 80% of the total cash compensation of male GCs, with smaller bonuses accounting for a large part of the disparity

Report of the Eighth Annual NAWL National Survey on Retention and Promotion of Women in Law Firms by The National Association of Women Lawyers and The NAWL Foundation (October 27, 2015)

**Large Companies**

UC Davis Graduate School of Management 2015-16 study by the University of California, Davis Graduate School of Management

2016 Census of Women Directors and Executive Officers of Massachusetts Public Companies — Unfinished Business by The Boston Club

Examining the Cracks in the Ceiling: A Survey of Corporate Diversity Practices of the S&P 100 by Calvert Investments (March 2015)

Credit Suisse Research Institute Releases the CS Gender 3000: The Reward for Change Report Analyzing the impact of Female Representation in Boardrooms and Senior Management (September 2016)

“Women On Corporate Boards Globally” Catalyst (January 2017)

## About the Firm

Fenwick & West provides comprehensive legal services to technology and life sciences clients of national and international prominence. Fenwick is committed to providing innovative, cost-effective and practical legal services that focus on global technology industries and issues. We have built internationally recognized practices in a wide spectrum of corporate, intellectual property, tax and litigation areas. We have also received praise for our innovative use of technology, our pro bono work and our diversity efforts. We differentiate ourselves by having a deep understanding of our clients' technologies, industry environments and business needs. For more information, visit [www.fenwick.com](http://www.fenwick.com).

From our founding in 1972, diversity and inclusion have been core components of our culture, and we commit significant resources toward improving our efforts at the firm across all levels.

The firm actively recruits diverse attorneys—race, gender, sexual orientation, physical ability, geographic/cultural background—through numerous channels, including on-campus initiatives and minority bar associations and job fairs. We believe that respect for and acknowledgment of others' backgrounds fosters cooperation, creativity and mutual understanding and helps us serve our clients better.

Fenwick has implemented a number of diversity and inclusion initiatives, including:

- **Diversity and Inclusion Committee:** To refine existing diversity programs as well as plan and implement innovative new diversity and inclusion initiatives.
- **Women's Leadership Initiative:** Focused on building the leadership, management and business development skills of our women attorneys.
- **Diversity and Inclusion Leadership Initiative:** Partners commit to fulfilling a variety of diversity-promoting action items throughout the year.
- **Bar Association Activities:** To promote the advancement of diversity and inclusion initiatives in the broader legal community; Fenwick attorneys chair key diversity and inclusion committees.
- **Affinity Groups:** Informal attorney groups centered on common interests and backgrounds to create a more comfortable and inclusive environment.
- **Attorney Recruiting Initiative:** A commitment to maintain strong representation of diverse attorneys in Fenwick's summer program as well as participation in minority job fairs and interfacing with diverse law student groups.
- **OnRamp Fellowship:** Fenwick is a participant in the OnRamp Fellowship, an innovative program launched in January 2014 to provide women lawyers re-entering the legal profession with an opportunity to update their skills and legal contacts through one-year, paid positions with top law firms. The program aims to replenish the talent pipeline in law firms with diverse, high-performing

**About the Firm** *(continued)*

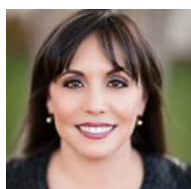
lawyers who have the potential and the desire to advance into leadership roles. Through the OnRamp Fellowship, Fenwick will hire women with three or more years of legal experience who have taken a hiatus of two or more years from practice.

Fenwick has repeatedly ranked in the top 15 most diverse U.S. law firms in *The American Lawyer's 2016 Diversity Scorecard*.

## About the Authors



David A. Bell's practice includes advising startup companies, venture capital financings, mergers and acquisitions, initial public offerings and intellectual property licensing, as well as counseling public companies in corporate, securities, governance and compliance matters. He represents a wide range of technology companies, from privately held startups to publicly traded corporations.



Kristine M. Di Bacco represents emerging technology companies primarily in the consumer Internet, e-commerce, FinTech, digital health, consumer hardware and software sectors. Her practice includes a broad range of corporate transactional matters, including the formation of new startup companies, venture capital financings, mergers & acquisitions and public offerings. Kristine also represents and advises leading incubators, angel investors and venture capitalists investing in technology companies.

We thank the myriad associates and other researchers who have participated in gathering survey data over the years, as well as the information graphics and design specialists who have assisted in the preparation of this report.

*The views expressed are those of the author and do not necessarily represent the views of any other partner of Fenwick & West LLP or the firm as a whole, nor do they necessarily represent the views of the firm's many clients that are mentioned in this report or are constituents of either the SV 150 or the S&P 100 indices.*

For additional information about this report, please contact Kristine M. Di Bacco at Fenwick & West at 917.580.3255 or [kdibacco@fenwick.com](mailto:kdibacco@fenwick.com).

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