BOARD REFRESHMENT TRENDS at S&P 1500 Firms
The analysis, opinions and perspectives herein are the sole responsibility of the author. The copyright for this report is held by the IRRC Institute. The material in this report may be reproduced and distributed without advanced permission, but only if attributed. If reproduced substantially or entirely, it should include all copyright and trademark notices.

© Copyright 2017, Investor Responsibility Research Center Institute (IRRCi)

For more information, please contact:

Jon Lukomnik, Executive Director
Investor Responsibility Research Center Institute (IRRCi)
T: (+1) 646-512-5807
info@irrcinstitute.org
www.irrcinstitute.org

About IRRCi
The Investor Responsibility Research Center Institute is a not-for-profit organization headquartered in New York, NY, that provides thought leadership at the intersection of corporate responsibility and the informational needs of investors. More information is available at www.irrcinstitute.org

Patrick McGurn
Special Counsel and Head of Strategic Research and Studies
Institutional Shareholder Services (ISS)
patrick.mcgurn@issgovernance.com

About ISS
Founded in 1985 as Institutional Shareholder Services Inc., ISS is the world’s leading provider of corporate governance and responsible investment solutions for asset owners, asset managers, hedge funds, and asset service providers. ISS’ solutions include: objective governance research and recommendations; SRI data, analytics, and research; end-to-end proxy voting and distribution solutions; turnkey securities class-action claims management (provided by Securities Class Action Services, LLC); and reliable global governance data and modeling tools. Clients rely on ISS’ expertise to help them make informed corporate governance decisions. For more information, please visit www.issgovernance.com

ISS would like to thank the following individuals for their support and contributions: Patrick McGurn, Rob Yates, Sean Quinn, and Kiko Sanchez. And special thanks to Edward Kamonjoh for his tireless efforts to collect and analyze the data contained in this report during his tenure at ISS.
## Contents

INTRODUCTION ........................................................................................................................................... 4

KEY FINDINGS ............................................................................................................................................ 6
  Part I: Boardroom Demographics and Refreshment ............................................................................... 6
  Part II: Assessing Board Refreshment Tools ......................................................................................... 11
  Part III: Governance Practices That Impact Board Refreshment ....................................................... 14

PART I: BOARDROOM DEMOGRAPHICS ................................................................................................. 17
  Average Boardroom Tenure .................................................................................................................. 17
  Median Tenure ..................................................................................................................................... 19
  Average Boardroom Age ..................................................................................................................... 22
  Median Age ......................................................................................................................................... 24
  Boardroom Age Distributions ............................................................................................................. 27
  Distribution of Tenures ......................................................................................................................... 32
  Refreshment Rate ................................................................................................................................. 35
  New Nominee Demographics .............................................................................................................. 41
  Gender Diversity ................................................................................................................................. 45
  Ethnic/Racial Diversity ......................................................................................................................... 52

PART II: ASSESSING BOARD REFRESHMENT TOOLS ........................................................................... 62
  Mandatory Retirement Age Policies .................................................................................................... 62
  Tenure Limit Policies .......................................................................................................................... 70
  Board Evaluation Policies .................................................................................................................... 76

PART III: OTHER GOVERNANCE FACTORS IMPACTING BOARD REFRESHMENT ................................. 87
  Audit Committees................................................................................................................................. 87
  Compensation Committees .................................................................................................................. 92
  Nominating Committees ..................................................................................................................... 98
  Board Independence ............................................................................................................................ 114
  Board Size ........................................................................................................................................ 133
Introduction

“Refreshment” is among the most hotly-debated topics across U.S. boardrooms and within the broader corporate governance community. While shareholders, directors, and other market constituents vary as to the reasons for their refreshment concerns, they typically include snail-paced board turnover, sky-rocketing tenures, stagnant skillsets and deficient diversity.

Investor respondents to ISS’ 2016-2017 Global Policy Survey (conducted between Aug. 2, 2016 and Aug. 30, 2016) were asked which tenure-related factors—with multiple answers allowed—would give rise to concern about a board's nominating and refreshment processes. Among the 120 institutional investors (one-third of whom each own or manage assets in excess of $100 billion) who responded, 68 percent pointed to a high proportion of directors with long tenure as cause for concern, 53 percent identified an absence of newly-appointed independent directors in recent years as a potential problem, and 51 percent flagged lengthy average tenure as problematic. Just 11 percent of the investor respondents said that tenure is not a concern, although even several of those respondents indicated that an absence of newly-appointed directors is a concern. In their comments, several investors identified other factors of concern, such as directors' ages, a high overlap between the tenure of the CEO and the tenure of the non-executive directors, and lengthy average tenure coupled with underperformance.

Suggested remedies vary as well. Some investors and board members urge wider use of “forced exit” mechanisms such as mandatory retirement ages or term limits. Other boardroom observers seek process improvements such as board/director evaluations, continuous boardroom succession planning and enhanced disclosure of these procedures.

A growing number of investors have begun to take refreshment matters into their own hands. Some shareholders routinely oppose the reelection of long-tenured directors to encourage turnover and fresh blood. Importing a practice from the U.K. and other global markets, other investors threaten to slap “affiliated” (non-independent) labels on long-tenured board members in hopes of spurring boardroom succession. While long tenure, by itself, is typically not enough to sway an election result, it can create a tipping point in contested elections. Notably, hedge funds increasingly seek to tap into investors’ angst over refreshment by targeting long-serving board members.

Diversity has become a lightning rod with respect to refreshment. Activists target low-diversity boards with shareholder resolutions and letter-writing campaigns. Disenchanted with the slow pace of progress, some players even urge market regulators to follow the lead of some of their global counterparts by using quotas and other best practice rules (including enhanced disclosure of nominating procedures) to speed up changes in boardroom composition.
Largely missing from this debate is hard data on: (1) the scope of the perceived problem, (2) the most effective methods for promoting board refreshment and (3) the benefits and possible side-effects of adopting them.

To close this data gap, IRRCi asked ISS to benchmark director demographics and existing refreshment mechanisms. Specifically, ISS set out to provide answers to some nagging questions such as:

- What is the state of board refreshment at U.S. firms?
- Do long board tenures and rising director ages inhibit boardroom turnover?
- What impact is the aging of the director population having on boardroom renewal rates?
- Do “forced exit” mechanisms or boardroom/director evaluations offer a solution to the refreshment riddle?
- Do positive governance trends—such as maintaining high levels of board independence and the migration of board oversight to key boardroom committee—encourage longer tenures and higher director ages?

This study examines the aforementioned boardroom attributes for firms in the S&P 1500 Composite Index as of January 1, 2016, and includes director data for index constituents with annual general meeting (AGM) dates through to October 12, 2016. When relevant, the data is stratified into three market cap segments: S&P 500 (large-cap), S&P 400 (middle market) and S&P 600 (small-cap).

The data and analysis is divided into three sections:

<table>
<thead>
<tr>
<th>Part I</th>
<th>Part II</th>
<th>Part III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examines demographic trends in the boardroom, including tenure, age, gender and ethnicity/race.</td>
<td>Offers evidence of the impact of the three most common refreshment tools—retirement ages, term limits, and boardroom evaluations—on refreshment.</td>
<td>Drills down into some structural issues—director independence, the growing importance of committees and board size shifts—that appear to have a significant impact on board refreshment rates.</td>
</tr>
</tbody>
</table>

Certain data were not available for a limited set of closely held firms that do not file a Form DEF 14A (proxy statement) or equivalent filings with the U.S. Securities and Exchange Commission (SEC) at all or in a consistent fashion.
Tenure Trends Reversing... And May Reverse Again: Investors’ concern—warranted or not—over rising director/board tenure is based in reality. Average boardroom tenure steadily rose from 8.4 years in 2008 to a peak of nine years in 2013 before slowly reversing course from 2014 to 2016 (YTD). As a result, average director tenure at S&P 1500 firms now stands at a level—8.7 years—last recorded in 2010. Moving in a similar pattern, median board tenure across all S&P 1500 directorships rose from six years to seven years in 2009, but has remained steady from...
2010 to 2016. Absent intervention by boards, however, structural issues—especially rising mandatory retirement ages—could cause average and median tenures to climb again in a few years.

- **Gender Tenure Gap Opens**: An influx of new female board members in recent years has created a sizable gender tenure gap—relative to both male directors and minority directors (regardless of gender). Male directors currently have average tenures (9.2 years, down from a high of 9.3 years during the 2013-2015 time period) that run nearly three years longer than the average service period (6.4 years) for women directors. Notably, the average tenure for women directors in 2016 is identical to the level recorded in 2008. The median tenure for male directors at study companies jumped by two years—from six years to eight years—over the study period, although it has remained constant since 2013. Meanwhile, the median tenure for female directors initially moved up by one year (from five years in 2008 to six years in 2010), but fell back to its starting point by 2015 and hit a study-period low of four years in 2016.

**Director Age**

- **Greying of Boards Has Slowed**: The typical director serving on the board at an S&P 1500 firm is 62.5 years old, which is the age high watermark for the 2008-2016 (YTD) study period. While the average age jumped by two years (from 60.5 years in 2008) over the study period, it held steady from 2015 to 2016. Meanwhile, the median age of directors on boards at S&P 1500 firms is 63 years. Between 2008 and 2012, the median age jumped by two years (from 61 years in 2008). The median age has held steady since that time. This slowdown in the board aging process, which is consistent with leveling off of average and median board tenure in recent years, appears to reflect the recent surge in refreshment.

- **Gender Age Gap Widens**: An average three year-plus age gender gap separates the typical male director (63.1 years old) on S&P 1500 boards from his female boardroom peers (59.8 years old). The median gender gap is four years—64 years for male directors versus 60 years for female board members.

**Distribution of Ages**

- **Older Directors Claim More Board Seats**: Directors who are in their seventies and eighties were the only age groups to claim bigger slices of the S&P 1500 boardroom seat pie over the 2008-2016 (YTD) time period. The share of all S&P 1500 directorships held by 70-something board members rose from 11.7 percent in 2008 to 18.6 percent in 2016 (YTD). The board seat tally for directors aged 80 or older steadily inched upward, though admittedly from a small base—from 1.2 percent in 2008 to 1.8 percent in 2016. These two age classes combine to fill 20.4 percent of all S&P 1500 board seats in 2016, the highest level recorded over the entire study period. Meanwhile, the total board seats held by individuals who are under 50 years old steadily dropped from 10.8 percent in 2008 to 6.1 percent in 2016.

- **Bulk of Board Seats Occupied by Directors in Their 50s and 60s**: Despite the shifts at both ends of the boardroom age brackets, individuals in their 50s and 60s continue to fill the lion’s share
(73.6 percent) of board seats at S&P 1500 companies. While both groups have ceded some space around the typical boardroom table to older directors over the study period, they remain the two biggest age group constituents in boardrooms.

Generational Shift Occurs in Boardrooms: The 2008-2016 study period coincides with a demographic boardroom shift from directors who are members of the so-called “silent generation” (born from roughly 1925 to 1945) to “baby boomer” board members (born from 1946 to 1964). At the beginning of the survey period in 2008, the oldest boomer directors were 62 years old and their sixty- and seventy-something silent generation boardroom peers still held the lion’s share of board seats. While silent generation directors (aged 71 to 91 in 2016) have not gone quietly into the boardroom night thanks to rising retirement ages and U.S. investors tacit acceptance of double-digit tenures, they now hold fewer than 20 percent of total board seats at index firms. By 2016, the oldest boomers had hit 70 years of age and the youngest of them, at 52, will soon reach their professional primes in the corporate and investment realms. As most remaining silent generation directors leave boards over the next few years, boomers will establish virtual demographic hegemony over boardrooms at S&P 1500 firms. Notably, the oldest Generation X nominees (born between roughly 1965 and 1979) turned 51 years old in 2016 and their fellow baby busters will not hit their boardroom prime until after 2025. Absent revolutionary changes in nominating practices, millennials (born from roughly 1980 to 1995) will continue to have little more than token status in corporate boardrooms over the next two decades.

Renewal and Retention Rates

Bumper Crops of “New” Directors in Recent Years: Contrary to common wisdom, no shortage of “fresh blood” exists in the overall S&P 1500 directorship pool. The pace of adding “new” directors (defined as individuals with “0 years” of board service) to S&P 1500 boards accelerated in the latter half of the 2008-2016 (YTD) time period as the external focus—from investors and the media—on “refreshment” grew. The “renewal rate” nearly doubled over the 2008-2016 study period. “New” nominees claimed less than six percent of total directorships prior to 2012, but their prevalence steadily rose over the remainder of the study period. By 2016, almost one out of every ten directors (9.5 percent) serving on S&P 1500 boards is “new.”

Fewer Boards Stand Pat: In 2015, for the first time since 2008 (and perhaps ever), more than one-half of the companies in the S&P 1500 added one or more “new” directors to their boards. For the first half of the study period, two-thirds or more of the companies in the index added no new members in any given year. From 2012 to the present, however, the prevalence of such “zero change” boards has steadily dropped.

Power Shifting Towards Newer Board Members: The large, recent incoming classes of “new” directors have (temporarily) tipped the balance of power in S&P 1500 boardrooms towards recent arrivals. The combination of directors who are classified as “new” (0 years) or “recent” (defined as “one to three years” of service) nominees now account for a larger slice of the total directorship pie at S&P 1500 companies than the cohort of “rising” directors (defined as those
board members serving for “between four and nine years”), who had constituted the most populous tenure segment over the bulk of the 2008-2016 study period. The prevalence of directors in “rising” tenure category peaked in 2011 at 38.9 percent. Since that time, however, the share of directorships falling into this demographic “sweet spot” (some academic literature suggests that nine years of service may represent “peak” performance in the boardroom) has fallen progressively—dropping below the 30 percent prevalence line for the first time in 2016. Notably, “rising” directors’ share of directorships (29.6 percent) fell below the combined seats (32.4 percent) occupied by “new” and “recent” nominees in 2016.

**Double-digit Directors Now Claim Larger Share of Seats:** Gains for “new” nominees have not come at the expense of lengthy-tenured directors. While boardrooms at S&P 1500 firms are being rejuvenated by annual infusions of “new” nominees, this refreshment rate is offset by the rising retention rate for directors with ten years or more of service. “Long-tenured” (defined as “ten to 14 years” of service) and “extended-tenure” (defined as “15 or more years” of service) directors were the only sitting director tenure categories to pick up larger shares of S&P 1500 seats over the study period. Thanks to rising retirement ages (and one would assume better health and longevity), directors in the “long-” and “extended-” tenure director camps now combine to claim 38 percent of the total directorships at index companies up from 33.2 percent in 2008.

**Women, 50-somethings and Leaders Dominate “New” Director Demographics:** Incoming director classes are changing the face of corporate boards. In 2016, women claimed nearly one-quarter (24.4 percent) of the “new” spaces around boardroom tables at S&P 1500 companies, up from a study low-point of 12.2 in 2009. Individuals between 50 and 59 years of age filled the lion’s share (45.3 percent in 2016) of new board seats. Ten director skillsets account for about 73 percent of all the “new” directors profiled by ISS’ data team in 2016, down marginally from three-quarters of all directors in 2015. The five most prevalent skillsets found for “new” nominees at board of firms in the S&P 1500 are: (1) leadership, (2) financial/investment expertise, (3) relevant industry experience, (4) CEO experience and (5) operational experience.

**Diversity**

**Steady, But Slow Gains on Board Gender Diversity:** Diversity shortfalls, especially as they relate to gender, catalyzed the refreshment debate. While nearly all constituents in the U.S. concede the existence of a problem, the slow-to-develop consensus on solutions and self-interest—boosts in diversity, by definition, require expanding board size or boosting attrition rates by sitting directors—clearly favor status quo and inertia over urgency and action. Despite nonstop hand-wringing by many market constituents, the data demonstrates that the pace of change in boardroom diversity in response to current director recruitment practices remains slow in the U.S., especially at middle-market and small-cap companies. Pressure from investors, regulators, the media and other constituencies is driving an increase in gender diversity on boards, but progress remains gradual as the share of S&P 1500 board seats held by women crept up to 17.8 percent in 2016 from 11.9 percent in 2008. While all-male boards (13.8 percent of S&P 1500
boards in 2016, down from 33 percent in 2008) are becoming an endangered species, they still far outnumber boards (just 6.8 percent of the S&P 1500 boards) with four or more women directors.

- **Multiples Matter:** In 2016, the most prevalent headcount of female directors on S&P 1500 boards ticked up—for the first time—from one to two as U.S. boards as a whole started to move beyond gender tokenism. The importance of this milestone should not be underestimated. Many women directors are quick to note that having multiple female board members changes the boardroom dynamic. The presence of a “token” woman over an extended period of time, for example, may indicate a box-ticking mentality in the boardroom rather than a true desire to include diverse viewpoints. While this progress is encouraging, most boards remain well-below the 30 percent goal set by the 30 Percent Coalition. Notably, the gap between the number of boards with at least 25 percent women directors and those with at or above 30 percent or more is rising. Given the typical nine-seat board at S&P 1500 firms, some observers may ask: Is two women directors the new boardroom glass ceiling?

- **Boards Make Slow Progress on Adding Minority Representation:** Progress in adding more minority directors to boardroom rosters is sluggish, at best. Minority directors now fill slightly more than ten percent of the total directorships at S&P 1500 firms, but these board seats are not evenly spread across the index. Large-cap firms are more likely than not to have one or more minority directors on their rosters. Meanwhile, the typical minority director headcount at small cap firms is zero.
Part II: Assessing Board Refreshment Tools

Tool Box

- **Boards Have Limited Tools to Drive Refreshment**: Traditionally, the boardroom toolbox has offered limited options for directors when it comes to promoting refreshment. The three primary refreshment mechanisms in use today focus on an individual director’s age (retirement policies), length of service (term limits) or absolute or relative performance (board evaluations). Notably, some boards use more than one of these tools. Each of the popular refreshment mechanisms has benefits and potential costs. Retirement ages and term limits force periodic refreshment by creating vacancies, but both may cause some directors to leave boards at a time when they are still highly-effective contributors, and reliance on these mechanical devices may allow some less productive directors to remain on boards until they reach the term or age limit. Evaluations aim to assess directors’ contributions and competence in real time, but may be ineffective in fostering the replenishment of directors’ skill sets in the absence of true boardroom succession planning.

Mandatory Retirement Ages

- **Four of Every Ten Boards Feature Mandatory Retirement Ages**: For the purpose of this study, ISS requires that a retirement policy do more than “suggest” an exit age for board members to be considered as a mandatory retirement policy. Even using this strict definition, retirement age policies were identified at more than 40 percent of S&P 1500 firms in 2016. The popularity of
these retirement provisions declines in lock step with diminishing market capitalization. More than one-half of large-cap S&P 500 firms have retirement ages in place. In contrast, 39 percent of mid-cap companies and 30 percent of small-cap concerns maintain retirement age policies.

› **Retirement Ages Move Toward 75:** The most common retirement age cited in policies currently in place at S&P 1500 companies is 72. Seventy-five appears to be in the process of becoming the new 72, however, as more boards push back their retirement ages. Seventy-two remains the top choice at large-cap and middle-market firms, but it is the runner-up at small-cap firms where 75 already emerged as the most prevalent cut-off age found in retirement policies. It also is now the second most popular threshold at large- and mid-cap firms.

› **Age Limits Produce Younger Directors:** Companies in the S&P 1500 index with retirement age policies in place generally have slightly lower average director ages than those firms without such limits. The average director age at all companies with such limits in place is 62.4 compared with an average age of 62.7 on boards without age limits. While directors are generally younger at firms with age restrictions compared with boards without such limits, the average director age on boards subject to retirement policies jumped from 60.4 years to 62.4 years over the 2008-2015 timeframe. The median director age at S&P 1500 firms with retirement policies also generally increased over the study period from 61 years in 2008 to 63 years in 2016.

**Term Limits**

› **Tenure/Term Limits Remain Rare:** Term limits for boardroom service are rare at U.S. companies. Only about five percent of S&P 1500 firms had term limits in place as of their most recent annual meeting. Notably, large-cap firms, which are often first adopters of many governance reforms, actually lag their mid-sized siblings in using such director tenure ceilings. The highest usage (six percent) of term limits is found at S&P 400 mid-cap firms. Tenure guillotines are slightly less popular (5.4 percent) at large-caps and almost nonexistent (3.7 percent) at small-cap S&P 600 firms. The most common term limits currently in place in the S&P 1500 universe of firms are, in order of prevalence, 15 years, 12 years and ten years.

› **Term Limits are Effective in Managing Board Tenure:** The average board tenure at a company with term limits in place is substantially lower than the typical stay for directors on boards without such measures. The tenure gap is more than a year and one-half—7.1 years for term-limited boards versus 8.8 years for S&P 1500 firms without tenure restrictions. While age is not the direct target of tenure restrictions, term limits lead to lower average board ages. The average director age on S&P 1500 company boards with term limits (61.3) is more than a full year less than that of directors at boards at firms without such policies in place (62.6). Moreover, firms with term limits in place tend to have a higher proportion of board seats filled by younger directors and a lower proportion of directorships occupied by boardroom elders.

› **Term Limits Promote Turnover:** Despite their relatively low usage, term limits appear to be highly effective in spurring boardroom refreshment. If a board’s goal is turnover, tenure limits appear to be the right tool for the job. Firms with term limits in place show a higher proportion
(more than 40 percent) of "new" and "recent" directors (with zero to three-year tenures) than those without term limits (slightly above 30 percent).

Evaluations

› **Board Evaluations Are Widespread**: Usage of boardroom evaluations is close to universal (97 percent) at S&P 1500 firms. More than 99 percent of large-cap company boards disclose their use. Assessing the effectiveness of these evaluation programs is difficult, however, since very few boards disclose any details about the outcomes of these assessments.

› **Annual Board Evaluations Are Most Common Type of Review**: Annual cadences for evaluations are the norm with more than 90 percent of evaluations occurring at least once per year. Most annual board evaluations do not include assessments of individual directors, but such deeper dives are growing in popularity, as 43.4 percent of S&P 1500 boards now do combined board process and individual reviews each year. U.S. boards have not followed a growing number of their European counterparts, however, by augmenting their annual reviews with periodic (triennial is typical) use of external third parties to evaluate boards or directors.

› **Widespread Use of Evaluations Makes It Hard to Assess Impact**: While the small group of boards that do not disclose the use of evaluation processes tend to have older and longer serving directors, there is limited evidence that the use of an evaluation process, by itself, has a significant impact on board turnover or succession. S&P 1500 firms without any board evaluation policies—just four percent of firms in 2015 and three percent of firms in 2016 (YTD)—have higher average director tenures and director ages than those at boards with evaluation processes in place. For all S&P 1500 companies, the average board tenure gap between firms without and with board assessments was 2.4 years in 2015 and three years in 2016 YTD. Companies with no board assessment process in place generally have higher average director ages, over the study period, compared with firms that perform such assessments. Similar observations generally hold true with respect to median director age, except that median age largely remained unchanged at both firms with and without board evaluation policies between 2015 and 2016 YTD. The type of review—board-only versus board and director—also appears to make little difference in board tenures, director ages or turnover.
Part III: Governance Practices That Impact Board Refreshment

Other Refreshment Influencers

› **Committee Service, Independence and Size Changes Impact Refreshment**: ISS examined a wide variety of governance structures to determine their impact on refreshment. Many of these factors had little impact—positive or negative—on refreshment. An examination of vote results in director elections, for example, did not yield any significant relationship between significant negative votes and directors’ age or tenure. A trio of governance attributes—service on key board committees, maintaining high levels of boardroom independence and ad hoc changes in board size—all appear to impact refreshment.

Service on Key Board Committees

› **Service on Key Board Committees May Lead to Longer Tenures**: Over the past decades, a significant portion of the overall boardroom workload has shifted to the three key committees—audit, compensation and nominating/governance. Today, these board panels are generally required (by stock market listing standards or SEC rules) to be populated by “independent” directors. In light of the growing importance of the work of these committees and their role in shareholder engagement, there may be pressure on boards to retain the subject-matter expertise developed by directors who serve on these key panels and to maintain continuity.
Nominating Panels Attract Older Directors: Nominating committees tend to attract the longest-tenured and oldest members (and chairs) compared to their audit and compensation counterparts. Nominating committee members and their chairs also tend to be older and longer-serving than the general boardroom population. Service by older and long tenured directors on nominating committees may have an impact on boardroom succession planning and refreshment since such directors may have a self-interested bias towards longer service and higher exit ages. Notably, nominating committees tend to drive both director evaluations and boardroom recruitment efforts. Nominating panels are also typically responsible for recommending and administering other governance mechanisms such as waivers of mandatory retirement ages and term limits. In contrast, audit panels and their chairs have shorter board tenures than their counterparts on nominating and compensation committees. The wearing workload carried by audit panel members and the need to refresh their “financial expertise” may help to explain this tenure gap. Average director tenures and ages for members of compensation committees (and their chairs) fall between those of their nominating and audit counterparts.

Boards Turn to Older Directors to Serve as Committee Chairs: On average, chairs of each of the key committees tend to be older and longer tenured than their fellow committee members and the overall boardroom population. While it is not surprising that boards turn to more experienced members when filling leadership positions, it may reinforce the subtle bias in favor of extended board service.

Board Independence

Board Independence Levels Continue to Rise: Thanks to stock exchange listing requirements and shareholder pressure, director independence levels at companies in the S&P 1500 continue to rise to new heights. The proportion of S&P 1500 board seats occupied by independent (as defined by ISS) directors has increased by almost five percentage points to 81.5 percent at the study companies over the 2008-2016 study period. Both average and median board independence at S&P 1500 companies show a steady upward rise between 2008 and 2016, increasing by five and six percentage points to 81.1 percent and 83.3 percent, respectively, in 2016.

Boards May Limit Refreshment to Maintain High Levels of Independence: In recent years, a growing number of global markets have adopted tenure-triggered disclosure requirements (or, in rare instances, restrictions) regarding independent directors. These provisions, which are typically based on the “comply or explain” model, set recommended maximum tenure for corporate directors that range from nine to 12 years. The U.S. market is not subject to such a requirement and only a small minority of investors in the market change directors’ independence status based on tenure alone. U.S. boards benefit from investors’ compartmentalization as longer director tenures generally do not appear to have a negative impact on independence levels. Board refreshment generally appears to drive higher boards towards higher independence levels. The addition of one or two new directors on the typical
S&P 1500 board appears to have a positive impact on board independence levels. Notably, independence levels appear rise even in the absence of board refreshment. Non-refreshed boards at S&P 1500 firms—those with zero “new” directors in a given year—actually experienced gains in the “highest” (i.e., 90 percent-plus independence) category over the study period.

Board Size Changes

› **Boards Change Size Frequently:** While average board size (hovering at nine seats at S&P 1500 firms ranging from 11 at large caps to eight at small caps) remained static over the entire study period, board size limits do not appear to handcuff boards with respect to board refreshment. Over 90 percent of firms in the S&P 1500 composite index changed the size of their boards between 2008 and 2016 (YTD). Slightly more than one-half (51.3 percent) of the firms in the S&P 1500 that altered their board size over the study period increased the size of their boards.

› **Boosting Board Size Benefits Women and Ethnic/Racial Minority Candidates:** Ad hoc changes in board size appear to provide boards with more flexibility to add women and (to a lesser degree) ethnic or racially diverse candidates to their boards. Notably, such board expansions may allow boards to bring more diverse candidates onto their rosters without the necessity of replacing specific skill sets of sitting directors who will soon exit the boardroom. Board size changes do not typically translate to board committee size changes – the average board committee size (of four members) did not change over the study period.
Part I: Boardroom Demographics

Average Boardroom Tenure

What is the average boardroom tenure of directors at S&P 1500 companies?

Average director tenure at S&P 1500 firms now stands at a level—8.7 years—a figure last recorded in 2010. Average tenure steadily rose from 8.4 years in 2008 to a peak of nine years in 2013 before slowly reversing course from 2014 to 2016. Notably, this reversal of the rising tenure trend coincided with increased investor attention to board tenure and diversity.

Is there any difference in average tenure based on gender or race/ethnicity at S&P 1500 firms?

Yes. A boardroom tenure gender gap has opened over the past few years. Male directors currently have average tenures (9.2 years, down from a high of 9.3 years during the 2013-2015 period) that run 2.8 years longer than the average service period (6.4 years) for women directors. Notably, average tenure for women directors in 2016 is identical to the level recorded in 2008. As such, it appears that the influx of women directors in response to the recent push for diversity might largely explain the overall decline in average tenure over the past few years.

Interestingly, the tenure gap based on director race and ethnicity has actually narrowed somewhat since 2008. Caucasian directors have served 1.7 years longer than their “minority” boardroom peers (8.9 years versus 7.2 years), compared to a full two year-gap in 2008.

Moreover, a tenure gap also emerged over the study period between women and minority directors. The average tenure of female and minority directors was comparable in 2008. The average tenure of minority directors, however, surpassed that of female directors in 2011 and stands at more than three-quarters of a year.
Board Refreshment Trends at S&P 1500 Firms:
2008 - 2016

**Average director tenure: S&P 1500**

![Graph showing average director tenure for S&P 1500 firms from 2008 to 2016.]

**Average director tenure: S&P 500**

![Graph showing average director tenure for S&P 500 firms from 2008 to 2016.]

---

January 2017 | Page 18 of 145
Median Tenure

What is the median tenure of directors on boards at S&P 1500 firm?

Median tenure across all S&P 1500 directorships rose from six years to seven years in 2009, but has remained flat from 2010 to 2016.
Is there any difference in median tenure based on gender or race/ethnicity at S&P 1500 firms?

Yes. As was the case for the rise in average tenure, the uptick in the median is largely driven by longer-serving male directors. The median tenure for male directors at study companies jumped by two years—from six years to eight years—over the study period, although it has remained constant since 2013.

In contrast, the median tenure line for female directors initially moved up by one year (from five years in 2008 to six years in 2010), but had fallen back to its starting point by 2015, and dropped to four years in 2016.

Perhaps reflecting its male-tilted gender mix, the median tenure for minority directorships jumped from five years to six years in 2011 and has remained steady thereafter.
Board Refreshment Trends at S&P 1500 Firms:
2008 - 2016

Median director tenure: S&P 500

Directorships:
- Total
- Male
- Female
- Minority
- Caucasian

Median director tenure: S&P 400

Directorships:
- Total
- Male
- Female
- Minority
- Caucasian
Average Boardroom Age

What is the average age of directors at S&P 1500 companies?

The typical director serving on the board at an S&P 1500 firm is 62.5 years old, which is the age high watermark for the 2008-2016 (YTD) study period. While the average age jumped by two years (from 60.5 years in 2008) over the study period, it held steady from 2015 to 2016 (YTD). This slowdown, which is consistent with a leveling off of average and median board tenure in recent years, may reflect a surge in turnover and refreshment.

Is there a significant difference in average age based on gender or race/ethnicity at S&P 1500 firms?

Yes. A three-year-plus gender gap separates the typical male director (63.1 years old on average) on S&P 1500 boards from his female boardroom peers (59.8 years old on average).

Caucasian directors, at 62.8 years on average, are more than two years older than their ethnically and racially diverse boardroom colleagues (60.6 years). These age gaps have remained persistent over the entire study period.
Is there a significant difference in average age based on company size at S&P 1500 firms?

No. Average director ages only varies by a small amount of time across market-cap indexes. Notably, middle market company directors (62.8 years old, on average, in 2016) are slightly older than their peers at large- (62.5 years old) and small-cap (62.4 years old) peers.
Median Age

What is the median age of directors on boards at S&P 1500 firms?
The median age of directors on boards at S&P 1500 firms is 63 years. Between 2008 and 2012, the median age jumped by two years (from 61 years at the beginning of the study period). The median, like the average age, has held steady since that time.

Is there a significant difference in median age based on gender or race/ethnicity at S&P 1500 firms?

Yes.

The median gender gap is four years—64 years for male directors versus 60 years for female board members.

The median age for Caucasian directors is 63 years, which is two years higher than their racially and ethnically diverse boardroom colleagues.

Is there a significant difference in median age based on company size at S&P 1500 firms?

No. Median age is 63 at S&P 500, 400, and 600 firms. Women and minority directors on small-cap S&P 600 boards are slightly younger than their counterparts at middle market and large-cap firms.
Boardroom Age Distributions

What age group saw the biggest board seat gains at S&P 1500 firms over the study period?

Directors in their seventies and eighties were the only groups to pick up market share over the 2008-2016 time period. The share of directorships held by 70-something board members rose from 11.7 percent in 2008 to 18.6 percent in 2016 (YTD). The board seat tally for directors aged 80 or older also steadily climbed—from 1.2 percent in 2008 to 1.8 percent in 2016 (YTD). These two age classes combine to fill 20.4 percent of all S&P 1500 board seats, the highest level of 70-year-old-plus directors recorded over the entire study period.

Despite sporadic reports in the media of growing boardroom demand for tech-savvy, under-40 directors, the percentage of total board seats held by individuals who are under 50 years old steadily fell from 10.8 percent in 2008 to 6.1 percent in 2016 (YTD).

Despite these shifts at the ends of the boardroom age brackets, individuals in the 50s and 60s filled the lion’s share (73.6 percent, down from 76.2 percent in 2008) of board seats at S&P 1500 companies. While both groups have ceded some seats to older directors over the study period, they remain the two biggest age group constituents in boardrooms.
Does market cap impact the distribution of board seats change?

Yes. Interestingly, small-cap firms lead the way at both ends of the age spectrum with the largest shares of board seats filled with sub-50 year old directors and board members aged 80 and higher. Large-cap firms, in contrast, show a smallest number of seats filled by these younger and older directors.
What are some age-related trends on S&P 1500 boards?

Six out of every ten S&P 1500 boards have no directors under the age of 50 serving in 2016. That is up from 2008 when slightly more than 40 percent of boards had no directors who were younger than 50.

More than six out of every ten S&P 1500 boards have more than one-quarter of their members in their 50s.
Nearly three-quarters of S&P 1500 boards have at least one-third of their board members in their 60s.

Sixty-something directors account for a majority of the board seats at slightly less than one-half (42.5 percent) of the S&P 1500 companies.

One-quarter or more of the board seats at nearly one-third (32.7 percent) of S&P 1500 firms are filled with directors who are in their 70s.

More than ten percent of S&P 1500 boards have at least one director who is aged 80 or older.
S&P 1500: Prevalence of firms w/directors in their fifties

% of Board Aged 50-59:

% of firms

S&P 1500: Prevalence of firms w/directors in their sixties

% of Board Aged 60-69:
Distribution of Tenures

Did the pace of refreshment via adding “new” board members to S&P 1500 boards increase over the study period?

Yes. While uneven, the pace of adding new directors to S&P 1500 boards nearly doubled from the beginning of the study period to its end. The prevalence of “new” directors (defined as those with...
“0” years of service) actually fell in the wake of the financial crisis—hitting an anemic 4.7 percent in 2010, as boards appeared to seek boardroom stability—but has quickly picked up speed in recent years. “New” nominees claimed less than six percent of total directorships prior to 2012, but their prevalence steadily rose over the remainder of the study period. By 2016, almost one out of every ten directors (9.5 percent) serving on S&P 1500 boards are “new.”

The relative gains made by these “new” nominees in recent years have come at the expense of their fellow single-digit tenure directors. The molasses-slow pipeline of “new” nominees in the wake of the financial crisis—from 2008 to 2012—eroded the share of total directorships held by “recent” directors (defined as those with “one to three years” of service) over the study period. This group accounted for more than one-quarter of all board seats back in 2008, but these neophyte directors’ share of total directorships slipped below 20 percent from 2012 to 2014. Their share currently stands just below 23 percent.

Over the course of the entire study period, the biggest single block of board seats was held by “rising” directors (defined as those board members serving between four and nine years). The prevalence of directors in this tenure category peaked in 2011 at 38.9 percent. Since that time, however, the share of directorships falling into this demographic “sweet spot” has fallen progressively—dropping below the 30 percent prevalence line for the first time in 2016. Notably, “rising” directors’ share of directorships (29.6 percent) fell below the combined seats (32.4 percent) occupied by “new” and “recent” nominees in 2016.

Has the prevalence of directors with lengthy tenure increased over the study period?
Yes. The recent surge in the proportion of board seats filled by “new” nominees has not had a significant impact on the share of directorships held by board members with “lengthy” tenure (defined as service of ten years or longer). The relative share of directorships held by directors with ten or more years of service increased over the study period from below one-third to 38 percent.

The share of S&P 1500 board seats held by directors who have served for between ten and 14 years (“long-tenured” directors) had remained relatively steady, at just under 16 percent of all directorships from 2008 to 2009. Since that time, however, the prevalence of directors in this category has jumped. In 2016, these long-tenured directors account for nearly one-fifth (19.3 percent) of all S&P 1500 directorships.

The prevalence of “extended tenure” directors (those serving for at least 15 years) has slowly, but steadily, grown over the study period, with the share of total directorships held by these boardroom veterans exceeding 19 percent line in 2013 and hovering near that figure since.
Board Refreshment Trends at S&P 1500 Firms:
2008 - 2016

Board tenure trends: S&P 1500

<table>
<thead>
<tr>
<th>Year</th>
<th>0</th>
<th>1 to 3</th>
<th>4 to 9</th>
<th>10 to 14</th>
<th>15+</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>35.9</td>
<td>36.9</td>
<td>37.6</td>
<td>38.9</td>
<td>38.4</td>
</tr>
<tr>
<td>2009</td>
<td>25.7</td>
<td>24.6</td>
<td>23.6</td>
<td>20.7</td>
<td>19.4</td>
</tr>
<tr>
<td>2010</td>
<td>17.3</td>
<td>17.7</td>
<td>18.0</td>
<td>18.3</td>
<td>18.9</td>
</tr>
<tr>
<td>2011</td>
<td>15.0</td>
<td>15.9</td>
<td>16.1</td>
<td>17.1</td>
<td>18.1</td>
</tr>
<tr>
<td>2012</td>
<td>5.2</td>
<td>4.9</td>
<td>4.7</td>
<td>6.1</td>
<td>7.5</td>
</tr>
<tr>
<td>2013</td>
<td>8.1</td>
<td>8.3</td>
<td>8.1</td>
<td>8.3</td>
<td>9.5</td>
</tr>
<tr>
<td>2014</td>
<td>20.2</td>
<td>22.3</td>
<td>23.7</td>
<td>21.2</td>
<td>22.9</td>
</tr>
<tr>
<td>2015</td>
<td>21.2</td>
<td>22.9</td>
<td>23.7</td>
<td>19.4</td>
<td>19.3</td>
</tr>
<tr>
<td>2016</td>
<td>22.9</td>
<td>23.7</td>
<td>19.3</td>
<td>18.7</td>
<td>18.7</td>
</tr>
</tbody>
</table>

Board tenure trends: S&P 500

<table>
<thead>
<tr>
<th>Year</th>
<th>0</th>
<th>1 to 3</th>
<th>4 to 9</th>
<th>10 to 14</th>
<th>15+</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>36.6</td>
<td>37.7</td>
<td>38.9</td>
<td>40.5</td>
<td>40.0</td>
</tr>
<tr>
<td>2009</td>
<td>27.2</td>
<td>25.6</td>
<td>25.2</td>
<td>21.8</td>
<td>19.9</td>
</tr>
<tr>
<td>2010</td>
<td>15.7</td>
<td>16.2</td>
<td>17.1</td>
<td>12.3</td>
<td>17.1</td>
</tr>
<tr>
<td>2011</td>
<td>15.1</td>
<td>15.1</td>
<td>15.3</td>
<td>15.9</td>
<td>16.4</td>
</tr>
<tr>
<td>2012</td>
<td>5.4</td>
<td>5.5</td>
<td>4.4</td>
<td>4.9</td>
<td>6.4</td>
</tr>
<tr>
<td>2013</td>
<td>8.2</td>
<td>8.2</td>
<td>8.2</td>
<td>8.2</td>
<td>9.5</td>
</tr>
<tr>
<td>2014</td>
<td>15.9</td>
<td>15.9</td>
<td>15.9</td>
<td>15.9</td>
<td>15.9</td>
</tr>
<tr>
<td>2015</td>
<td>20.2</td>
<td>22.3</td>
<td>23.7</td>
<td>19.5</td>
<td>19.4</td>
</tr>
<tr>
<td>2016</td>
<td>22.3</td>
<td>23.7</td>
<td>19.4</td>
<td>16.1</td>
<td>15.9</td>
</tr>
</tbody>
</table>

January 2017 | Page 34 of 145
Refreshment Rate

What is the annual rate of board refreshment?

Annual board refreshment rates at S&P 1500 firms accelerated over the study period. The proportion of firms that would go an entire year without any board refreshment—via the addition of “new” nominees—has steadily fallen over the past six years from 66.2 percent to 48.6 percent. From
2008 to 2011, roughly two-thirds or more of the S&P 1500 boards would stand pat in a given year by adding zero “new” directors. From 2012 to the present, however, the prevalence of such “zero change” boards has steadily dropped. In 2015, for the first time in the study period, the majority of S&P 1500 boards added at least one new director. Annual additions of multiple “new” directors to boards remain relatively rare.
Does the prevalence of long-tenured and extended tenure directors vary by company?

**Long Tenure**—The prevalence of firms with zero long-tenured (ten to 14 years of service) nominees has been on the decline in every year since 2008, suggesting that directors have been holding onto their board seats for longer periods of time over the study period. Like birds of a feather, directors...
with long tenure also appear to flock together. Notably, long tenured directors fill at least one-quarter of the board seats at more than one-third (35.2 percent) of the study companies. Almost one-fifth of study companies currently have boards with roughly three long-tenured directors (given an average board size of nine at S&P 1500 firms).
Extended Tenure—Prevalence of S&P 1500 boards with no extended-tenure (15+ years of service) board nominees has also declined every year since 2008, evidencing the rise of extended boardroom tenures. Extended tenure directors currently fill at least one-quarter of the board seats at over one-third of the S&P 1500 companies. S&P 500 firms generally have a lower prevalence of extended-tenure directors in the gradations examined across all years reviewed, suggesting that large-cap firms may push directors out of the nest sooner than other firms in the S&P 1500 index.
Contrasting the prevalence of extended tenure directors with that of new director nominees reveals a much higher preponderance of directors with lengthy tenures. Presently, roughly 34 percent of study companies have directors with 15 or more years of service who together comprise at least 25 of the board. Conversely, nine percent of firms have directors with zero years of service who together constitute at least a quarter of the board – an almost 25 percentage point difference in prevalence.
New Nominee Demographics

Has the demographic breakdown of “new” nominees changed over time?

**Gender:** Women make up a larger portion of the “new” director pool than female directors did at the outset of the 2008-2016 study period. In 2016, women claimed nearly one-quarter (24.4%...
percent) of the “new” spaces around boardroom tables at S&P 1500 companies, up from a low-point of 12.2 in 2009.

**Race/Ethnicity:** The proportion of new directors who are drawn from the pool of racial and ethnic minority group candidates has remained static over the 2008-2016 period, hovering in the ten- to 13 percent range.

**Age:** The lion’s share (45 percent on average over the study period) of new director nominees in the S&P 1500 are between 50 and 59 years of age. Sixty-something-year-olds provide the second-largest supply (an average of 33 percent) of new nominees, whereas septuagenarians comprise three percent of the new nominee pool on an average basis.
Skillsets—Ten director skillsets account for about 73 percent of all the “new” directors profiled by ISS’ data team in 2016, down from three-quarters of all directors in 2015. The five most prevalent skillsets found for “new” nominees at board of firms in the S&P 1500 are: (1) leadership, (2) financial/investment expertise, (3) relevant industry experience, (4) CEO experience and (5) operational experience.
The top four “new” nominee skillsets also dominate the resumes for the broader universe of all S&P 1500 directors. The lone difference appears in the fifth-most prevalent ranking as audit experience appears to be more valued in the larger boardroom universe than operational experience.

That said, for the universe of “new” directors, technology skillsets seem to be more in demand in 2016, whereas the demand for CEO experience has waned somewhat in 2016 compared with 2015.

With respect to skillsets for “new” female board nominees, leadership and financial/investment experience appear to also be the most commonly cited skills, followed by industry experience and, thereafter, audit/accounting expertise—which ranks 8th on the list of skillsets for all “new” nominees.

The most common skillsets associated with new minority directors in 2016 are leadership, financial skills, and industry skills, which is similar to 2015’s list of the most highly demanded skillsets, save for CEO experience, which was the third most-common skillset in 2015.

These observations suggest that boards are slowly beginning to tilt away from more traditional boardroom skills, such as CEO experience, as they go about refreshing themselves, a trend that could open up more board seats to a wider pool of director nominees.
Gender Diversity

Are recent efforts to promote greater gender diversity in boardrooms having an impact?

Yes. The proportion of total board seats at S&P 1500 companies that are occupied by female directors has steadily increased since 2008. The pace of change, however, has been slow (less than one percentage point per year). By 2016, the share of total board seats at S&P 1500 firms occupied
by women is 17.8 percent, up from just under 12 percent in 2008. Large-cap S&P 500 firms are further along, with women holding more than 20 percent of the total board seats in 2016, up from 15 percent in 2008.

Has the number of S&P 1500 boards with zero women decreased?

Yes. While some companies persist with all-male boards, the number is shrinking. The proportion of firms in the S&P 1500 with no women on their boards has dwindled by almost 20 percentage points to 13.8 percent in 2016 from 32 percent in 2008.

All-male boards remain more common at smaller firms.

› 2016 (YTD) data show that only 1.3 percent of firms in the S&P 500 have no women on their boards, down from nearly 14 percent of firms in 2008.

› Eleven percent of firms currently have no women on their boards in the mid-cap S&P 400, down from 31 percent of firms in 2008.

› Over a quarter of S&P 600 firms presently have no women on their boards, down from almost one-half of firms in 2008.

What is the most common headcount of female directors on S&P 1500 boards?

Two women is now the most common headcount in S&P 1500 boardrooms. Until the end of the study period, the most prevalent tally of women directors at the study companies had been one. The proportion of S&P 1500 boards with one woman occupying a seat hovered between 34 percent and 37 percent during the study period.
The 2016 (YTD) data also shows that—for the first time—a majority (54 percent) of S&P 1500 boards have two or more women serving on them, largely driven by a surge of multiple female directors at S&P 500 firms during the study period. More than three-quarters (77 percent) of these large-capital companies currently have two or more women on their boards, whereas less than half of mid-cap and under 40 percent of small-cap firms presently have two or more women on their boards.

Progress is slow, but some boards have broken through the two-seat glass ceiling. Over the study period, the proportion of S&P 1500 boards with three women jumped by almost seven percentage points (or by almost half the 13 percentage point jump at S&P 500 firms); those with four women grew by four percentage points (and by seven percentage points at large-cap firms). Overall, one-fifth of study companies currently have at least three women represented in the boardroom compared with 36 percent of large-cap firms.
How many S&P 1500 boards reached the diversity threshold set by the 30 Percent Coalition?

Roughly 12 percent of S&P 1500 firms have reached the 30 percent goal for women directors set by investor and business groups affiliated with the 30 Percent Coalition. Notably, one-quarter of S&P 1500 companies have at least 25 percent female representation on their boards, which is more than double the rate evidenced in 2008. About one-third of S&P 500 firms have one-quarter of their board seats occupied by women. Eight percent of S&P 1500 companies had at least a third of their board seats filed by women in 2016, up from three percent of firms in 2008. Just a tiny fraction (one-half of one percent) of S&P 1500 companies had gender parity on their boards in 2015. 2016 YTD data suggests that the prevalence of S&P 1500 firms with half the board comprising female directors has increased, albeit by basis points, to 0.8 percent. Four of the 11 firms with at least 50 percent of women on the board are in the Consumer Discretionary sector, and four are large-cap companies. Tootsie Roll Industries currently has the highest prevalence of female directors on the board (75 percent) of any firm in the S&P 1500 index and is one of only five firms in the composite index with a board size of four - the smallest board size in the study. Navient Corporation, one of the 11 firms, has the highest number of female directors (seven) among S&P 1500 constituents.
Board Refreshment Trends at S&P 1500 Firms:
2008 - 2016

At Least 33.3% Female Representation

At Least 50% Female Representation
<table>
<thead>
<tr>
<th>Company</th>
<th>Index</th>
<th>Sector</th>
<th>Board Size</th>
<th>% of WoB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alliant Energy Corporation</td>
<td>S&amp;P 400</td>
<td>Utilities</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td>Avon Products, Inc.</td>
<td>S&amp;P 400</td>
<td>Consumer Staples</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td>TOOTSIE ROLL INDUSTRIES, INC.</td>
<td>S&amp;P 400</td>
<td>Consumer Staples</td>
<td>4</td>
<td>75%</td>
</tr>
<tr>
<td>General Motors Company</td>
<td>S&amp;P 500</td>
<td>Consumer Discretionary</td>
<td>12</td>
<td>50%</td>
</tr>
<tr>
<td>Michael Kors Holdings Limited</td>
<td>S&amp;P 500</td>
<td>Consumer Discretionary</td>
<td>8</td>
<td>50%</td>
</tr>
<tr>
<td>Navient Corporation</td>
<td>S&amp;P 500</td>
<td>Financials</td>
<td>12</td>
<td>58.3%</td>
</tr>
<tr>
<td>TEGNA Inc.</td>
<td>S&amp;P 500</td>
<td>Consumer Discretionary</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td>Boston Private Financial Holdings, Inc.</td>
<td>S&amp;P 600</td>
<td>Financials</td>
<td>9</td>
<td>55.6%</td>
</tr>
<tr>
<td>Select Comfort Corporation</td>
<td>S&amp;P 600</td>
<td>Consumer Discretionary</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td>Simpson Manufacturing Co., Inc.</td>
<td>S&amp;P 600</td>
<td>Industrials</td>
<td>8</td>
<td>50%</td>
</tr>
<tr>
<td>Spire Inc.</td>
<td>S&amp;P 600</td>
<td>Utilities</td>
<td>8</td>
<td>50%</td>
</tr>
</tbody>
</table>

**Ethnic/Racial Diversity**

Are S&P 1500 boards adding more directors who are racially or ethnically diverse?

Yes. The proportion of board seats at S&P 1500 boards occupied by minority directors has slowly yet steadily increased since 2008. In 2015, minority directors’ share of the board seat pie crossed the ten-percent line for the first time. Gains continue in 2016, as the YTD figures indicate that minority directors now fill 10.4 of all board seats at S&P 1500 firms, up from eight percent in 2008. Minority representation is highest at S&P 500 companies with 14 percent of seats held by minorities in 2016 (YTD), up from 11.5 percent in 2008. The headcount for minority directors drops at middle-market and small-cap firms.
What is the mix of minority board members?

African Americans and other people of African descent from other nations currently (2016 YTD) hold almost five percent of board seats at S&P 1500 companies.

Directors of Asian descent represent the next most common minority type at S&P 1500 firms with roughly three percent of directorships.

Hispanic board members, with about two percent of board seats, are next in line.

The proportion of African descent directors is highest at S&P 500 companies at 7.2 percent of all directorships in 2016 compared with roughly four percent and two percent of all board seats at S&P 400 and S&P 600 companies, respectively.
What is the most common headcount of minority directors at S&P 1500 firms?

A majority (58 percent in 2016 versus 50 percent in 2008) of S&P 1500 companies has one or more minority directors in their boardroom, but racial/ethnic diversity neither spreads evenly across the index nor runs deep within it.

Minority directors are most common at large-cap (roughly 80 percent of S&P 500 boards currently have one or more diverse directors) and middle-market firms (54 percent have one or more). In
sharp contrast, racial and ethnic diversity at the bulk (almost 60 percent) of small-cap boards remains stuck on zero.

In other words, while more than 40 percent of the boards in the S&P 1500 have no racial/ethnic minority representation, this non-diverse boardroom makeup persists at just about half this prevalence (approximately 20 percent) at large-cap S&P 500 companies.

Service by multiple minority directors on a board is rare outside of the large-cap universe.
## S&P 500: Minorities on Boards (MoB)

The graph shows the percentage of firms with 0 MoB, 1 MoB, 2 MoB, 3 MoB, 4 MoB, and 5+ MoB from 2008 to 2016 YTD. The data is presented as a line graph with each year from 2008 to 2016 and the corresponding percentage of firms in each category.

### S&P 500: Minorities on Boards (MoB)

<table>
<thead>
<tr>
<th>Year</th>
<th>0 MoB</th>
<th>1 MoB</th>
<th>2 MoB</th>
<th>3 MoB</th>
<th>4 MoB</th>
<th>5+ MoB</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>37.7%</td>
<td>35.1%</td>
<td>36.7%</td>
<td>37.2%</td>
<td>34.4%</td>
<td>35%</td>
</tr>
<tr>
<td>2009</td>
<td>27.3%</td>
<td>27.4%</td>
<td>25.9%</td>
<td>23.7%</td>
<td>22.7%</td>
<td>22%</td>
</tr>
<tr>
<td>2010</td>
<td>23.7%</td>
<td>24.9%</td>
<td>22.7%</td>
<td>22%</td>
<td>23%</td>
<td>22.8%</td>
</tr>
<tr>
<td>2011</td>
<td>22.7%</td>
<td>22.7%</td>
<td>22%</td>
<td>23%</td>
<td>22.8%</td>
<td>20.5%</td>
</tr>
<tr>
<td>2012</td>
<td>22%</td>
<td>23%</td>
<td>22%</td>
<td>23%</td>
<td>22.8%</td>
<td>20.5%</td>
</tr>
<tr>
<td>2013</td>
<td>22%</td>
<td>23%</td>
<td>22%</td>
<td>23%</td>
<td>22.8%</td>
<td>20.5%</td>
</tr>
<tr>
<td>2014</td>
<td>22%</td>
<td>23%</td>
<td>22%</td>
<td>23%</td>
<td>22.8%</td>
<td>20.5%</td>
</tr>
<tr>
<td>2015</td>
<td>22%</td>
<td>23%</td>
<td>22%</td>
<td>23%</td>
<td>22.8%</td>
<td>20.5%</td>
</tr>
<tr>
<td>2016 YTD</td>
<td>22%</td>
<td>23%</td>
<td>22%</td>
<td>23%</td>
<td>22.8%</td>
<td>20.5%</td>
</tr>
</tbody>
</table>

## S&P 400: Minorities on Boards (MoB)

The graph shows the percentage of firms with 0 MoB, 1 MoB, 2 MoB, 3 MoB, 4 MoB, and 5+ MoB from 2008 to 2016 YTD. The data is presented as a line graph with each year from 2008 to 2016 and the corresponding percentage of firms in each category.

### S&P 400: Minorities on Boards (MoB)

<table>
<thead>
<tr>
<th>Year</th>
<th>0 MoB</th>
<th>1 MoB</th>
<th>2 MoB</th>
<th>3 MoB</th>
<th>4 MoB</th>
<th>5+ MoB</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>53.9%</td>
<td>52.9%</td>
<td>50.7%</td>
<td>49.7%</td>
<td>49.6%</td>
<td>50.3%</td>
</tr>
<tr>
<td>2009</td>
<td>50.7%</td>
<td>50.7%</td>
<td>49.7%</td>
<td>49.6%</td>
<td>50.3%</td>
<td>49.5%</td>
</tr>
<tr>
<td>2010</td>
<td>49.6%</td>
<td>49.6%</td>
<td>49.6%</td>
<td>50.3%</td>
<td>49.5%</td>
<td>48%</td>
</tr>
<tr>
<td>2011</td>
<td>50.3%</td>
<td>50.3%</td>
<td>49.3%</td>
<td>50.3%</td>
<td>49.5%</td>
<td>48%</td>
</tr>
<tr>
<td>2012</td>
<td>49.5%</td>
<td>49.5%</td>
<td>49.5%</td>
<td>50.3%</td>
<td>49.5%</td>
<td>48%</td>
</tr>
<tr>
<td>2013</td>
<td>48%</td>
<td>48%</td>
<td>48%</td>
<td>49.6%</td>
<td>49.5%</td>
<td>48%</td>
</tr>
<tr>
<td>2014</td>
<td>46.1%</td>
<td>46.1%</td>
<td>46.1%</td>
<td>46.1%</td>
<td>46.1%</td>
<td>46.1%</td>
</tr>
</tbody>
</table>

Note: The percentages for 2016 YTD are not available in the text.
How prevalent are boards with significant representation by minority directors?

Large gatherings of minority directors on individual boards are rare. Minority directors comprise more than one-quarter of the entire board membership at fewer than ten percent of S&P 1500 companies.

Over one-half of the 16 S&P 1500 companies with at least 50 percent minority representation on the board are in the financial sector while six are in the Information Technology sector. Three-quarters of the firms are in the small-cap index, and 47 percent of the almost 140 directors at these 16 firms are of Asian descent, a group that represents 70 percent of all minority directors at the firms. One of these companies, Cathay General Bancorp, has 11 minority directors, more than any other firm in the S&P 1500, while OFG Bancorp has an all-minority director board.
S&P 1500 Firms where Minorities Comprised at least 50% of the Board in 2016

<table>
<thead>
<tr>
<th>Company</th>
<th>Index</th>
<th>Sector</th>
<th>Board Size</th>
<th>% of MoB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cathay General Bancorp</td>
<td>S&amp;P 400</td>
<td>Financials</td>
<td>12</td>
<td>91.7%</td>
</tr>
<tr>
<td>East West Bancorp, Inc.</td>
<td>S&amp;P 400</td>
<td>Financials</td>
<td>10</td>
<td>60%</td>
</tr>
<tr>
<td>Fortinet, Inc.</td>
<td>S&amp;P 400</td>
<td>Information Technology</td>
<td>7</td>
<td>57.1%</td>
</tr>
<tr>
<td>MEDNAX, Inc.</td>
<td>S&amp;P 400</td>
<td>Health Care</td>
<td>10</td>
<td>80%</td>
</tr>
<tr>
<td>Archer-Daniels-Midland Company</td>
<td>S&amp;P 500</td>
<td>Consumer Staples</td>
<td>12</td>
<td>50%</td>
</tr>
<tr>
<td>Central Pacific Financial Corp.</td>
<td>S&amp;P 600</td>
<td>Financials</td>
<td>11</td>
<td>63.6%</td>
</tr>
<tr>
<td>Digi International Inc.</td>
<td>S&amp;P 600</td>
<td>Information Technology</td>
<td>6</td>
<td>50%</td>
</tr>
<tr>
<td>Diodes Incorporated</td>
<td>S&amp;P 600</td>
<td>Information Technology</td>
<td>7</td>
<td>71.4%</td>
</tr>
<tr>
<td>First BanCorp.</td>
<td>S&amp;P 600</td>
<td>Financials</td>
<td>9</td>
<td>55.6%</td>
</tr>
<tr>
<td>Hanmi Financial Corporation</td>
<td>S&amp;P 600</td>
<td>Financials</td>
<td>9</td>
<td>88.9%</td>
</tr>
<tr>
<td>Hope Bancorp Inc.</td>
<td>S&amp;P 600</td>
<td>Financials</td>
<td>9</td>
<td>55.6%</td>
</tr>
<tr>
<td>KULICKE AND SOFFA INDUSTRIES, INC.</td>
<td>S&amp;P 600</td>
<td>Information Technology</td>
<td>6</td>
<td>50%</td>
</tr>
<tr>
<td>Monolithic Power Systems, Inc.</td>
<td>S&amp;P 600</td>
<td>Information Technology</td>
<td>7</td>
<td>57.1%</td>
</tr>
<tr>
<td>Company</td>
<td>Index</td>
<td>Sector</td>
<td>Year</td>
<td>Refreshment Rate</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------</td>
<td>------------------------</td>
<td>------</td>
<td>------------------</td>
</tr>
<tr>
<td>OFG Bancorp</td>
<td>S&amp;P 600</td>
<td>Financials</td>
<td>8</td>
<td>100%</td>
</tr>
<tr>
<td>Super Micro Computer, Inc.</td>
<td>S&amp;P 600</td>
<td>Information Technology</td>
<td>7</td>
<td>71.4%</td>
</tr>
<tr>
<td>Wilshire Bancorp, Inc.</td>
<td>S&amp;P 600</td>
<td>Financials</td>
<td>8</td>
<td>62.5%</td>
</tr>
</tbody>
</table>
Part II: Assessing Board Refreshment Tools

Mandatory Retirement Age Policies

How widespread is the use of retirement age policies?

For the purpose of this study, ISS requires that a retirement policy do more than “suggest” an exit age for board members. Even using this strict definition, retirement age policies were identified at more than 40 percent of S&P 1500 firms in 2016.

The popularity of these retirement provisions declines in lock step with diminishing market capitalization. More than one-half of large-cap S&P 500 firms have retirement ages in place. In contrast, 39 percent of mid-cap companies and 30 percent of small-cap concerns maintain retirement age policies.

What are the most common age thresholds found in retirement policies?

The most common retirement age cited in policies currently in place at S&P 1500 companies is 72. Seventy-five appears to be in the process of becoming the new 72, however, as more companies push back their retirement ages. Seventy-two remains the top choice at large-cap and middle-market firms, but is the runner-up at small-cap firms where 75 has already emerged as the most prevalent age cut-off age found in retirement policies. It also is now the second most popular threshold at large- and mid-cap firms.
Do boards with age limits have younger directors?

Yes. Companies in the S&P 1500 index with board retirement age policies in place generally have slightly lower average director ages than those firms without such limits. The average director age at all companies with such limits in place is 62.4 compared with an average age of 62.7 on boards without age limits. Further, there is a sharp drop in the prevalence of directors in their 70s and 80s (compared with those aged 60-69 and below) at firms with retirement age policies in place vis-à-vis those without such age limits.

Do boards without age limits have longer average board tenures?

Yes. Boards without age limits have average board tenures (8.9 years) that run more than half a year longer than boards with retirement ages (8.4 years).
At just eight years, the average tenure at S&P 500 firms with age limits is the lowest of any of the S&P 1500 index cohorts. Notably, the average tenure of S&P 500 boards without age limits (8.5 years) is below the typical tenure for directors at small-cap S&P 600 firms (8.9 years) with age limits.

The tenure gap is smaller—8.9 years for the haves and 9.2 for the have nots—at S&P 600 firms where retirement ages are less common and higher than their index peers.

<table>
<thead>
<tr>
<th>Retirement Age Limits &amp; Avg. Tenure</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P 400</td>
</tr>
<tr>
<td>Ret. Age Limits:</td>
</tr>
<tr>
<td>6.5</td>
</tr>
<tr>
<td>8.5</td>
</tr>
<tr>
<td>8.9</td>
</tr>
<tr>
<td>8.7</td>
</tr>
</tbody>
</table>

Have retirement policies stopped the "greying" of directors on boards?

No. While directors are generally younger at firms with age restrictions compared with boards without such limits, the average director age on boards subject to retirement policies jumped from 60.4 years to 62.4 years over the 2008-2015 timeframe. Not surprisingly, a higher retirement age corresponds to older board members. Firms with an age limit of 75 years have the loftiest average board ages in every year reviewed (63.2 in 2015, down from a high water mark of 63.3 in 2014), although in 2016 the average director age dropped slightly to 63, a trend that hints at an uptick in board turnover at firms with the highest most common age limit.
Is the median age of directors rising at firms with retirement policies?

Yes. The median director age at S&P 1500 firms with retirement policies has generally increased over the study period from 61 years in 2008 to 63 years in 2016. In recent years, however, the upward trend has slowed or even reversed, consistent with the overall trend. The median age of directors at S&P 1500 companies with a retirement age limit of 75 was two years higher than boards with limits set at 70 years or 72 years in 2015, but one year higher than at boards with an age limit of 70 in 2016. The 2008 versus 2016 median age differential (of three years) is highest at boards with a retirement age limit of 70. Similar observations are evident for the average age gap (of 3.4 years) at firms with a 70-year age limit. These differentials can, perhaps, be explained by a greying population of directors at firms with an age limit of 70 at a smaller universe of firms – the prevalence of companies with a retirement age of 70 has shrunk by almost half over the study period (from 9.2 percent to 4.8 percent).
Do age restrictions impact median director tenure?

Yes. Median director tenure remained fairly steady over the study period on boards with retirement policies in place. Median tenures remained constant for all of the age policy sub-groups from 2011 through to 2015. Interestingly, the median tenures on boards with age limits of 70 and 72 have stayed in lock-step over most of the study period, diverging most recently in 2016. This consistency may indicate that the retirement policies have encouraged a steady pace of boardroom turnover that, in 2016, showed signs of slowing down at firms with the lowest most prevalent age limit (of 70) and, conversely, an uptick in board turnover at companies with the highest most common retirement age policy (of 75).
Are age limits generally an effective mechanism for capping lengthy director tenure?

Yes. Boards with age limits generally have a smaller proportion of their board seats filled with directors who have served on their boards for 15 years or longer. Such extended-tenure directors currently account for roughly 20 percent of board seats at companies without age limits compared with 17.2 percent of seats on boards with such limits in place. Notably, in many of the study years, companies with age limits set at 75 reserved a bigger slice of their board seats for extended-tenure directors.
Interestingly, age limits appear to lead boards to fill a larger proportion of their seats (20 percent) with “long-tenured” directors with ten to 14 years of service.

This higher proportion of “long-tenured” directors is, of course, somewhat inevitable given the smaller proportion of directors with 15 years of service or more.
Do retirement age policies decrease the ranks of older directors?

Yes. While the share of board seats filled by seventy- and eighty-something year old directors rose over the study period for boards with or without age restrictions, the presence of a retirement policy generally reduces the proportion of directors in their seventies and eighties. There is one meaningful exception: boards with age limits set at 75 contain a higher than average number of septuagenarian directors.
Tenure Limit Policies

How prevalent are term limits?

Term limits for boardroom service remain rare at U.S. companies. Only about five percent of S&P 1500 firms had term limits in place as of their most recent AGMs. Notably, large-cap firms, which are often first adopters of many governance reforms, actually lag their mid-sized siblings in using such director tenure cutoffs. The highest usage (six percent) of term limits is found at S&P 400 mid-cap firms. Tenure guillotines are slightly less popular (5.4 percent) at large-caps and almost nonexistent (3.7 percent) at small-cap S&P 600 firms.

What are the most popular tenure limits?

The most common term limits currently in place in the S&P 1500 universe of firms are, in order of prevalence, 15 years, 12 years, and ten years. The five most popular term limits at S&P 1500 companies account for 89 percent of all term limits.

There is some differentiation with respect to term limits used within the index constituents. At S&P 400 firms, the most popular tenure limits currently are 15, ten, and 18 years, whereas at S&P 600 companies the most common board service limits are, in order, 15, 20, and ten years.

The prevalence of term limits has evolved over time, with companies typically opting for shorter term limits. At S&P 1500 firms, the mix of the most prevalent term limits has shifted from 15, 12, and 20 years, in that order, in 2008, to 15, ten, and 12 in 2015/2016 (YTD).
Do term limits shorten the typical board tenure?

Yes. The average board tenure at a company with term limits in place is substantially lower than the typical stay for directors on boards without such measures. The tenure gap is more than a year and one-half—7.1 years for term-limited boards versus 8.8 years for S&P 1500 firms without tenure restrictions.

Do term limits appear to impact average board ages?

Yes. While age is not the direct target of tenure restrictions, term limits lead to lower average board ages. The average director age on S&P 1500 company boards with term limits is more than a full year less than that of directors at boards at firms without such policies in place. Moreover, firms with term limits in place tend to have a higher proportion of board seats filled by younger directors and a lower proportion of directorships occupied by board elders.
Are term limits effective in promoting turnover?

Yes. Despite their relatively low usage, term limits appear to be highly effective in spurring boardroom refreshment. If a board’s goal is turnover, tenure limits appear to be the right tool for the job. Firms with term limits in place show a higher proportion (more than 40 percent) of "new" and "recent" directors (with zero to three-year tenures) than those without term limits (slightly above 30 percent).
Interestingly, term-limited boards also have a marginally higher proportion of directors with "long" (ten to 14 year) tenures. The tradeoff, of course, is a notably lower proportion of board members with "extended" tenures on term-limited boards. While directors with 15 years or more of service account for nearly one in five directors (19 percent) of boards without term limits, this drops to just over one in ten (12.2 percent) directors on boards with tenure cutoffs.

Do term limits disproportionally impact women directors?

- The prevalence of long-tenured female directors at S&P 1500 firms has remained relatively steady since 2008 but ticked up in 2014 and increased in 2016. S&P 500 companies have the highest proportion of female directors in the long-tenured (ten to 14 years) service category. Almost one-fifth of long-tenured directors at large-cap firms in 2016 were female—the highest prevalence over the study period.

- In the extended-tenure category, again, S&P 500 firms lead the pack with the highest prevalence of female directors with 15+ years of service in every year since 2008 suggesting boards are retaining female directors longer. The proportion of extended-tenure female directors has essentially doubled since 2008 at S&P 400 firms.
Does the length of service allowed under the term limit matter?

Yes. Simply put, relatively short permitted boardroom lifespans lead to spikes at the low end of the tenure spectrum. Ten-year tenure limits, for example, result in large clusters of directors in the one-to-three-year service range. This clustering at the low end of the experience spectrum dissipates on boards that set higher tenure limits, but the spike simply moves towards the middle with the largest proportion of directors falling into the four-to-nine-years tenure block.
While term limit policies are generally effective tools for facilitating board turnover and refreshment when board members grind up against them, they do not appear to work as well when they are not triggered. In other words, directors whose board service is not yet term-barred do not generally appear to depart from boards until their terms end. That said, some boards do seem to allow some directors to stay on boards beyond tenure limit terms. Between 2008 and 2016 YTD, 110 directors at firms with 15 year-term limits had exceeded their terms and 40 directors at companies with 20-year tenure limits served beyond their term limits—most of these board members were the same individuals from year to year, a number of whom were founders.
Are boardroom evaluation processes common?

Yes. Boardroom evaluation is close to universal practice (roughly 97 percent) at S&P 1500 firms. More than 99 percent of large-cap company boards disclose their use (although few boards disclose the outcomes of these assessments).
The highest proportion of firms without disclosed board evaluation policies fall within the S&P 600 index. So far in 2016, five percent of S&P 600 companies have no publicly disclosed board evaluation policy, down from six percent of small-cap firms in 2015. The prevalence of firms with no board evaluation policies in the S&P 400 and in the S&P 500 indexes in 2016 YTD and 2015 is approximately three and four percent and 0.8 and 1.4 percent, respectively.

What is the most common schedule for boardroom evaluations?

Annual boardroom evaluation is the norm at S&P 1500 companies. More than 90 percent of study company boards assess their performance at least once a year. In the aggregate, annual evaluations are most prevalent at firms in the S&P 500 (over 96 percent) followed by S&P 400 companies (92 percent) and firms in the S&P 600 (88 percent).

What is the most common type of evaluation?

Standalone annual board evaluations (“annual evaluation” in the charts, below) remain the most widespread practice with 48.6 of study companies using this technique. Combining these broad reviews with annual individual director assessments (“annual and individual” in the charts) is rising in popularity—with 43.4 percent of study companies conducting such two-step evaluations. ISS recorded a ten percentage point rise from 2015 to 2016 in the cohort of firms with annual director evaluations. “General evaluations” are conducted by roughly three percent of study firms making it the third-most prevalent board evaluation type. Individual evaluations occurring less frequently than annually are practiced at less than two percent of firms. Notably the increasing popular global market practice of adding periodic (triennial appears to be the norm) external, third-party assessments to annual board/director evaluations has failed to catch on in the U.S.
Do boards that do not disclose boardroom evaluations have longer tenures?

Yes. S&P 1500 firms without board evaluation policies—just four percent of firms in 2015 and three percent of firms in 2016 (YTD)—have higher average director tenures and director ages than those at boards with evaluation processes in place. For all S&P 1500 companies the average board tenure gap between firms without and with board assessments are 2.4 years in 2015 and three years in 2016 YTD.
The largest differences in average tenure between companies without and with board evaluation policies are found at mid-cap firms where the average gap in board tenure hit 3.6 years in 2016 YTD (versus a gap of 1.5 years in 2015). The average tenure gap between large-cap firms without and with board evaluation policies in 2015 and 2016 YTD is 3.7 and 2.6 years, respectively, whereas at small-cap firms the gap in 2015 versus 2016 YTD is similar – 2.2 and 2.5 years, respectively.

Average tenure at firms with no disclosed board evaluation policies in force increased across all index constituents, with the exception of large-cap firms, between 2015 and 2016 YTD, with the largest increase of 1.8 years witnessed at S&P 400 firms.

Median board tenure is also generally higher at firms without board evaluations in place and, with a median tenure of 11 years, is highest in 2016 YTD at S&P 400 firms representing a two-year increase from 2015 levels and a differential of four years vis-à-vis mid-cap firms with a board evaluation policy in place.
Do firms without boardroom evaluations have lower refreshment rates?

Yes. Firms with board evaluation policies in place have a higher proportion—by more than two percentage points—of board seats occupied by newly-appointed directors than companies without such policies.
Boards without evaluation policies also have a significantly higher proportion of directorships occupied by individuals with extended tenures (15 or more years) to the tune of ten and 15 percentage points higher in 2015 and 2016, respectively.

Study companies with board evaluation policies generally have a higher prevalence of board seats occupied by long-tenured directors (with between ten and 14 years of service) so far in 2016 than at firms with no evaluation policies – with the exception of S&P 400 and S&P 500 companies where the proportion of long-tenured directors at firms without board evaluation policies exceeds that at firms with such policies by five and four percentage points, respectively, in 2016 YTD. Similar observations are made in 2015, except at small-cap firms where the percentage of long-serving directors is marginally lower at firms without board evaluation policies. The proportion of board seats held by long-tenured directors has generally been on the decline at S&P 1500 companies with and without board assessments between 2015 and 2016 YTD; however, S&P 500 and S&P 400 firms with no disclosed board evaluation measures witnessed a 15 and four percentage point jump, respectively, in long-tenure directorships, suggesting a declining board turnover trajectory at large- and mid-cap companies.

At firms with board evaluation policies, those without an annual evaluation generally had a higher proportion of board seats held by the longest serving directors as well as by the oldest directors, suggesting that more frequent board evaluations may be a more effective tool for judging the strength and efficacy of board member contributions and competence and thus, by extension, for refreshing boardrooms.

Older directors also occupy a much higher proportion of board seats at companies with no stated board evaluation policies. S&P 1500 directorships occupied by board members in their 70s were
more than two percentage points higher in 2015 and more than four percentage points higher at firms without board evaluation policies in 2015 and 2016 YTD respectively, compared to those without policies. Similarly, directors aged 80 years and above were more than twice as prevalent at firms without board evaluation polices than those with such policies in both 2015 and 2016 YTD.

The distinction between board turnover rates at firms with and without board evaluation policies is starkest where board seats are occupied by directors with extended tenures – i.e., where board service is at least 15 years. In this board tenure category, firms without board assessment programs consistently have much higher proportions of extended-tenure directorships – a 15 percentage point differential among S&P 1500 companies in 2016. This differential (of seven percentage points) is lowest at large-cap firms, where 23 percent of directorships at firms without evaluation policies are associated with tenures of 15 or more years in 2016 YTD – compared to over 34 percent of directorships at both mid- and small-cap firms.

Do boardroom evaluations impact average director age?

Yes. Companies with no board assessment process in place generally have higher average director ages, over the study period, compared with firms that perform such assessments. Similar observations generally hold true with respect to median director age, except that median age largely remained unchanged at both firms with and without board evaluation policies between 2015 and 2016 YTD. These findings suggest that firms with no board assessment policies are either holding on to their older board members longer or that they are onboarding older directors at a higher rate than at firms with board review policies.
Do board evaluation policies limit the prevalence of older directors?

Yes. S&P 1500 composite index firms (and mid-cap firms in particular) with no stated board evaluation policies in force generally have a higher proportion of directorships associated with individuals in the 70 – 79-year age group than companies with such policies.

The prevalence of directors in their 70s at S&P 400 mid-cap firms without board assessment policies increased by four percentage points between 2015 and 2016 YTD compared with a roughly one
percentage point increase for firms with board assessments. At mid-cap firms the prevalence of septuagenarian-occupied board seats at firms without board appraisals (29 percent of seats) surpassed that at firms with such appraisals in place by ten percentage points – the highest differential across all indexes examined.

The percentage of directorships tied to individuals aged 80 years and above at S&P 1500 firms without board evaluation policies is more than twice that at index firms with evaluation policies. Small-cap firms sport the highest proportion of board seats associated with directors in this age category (over five percent of directorships in 2016 YTD) followed by mid-cap firms (more than two percent of directorships in 2016 YTD). Interestingly, no large-cap firms without evaluation policies had board members aged 80+.

In sum, these findings tied to directorships associated with high board member ages suggest that board performance review policies at mid-cap firms appear to be effective at increasing board turnover for older directors which, in turn, provides opportunities for refreshing boards with younger directors.
ANNUAL OR INDIVIDUAL ASSESSMENT AND EXTERNAL ASSESSMENT EVERY THREE YEARS

% OF BOARD SEATS HELD BY DIRECTORS AGED 80+

0% 0% 0% 0% 3.1% 3.4% 1.3% 1.3% 2.1% 2.1% 3.8% 3.9% 1.8% 1.7%

ANNUAL OR INDIVIDUAL (NOT ANNUAL) GENERAL EVALUATION ANNUAL AND INDIVIDUAL EVALUATION NO EVALS WITH EVALS

2015 2016 YTD

ANNUAL OR INDIVIDUAL (NOT ANNUAL) GENERAL EVALUATION ANNUAL AND INDIVIDUAL EVALUATION NO EVALS WITH EVALS

2015 2016 YTD

Board Evals Vs. Directors Aged 80+: S&P 1500
Part III: Other Governance Factors Impacting Board Refreshment

Refreshment trends on key board committees.

Audit Committees

Does service on audit committees correlate to longer board tenures for directors?

No. While audit committee members’ average board tenure at S&P 1500 firms steadily increased from 2008 until 2012 (and have remained stable since that time), their typical boardroom stays (7.9 years in 2016 YTD) run shorter than the average tenure for all directors (8.7 years).

The average board tenure of audit committee chairs (9.4 years) at S&P 1500 companies, however, is higher than average committee member board tenure and the typical director.
The highest percentage of audit committee members at S&P 1500 companies has board service of between four and nine years (i.e., “rising” directors), but the prevalence of directors in this tenure category has also witnessed a sharp decline from a crest of almost 45 percent of committee memberships in 2012 to 32 percent in 2016. The percentage of audit committee memberships associated with more than ten years of board tenure increased from 28 percent in 2008 to 35 percent in 2016.

The proportion of audit committee members with service of between one and three years (recent appointees) has dipped by eight percentage points between 2008 and 2013, but the prevalence of recently appointed audit committee members has since been on the rise, increasing to one quarter of all memberships in 2016.

Audit panels at S&P 1500 firms have witnessed the highest infusion of new members in 2016 when roughly eight percent of all memberships were associated with board tenures of less than one year, compared with approximately three percent of all memberships in 2008 – a more than two-fold increase in new faces.

The prevalence of S&P 1500 audit committee chairs with board service of between four and nine years has declined steadily from a peak of about 55 percent of chairpersonships in 2012 to 37 percent in 2016. The proportion of recently appointed (between one and three years of board tenure) committee chairs has risen from ten percent of chairpersonships in 2012 to 16 percent in 2016, with much of this refreshment taking place at S&P 400 companies. The proportion of new committee chairs at S&P 1500 firms remained below two percent until 2016, suggesting a strong preference for continuity over fresh faces for committee chairs.
Is the age of audit committee members rising?

Yes. The average age for audit committee members at S&P 1500 firms shows a higher upward trajectory than average tenure. Average audit committee member age at S&P 1500 firms increased from 61.4 years in 2008 to 63.3 years in 2016 (YTD). Average audit committee member age showed more differentiation amongst S&P 1500 constituents prior to 2013, but not much variation since
that time. The average age of audit panel members has generally been highest at S&P 400 and S&P 500 firms over the study period.

The increase in the average age of audit committee chairs also travels on a steep upward trajectory, increasing from 62 to 65 years between 2008 and 2016 at S&P 1500 firms. Average audit committee chair age has historically been much higher at S&P 500 firms prior to 2013 but there has not been much differentiation in average age amongst index constituents since that time.
While declining incrementally in prevalence since 2012, audit committee members in their 60s remain by far the most prevalent age grouping in the S&P 1500 universe of firms. Sixty-something-year-old directors account for 48 percent of all audit committee memberships, on average, over the study period.

Directors aged 50 to 59 years of age represent the next most prevalent age range for audit committee members at S&P 1500 firms with an average of 28 percent of memberships. The prevalence of S&P 1500 company audit committee members in their 50s has declined from 29 percent of all memberships in 2008 to 27 percent in 2016.

Directors in their 70s filled approximately 17 percent of audit panel seats on average over the study period. The proportion of audit committee members in their 70s has seen a steady increase from about 13 percent of memberships in 2008 to 20 percent in 2016. At S&P 600 firms, the rise of septuagenarians is especially evident with an almost nine percentage point increase in prevalence over the study period, to 22 percent of committee memberships in 2016 YTD.

Directors aged 80 and above are rare audit panel participants, accounting for less than two percent of committee memberships, on average.

The youngest cadre of audit committee members (those below 50 years of age) has been on the decline, with the prevalence of directors in this age category dropping by half from roughly eight percent of all memberships in 2008 to about four percent of memberships in 2016.

Over half of audit committee chairs, on average, are in their 60s and the prevalence of chairs in their 50s and below 50 have both been in decline (by seven and four percentage points, respectively) over the study period. Conversely, chairs in their 70s have burgeoned with an increase in prevalence of almost 11 percentage points over the study period.
Compensation Committees

Does service on a compensation committee correlate to longer board tenures for directors?

No. While average compensation committee tenure at S&P 1500 firms has risen since 2008, index firms experienced a slight drop—to 8.8 years, roughly the same as the average tenure for all S&P
1500 directors—in compensation committee average tenure in 2016 suggesting increased refreshment on the committees.

However, rising tenure on pay panels is evident at S&P 400 firms where average committee member tenure has been highest across all years reviewed. In contrast, S&P 500 firms generally sport the lowest average pay panel member tenures, although average tenure at large cap firms has been on the rise over the study period.

Compensation committee chair average tenures at S&P 1500 firms are noticeably higher than that of committee members and are generally highest at S&P 400 companies.
On an average basis over the study period, 39 percent of compensation committee members have served on the board for between four and nine years (“rising directors”) the highest tenure prevalence, followed by 21 percent of members with between one and three years of board service (recent appointees), and 20 percent of committee members that have served for between ten and 14 years (long-tenured), 17 percent that have a board tenure of 15 or more years (extended-tenure), and three percent of committee members with less than one year of board service (new appointees).

That said, the proportion of “rising” directors has been on the decline, falling from a high of 42 percent of memberships in 2011 to 33 percent in 2016, and so has the prevalence of recent appointees, which has dropped from 25 percent in 2008 to 21 percent in 2016. The proportion of long-tenured committee members increased from 18 percent in 2008 to 23 percent in 2015, and then dropped slightly to 22 percent in 2016, whereas the prevalence of extended-tenure committee appointees has increased from 15 percent in 2008 to 18 percent in 2016. The prevalence of compensation committee members newly appointed to the board has also risen from a low of two percent in 2009 to approximately six percent in 2016. This shift in board tenure demographics suggests that longer compensation committee member tenures are growing at a faster clip than shorter tenures, hinting at a slowdown in the turnover rate on pay panels.

While the board tenure distribution trends for compensation committee chairs are directionally similar to those for committee members, there is a notably higher prevalence of “rising” directors, long-tenured and extended-tenure chairs and, conversely, a notably lower proportion of committee chairs in the lower board tenure categories (new and recent chairs) pointing to a strong inclination by firms to keep committee chairs in place for longer periods of time.
Is the age of compensation committee members rising?

Yes. The average age of compensation committee members at S&P 1500 companies has risen steadily, from roughly 62 years in 2008 to 64 years in 2016, with the highest rate of increase taking place between 2008 and 2013.
The average age of committee chairs has also increased, from 62 years in 2008 to 65 years in 2016. The age of pay panel chairs has typically been highest at S&P 500 companies, although the average age gap between S&P 500 and S&P 400 firms has diminished significantly in recent years.

Compensation committee members in their 60s account for the largest proportion (51 percent on average) of committee memberships at S&P 1500 firms over the study period, followed by about 23 percent of members in their 50s, 20 percent of members in their 70s, 5 percent of members under 50 and approximately two percent of members over 80 years of age.
The prevalence of S&P 1500 company compensation committee members in their 60s has been in decline—falling from more than half of pay panelists in 2011 to 47 percent in 2016. The proportion of members in their 50s has declined from 28 percent in 2009 to 25 percent in 2016. The share of committee memberships filled with directors who are younger than 50 has decreased from eight percent in 2008 to just about five percent in 2016.

The oldest compensation committee members have picked up a larger number of seats since 2008. The proportion of committee members in their 70s has risen steadily from 14 percent of all memberships in 2008 to 22 percent in 2016, and committee members aged 80 years and up have increased in prevalence by one percentage point.

The proportion of directors aged 60 is highest at S&P 500 firms (52 percent on average over the study period) as is the cohort of committee members in their 50s from 2008 to 2012, after which S&P 600 firms have the highest prevalence of members in this age category. S&P 600 small cap companies also have the greatest incidence of directors under 50 over the study period and also generally have the highest proportion of committee members aged 80 and above. Directors in their 70s are most prevalent at S&P 600 firms as well.

Interestingly, small cap firms tend to have both the youngest and oldest compensation committee members. The prevalence ratio of younger directors (those under 60 years of age) and older directors (those aged 70 or up) at S&P 600 firms is 32/26 in 2016 (vs. 37/17 in 2008) compared with 28/23 and 27/23 at S&P 400 and S&P 500 companies, respectively in 2016. The ratios reflect committee member age prevalence in percentage terms.

On an average basis, over the study period, more than half of compensation committee chairs at S&P 1500 firms are in their 60s, but their prevalence has declined from a high of 52 percent in 2010 to 50 percent in 2016. Pay panel chairs in their 50s have a higher prevalence (23 percent on average) than those in their 70s (20 percent). The proportion of directors in their 50s held a larger share of chairpersonships than directors in their 70s until 2012, and directors in their 70s have chaired the committees in higher proportions since 2014, following a more even mix of committee chairs in their 50s and 70s in 2013. ISS observed the highest prevalence of chairpersonships held by board members aged 80 and above in recent years – as many of three percent of committee chairs in 2015 compared to one percent in 2008. These committee chair age distribution trends hint at committee refreshment trends that reflect a shift in predilection by S&P 1500 firms for older, more experienced chairs in the last three to four years than was the case previously, as the demands and focus on pay panels have intensified following the advent of say on pay in 2011.
Nominating Committees

Does service on a nominating committee correlate to longer board tenures for directors?

Yes. Boardroom stays by members of nominating panels (9.2 years, on average) tend to be longer than the typical S&P 1500 director tenure (8.7 years). While nominating committee members'
average tenure at S&P 1500 firms rose for most of the study period, average stays by committee members declined in 2015 and 2016, suggesting more refreshment in recent years.

S&P 400 companies’ directors have had the longest average nominating committee tenures in all years reviewed; S&P 500 companies have the lowest tenure averages. The gap in average tenure between the mid-cap firms and the large- and small-cap index constituents has shrunk considerably since 2012-2013, as average tenure has increased over the last few years.

Nominating panel committee chairs have much higher average tenures than their fellow committee members with a gap of nearly two years. Average chair tenures have been highest at S&P 400 firms until 2013, after which S&P 500 firms have the highest average tenures. This large-cap gap has widened over the intervening years to hit the highest average tenures seen in the study period, suggesting that large cap-firms are holding on to their nominating committee chairs for much longer - 11.4 years on average.
Directors with board tenures of between four and nine years ("rising directors") account for the largest proportion of nominating committee members (38 percent on average over the study period) followed by long-tenured directors with between ten and 14 years of tenure (21 percent on average), directors with between one and three years of board service (recent board appointees) and extended-tenure directors with at least 15 years of tenure (19 percent each), and then by newly appointed directors with less than one year of service (three percent).

The proportion of long-tenured committee members has risen in almost every year during the study period and similar trends are also observable for extended-tenure committee members, save for a decline in 2015 and 2016 that corresponds with a relative uptick in the prevalence of new directors, particularly in 2016. The proportion of new board appointees sitting on nominating committees hit an all-time high in 2016 (six percent – almost triple the prevalence in 2008).

These observations suggest that the nominating committee member refreshment rate is much lower than the committee member retention rate at S&P 1500 firms. The prevalence mix of new/recent directors (i.e., those with less than four years of board service) on nominating panels has not changed much between 2008 and 2016 (roughly 25 and 26 percent, respectively) whereas the proportion of committee members with ten-plus years of board tenure has shifted from 36 percent in 2008 to 43 percent in 2016.

Nominating committee chairs have a higher prevalence of directors with ten or more years of board tenure compared with committee members, and a much lower proportion of directors in the low-tenure categories (i.e., less than four years), suggesting much lower refreshment rates amongst committee chairs in the S&P 1500 universe of firms. To exemplify this observation, consider that the prevalence of low-tenure nominating committee chairs has remained relatively static from 2008 to
2016 (at 13 and 14 percent, respectively), whereas the proportion of nominating panel chairs with ten-plus years of board tenure has surged from 47 percent in 2008 to 54 percent in 2016.

Is the age of nominating committee members rising?

Yes. The average age of nominating committee members at S&P 1500 companies has been on the rise over the study period and represents the highest average of the three board panels reviewed.
Committee members’ average age increased from 62 in 2008 to 64 in 2016, but the rate of growth fell from one year, on average, every three years from 2008 to 2011, to one year, on average, every four years between 2011 and 2015. S&P 400 firms boast the highest average committee ages followed, in most years, by S&P 500 firms.

Nominating committee chair average ages are, predictably, higher than the average age of committee members and have been on an upward trajectory since 2008 increasing at a rate of one year on average every four years. S&P 500 firms have the highest committee chair average ages – 66 years in 2016. While average nominating committee chair age is the highest of all board committee chairs studied, the rate of increase in average age for nominating committee members is slower than the rates of increase in average age for audit and compensation committee chairs of roughly one year on average every three years.
Directors in their 60s supply the biggest proportion of nominating committee memberships at S&P 1500 companies (an average of 49 percent over the study period) although the prevalence of directors in this age category has generally been in a slight decline over the years reviewed.

The next most frequently represented age categories are directors in their 50s (an average of almost a quarter of all memberships), 70s (20 percent), sub-50 year olds (five percent) and 80 years and up (two percent).

The prevalence of seventy-something-year-old directors rose from 16 percent of committee memberships in 2008 to just under one-quarter (23.4 percent) in 2016. The proportion of committee members aged 80 or higher has also increased marginally over the study period, from roughly one percent to slightly over two percent.

On the other hand, the prevalence of committee members in their 50s declined from more than 26 percent in 2008 to about 23 percent in 2015-2016. Sub 50-year-old committee members’ share of seats dropped from upwards of seven percent to roughly four percent over the years studied.

On average, more than half of nominating committee chairs at S&P 1500 companies over the study period are in their 60s, whereas the next highest concentration of committee chairs is those in their 70s (23 percent on average), followed by those in their 50s (21 percent), whereas, on average, four percent of chairs are aged less than 50 and two percent of chairs are aged 80 and above.
The prevalence of seventy-something year old nominating committee chairs has increased from 18 percent in 2008 to 27 percent in 2016. The emergence of older nominating committee chairs is particularly striking in light of the prevalence mix of younger directors (less than 60 years of age) and that of older directors (aged 70+) practically undergoing an inversion – shifting from 27/20 in 2008 to 22/29 in 2016. These ratios reflect committee chair age prevalence (i.e., ages<60/70+) in percentage terms. The increased appointment of older directors on nominating panels is likely to have a lasting impact on board composition and refreshment in coming years, as well as how rapidly fresh, contemporary and/or technologically-savvy perspectives and strategies are embraced by boards.
Which of the three key boardroom committees attracts the largest number of women?

Female directors are fairly evenly spread across the three key boardroom committees. Somewhat ironically, in light of stagnant gender diversity levels, women are actually slightly more likely to serve on nominating/governance panels (and as their chairs) than they are to serve on audit or compensation committees.

Audit Committees

As a percentage of total board seats occupied by female directors, the proportion of female directors sitting on audit committees at S&P 1500 firms did not change much between 2008 and 2015-2016 (YTD), hovering at between 44 to 46 percent. There has, however, been more variation with respect to the percentage of women serving on audit committees at S&P 500 and S&P 600 firms over the study period.
Women have chaired audit committees at S&P 1500 firms at an increasing rate since 2008, with the ratio of female audit committee chairs to that of total female-occupied board seats increasing by almost two percentage points between 2008 and 2015. The highest prevalence of female audit committee chairs in recent years has been at S&P 400 and S&P 600 firms. S&P 500 firms have historically had the lowest proportion of women chairing audit committees. Relative parity with the other index constituents was attained briefly in 2012, but the large cap firms have since trailed other index members.
Compensation Committees

As a percentage of total board seats occupied by female directors, the prevalence of female directors serving on compensation committees at S&P 1500 firms has remained relatively steady (42 percent in most years) over the study period. Exceptions arose in 2009 and 2010 when the prevalence of female directors on these committees was slightly higher and in 2016 when the prevalence of female compensation committee members reached an all-time high.

The proportion of women serving on compensation committees has consistently been lowest at S&P 500 firms over the study period.

The proportion of female compensation committee chairs at S&P 1500 firms rose between 2008 and 2012 at most index firms, but witnessed a sharp decline in 2013 and has generally been increasing incrementally since. The deficit of pay panel female committee chairs is especially pronounced at S&P 500 companies where the prevalence of female chairs is an average of five percentage points lower than at S&P 400 companies and an average of almost seven percentage points lower than at S&P 600 companies over the study period.
Nominating Committees

The prevalence of female directors on nominating committees as a function of total directorships held by women at S&P 1500 companies dropped steadily from 48 percent in 2008 to 45 percent in 2014 before climbing up to 46 percent in 2015-2016. Much of this decrease can be explained by a sharp reduction of female nominating committee members at S&P 400 firms where the proportion of women on the committees declined from almost 50 percent in 2008 to 43 percent in 2015, before
ticking upward to 46 percent in 2016. Similarly, at S&P 500 companies, the prevalence of female nominating committee members dipped from 47 percent of memberships in 2009 to 43 percent in 2014 before climbing up to 44 percent in 2015-2016. The reduction of female directors on nominating committees at the mid- and large-cap companies has been offset by a healthy prevalence of women on nominating committees at S&P 600 small-cap firms where the proportion of female committee members is notably higher and has averaged almost 50 percent over the study period during which it has largely remained unchanged.

Women are much more likely to chair nominating committees at S&P 600 small-cap firms than at either S&P 400 or S&P 500 firms in practically all years examined. Large-cap companies had a higher prevalence of female nominating committee chairs than mid-cap firms between 2008 and 2012, after which mid-cap companies have had a larger proportion of female committee chairs than large-cap firms.

Across all board committees examined, on an average basis, women are almost twice as likely to chair nominating committees as compensation committees and almost as likely to chair audit committees as nominating committees. In the aggregate, these observations point to greater gender diversity on nominating panels much further down the market capitalization chain and outside the large-cap universe of firms at which gender diversity levels are usually highest but where female directors tend to sit on multiple outside boards.
Which of the three key boardroom committees attracts the largest number of minority directors?

Ethnically or racially diverse board members are more likely to serve on nominating panels than audit or compensation committee. Such minority directors are much less likely to serve on compensation committees than either nominating or audit panels. They also are much less likely to serve as the chair of an audit panel than as the head of a compensation or nominating committee.

For context, over the study period, an average of 9.4 percent of S&P 1500 board seats are held by minority directors, whereas the average prevalence at S&P 500, S&P 400 and S&P 600 firms is 13, 8, and seven percent, respectively.

Audit Committees

The prevalence of minority directors on audit committees at S&P 1500 companies has remained relatively steady since 2008, ranging from 39 percent to 42 percent of all board seats held by minorities. Except for in the earlier years of the study period, there is not a significant differentiation in representation on audit committees by minority directors amongst the respective index constituents.
The prevalence of minorities chairing audit committees at S&P 1500 firms was on the decline between 2009 and 2012, particularly at S&P 400 companies, but has since rebounded and remained relatively stable in recent years. Again, the incidence of minority board member audit committee appointments was higher at S&P 500 firms in all years reviewed.
The prevalence of minority directors on compensation committees at S&P 1500 companies has hovered between 36 percent and 40 percent of all board seats held by minorities over the study period.

The prevalence of ethnic/racial minority directors chairing compensation committees generally grew over the study period across all index constituents. In the S&P 1500 composite index, the prevalence of minority committee chairs rose from five percent of minority directorships in 2008 to over eight percent in 2016.

S&P 500 companies have the lowest proportion of minority compensation committee chairs, but the proportion of minority chairpersonships at large cap firms is higher than that of female chairpersonships.
Nominating Committee

Service by ethnically and racially diverse directors on nominating committees at S&P 1500 firms has slowly increased in prevalence over the study period—from 42 percent of committee members as a percentage of all minority directorships in 2010 to 45 percent in 2016.

In conclusion, minorities are more likely to be appointed as nominating committee chairs (9.4 percent on average) than they are likely to be appointed to chair compensation committees (seven percent) or audit committees (six percent).
Board Independence

Is the prevalence of independent directors on the rise?

Yes. Thanks to stock exchange listing requirements and shareholder pressure, director independence levels at companies in the S&P 1500 continue to rise to new heights. The proportion of S&P 1500 board seats occupied by independent (as defined by ISS) directors has increased by
almost five percentage points to 81.5 percent at the study companies over the 2008-2016 study period. Conversely, the combined board seat shares for inside and affiliated outside directors in the study universe has shrunk—from 23.2 percent in 2008 to 18.5 percent in 2016 (YTD).

Both average and median board independence at S&P 1500 companies show a steady upward rise between 2008 and 2016, increasing by five and six percentage points to 81.1 percent and 83.3 percent, respectively, in 2016. The growth rate in average and median independence levels was highest at S&P 600 firms over the study period.
### S&P 1500: Average Board Independence

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Board Independence</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>74%</td>
</tr>
<tr>
<td>2009</td>
<td>75%</td>
</tr>
<tr>
<td>2010</td>
<td>76%</td>
</tr>
<tr>
<td>2011</td>
<td>77%</td>
</tr>
<tr>
<td>2012</td>
<td>78%</td>
</tr>
<tr>
<td>2013</td>
<td>79%</td>
</tr>
<tr>
<td>2014</td>
<td>80%</td>
</tr>
<tr>
<td>2015</td>
<td>81%</td>
</tr>
<tr>
<td>2016</td>
<td>82%</td>
</tr>
</tbody>
</table>

### Average Board Independence: S&P 500

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Board Independence</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>81.8%</td>
</tr>
<tr>
<td>2009</td>
<td>81.8%</td>
</tr>
<tr>
<td>2010</td>
<td>83.3%</td>
</tr>
<tr>
<td>2011</td>
<td>84.6%</td>
</tr>
<tr>
<td>2012</td>
<td>84.6%</td>
</tr>
<tr>
<td>2013</td>
<td>85.7%</td>
</tr>
<tr>
<td>2014</td>
<td>85.7%</td>
</tr>
<tr>
<td>2015</td>
<td>87.5%</td>
</tr>
<tr>
<td>2016</td>
<td>87.5%</td>
</tr>
</tbody>
</table>

The graphs above illustrate the trend of average board independence for S&P 1500 and S&P 500 firms from 2008 to 2016.
Over the study period, the prevalence of study companies with lower levels of board independence has gradually declined, whereas the percentage of firms with higher levels of independence has generally risen. In 2016, about 79 percent of S&P 1500 companies had boards that were at least 75 percent independent, representing an increase of about 16 percentage points from 2008 levels. Much of this gain stems from S&P 600 companies, which experienced a 20-percentage point gain in this independence category between 2008 and 2016 (approximately 73 percent of firms in this
category). That said, S&P 500 firms sport the largest proportion of firms (85 percent) in 2016 where at least three-quarters of the board was independent.

At S&P 500 firms, the proportion of firms with board independence levels between 75 percent and less than 90 percent has been on the decline, decreasing by five percentage points over the study period, as boards at large-cap firms have increasingly shifted to being 90-plus percent independent. The prevalence of S&P 500 companies exhibiting this highest level of board independence increased by 18 percentage points between 2008 and 2016, representing the largest increase in this independence category.
Does limiting refreshment help to preserve high levels of independence?

Board independence levels appear to rise even in the absence of board refreshment. Non-refreshed boards at S&P 1500 firms—those with zero “new” directors in a given year—actually experienced gains in the “highest” (i.e., 90 percent-plus independence) category over the study period.
The addition of one or two new directors on the typical S&P 1500 board appears to have a positive impact on board independence levels. Study companies with at least ten percent “new” directors on their boards in a given year generally moved towards higher board independence levels. The biggest gains in board independence over the study period appeared at firms in the “high” (i.e., 75 percent to 90 percent independence) and “highest” independence categories.

Study companies with “rapid” board refreshment rates—where “new” nominees comprised at least one-quarter, one-third or one-half of the entire board in a given year—offer more mixed results with respect to board independence. While these firms generally shift towards the “high” and “highest” board independence categories, independence appears to plateau at the high level of independence.
Widening the lens to observe study companies with no “recent” board nominees (i.e., directors with between one and three years of tenure), there is an upward trend with respect to both the “high” and the “highest” levels of board independence during the first six years of the study period, but this trend thereafter dips downward. The degree of decline at the “high” independence thresholds is particularly evident at S&P 500 firms.

On average, the highest prevalence (9.3 percent) of firms in this tenure category falls under the “high” board independence group (i.e., boards that are at least 75 percent but less than 90 percent independent).

The findings suggest that, at firms with no “recent” board additions, the impact on high independence levels is somewhat delayed and the effect less immediate than that at firms lacking “new” board nominees. That said, notwithstanding this observed lag, the absence of recently appointed directors on boards still appears to have an eventual dampening effect on board independence.
The addition of some “recent” nominees generally appears to have a positive effect on overall board independence. Independence trends at S&P 1500 companies whose boards had at least ten percent of the board constitute “recent” nominees are generally opposite to those found at firms with no such director appointments. Companies with recent board appointees first witnessed slight increases in prevalence in the “high” board independence category and then generally experienced declining independence levels for a number of years before a shift to rising independence levels.
Where “recent” board nominees constituted at least 25 percent, 33.3 percent, or 50 percent of the board, the proportion of S&P 1500 firms with “high” board independence levels (the most prevalent cohort) generally exhibited a downward trajectory over the initial five to six years of the study period, before inflecting upward for the remainder of the review period. A similar latency was noted with respect to an increased prevalence of firms with independence in the “highest” board independence (at least 90 percent) category.
Does extending directors’ tenures help boards to maintain high levels of independence?

Yes. Long director tenures appear to have a positive relationship with high degrees of board independence.

S&P 1500 companies with no “long-tenured” directors (i.e., those that have served on the board for between 10 and 14 years) have generally experienced declining levels of independence in the “high” board independence category (the most prevalent category in this tenure group with 14 percent of firms on average) and slightly rising proportions in the “highest” independence class (that accounts for an average of three percent of firms). Much of this rise in prevalence can be attributed to an increasing share of S&P 500 firms with boards that are at least 90 percent independent. Collectively, just about 16 percent of S&P 1500 firms had boards with at least 75 percent independence in 2016, down more than three percentage points from 2008 levels. At firms with zero “long-tenured” directors in the boardroom, those with less than majority-independent boards accounted for less than one percent of firms, on average.
The proportion of S&P 1500 firms whose boards comprised at least ten percent “long-tenured” directors exhibited an upward trajectory with respect to higher levels of board independence over the study period, and, conversely, a declining prevalence in relation to lower board independence levels. In fact, the percentage of firms with the “highest” degree of independence in this tenure grouping more than doubled between 2008 and 2016 (to 16 percent), and almost tripled at S&P 600 small cap firms (to eight percent in 2016).

In the aggregate, the proportion of S&P 1500 firms in this tenure category whose boards were at least 75 percent independent increased by 19 percentage points over the study period to 57 percent of companies in 2016, with the largest jump (of about 22 percentage points) witnessed at the small-cap firms.
The prevalence of study companies at which the proportion of board nominees with between ten and 14 years of service was at least 25 percent, 33.3 percent, or 50 percent of the board generally depicts an upward trend for the “high” and “highest” independence threshold.

These conclusions lend further credence to the earlier finding that long (as defined in this study) director tenures generally do not impair high board independence levels, with the caveat that higher proportions of directors with lengthy boardroom tenures tend to heighten the occurrence of low board independence levels.
A high prevalence of directors with “extended” board tenures (i.e. those with at least 15 years of service) has a dampening effect on overall board independence.

Firms with zero “extended-tenure” directors have declined in proportion in the “high” board independence category (representing 19 percent of firms on average over the study period – the largest share of firms) and increased in prevalence in the “highest” board independence category (that accounts for an average of six percent of firms – the second largest share of firms).

Much of this increase is again attributable to the rising proportion of S&P 500 companies whose boards are at least 90 percent independent – that, in 2016, is essentially equal to the category of firms where boards are less than 90 percent but at least 75 percent independent.

While the absence of extended-tenure directors results in a slight decline in the proportion of firms with higher board independence levels over the study period, there is a much larger decline (representing a differential of more than six percentage points) for firms with lower independence levels.
The prevalence of study companies whose boards constituted at least ten percent of directors with extended tenures and that had higher levels of board independence follows an upward trajectory over the study period. Notably, the percentage of S&P 1500 firms with the “highest” degree of independence in this tenure category more than doubled over the study period (to 12 percent in 2016), and almost quintupled at S&P 600 small cap firms (to seven percent in 2016). Moreover, the prevalence of firms with “high” independence levels increased by about nine percentage points (to 36 percent of firms) in 2016. The amalgamated proportion of study companies whose boards were at least 75-percent independent increased by 16 percentage points over the study period to over 48 percent of companies in 2016, with the largest increase (of 21 percentage points) witnessed at S&P 600 firms.

There is a much higher proportion of firms with lower levels of independence in this extended tenure category compared to the other tenure groupings (except for the “recent” board appointments category), a finding that serves to further highlight the apparent relationship between extended tenures and a higher incidence of lower board independence.
The prevalence of S&P 1500 companies where the percentage of board nominees with at least 15 years of tenure is significant—at least 25 percent, 33.3 percent, or 50 percent of the board—largely trends upward over the study period for the “high” and “highest” independence thresholds. The prevalence of firms in the lower board independence categories generally slopes downward between 2008 and 2016.
Board Size

Do board size limits retard the process of board refreshment?

Board size limits do not appear to handcuff boards with respect to board refreshment. Over 90 percent of firms in the S&P 1500 composite index changed the size of their boards between 2008 and 2016 YTD. Almost all (98 percent) of S&P 500 companies have changed
their board size over this period whereas 93 percent and 88 percent of S&P 600 and S&P 400 companies, respectively, have altered their board size.

Reflecting steady turnover and refreshment, nearly 44 percent of S&P 1500 firms changed their board size three or four times (the most prevalent frequencies for changes) between 2008 and 2016 YTD. Nine firms, representing less than one percent of the universe of S&P 1500 firms, modified the size of their board eight times - or in every year of the study period.
On average, more than one-half (51.3 percent) of the firms in the S&P 1500 that altered their board size over the study period increased the size of their boards. S&P 500 companies featured the highest average proportion (96 percent) of firms with increases where board size changed between 2008 and 2016 YTD, followed by S&P 400 firms (93 percent) and then by S&P 600 companies (90 percent).

By contrast, on average, close to one-half (48.7 percent) of the firms in the study universe decreased their board size.
Does expanding the size of the board boost gender diversity?

Yes. Expanding the size of the board appears to be an effective strategy for boosting gender diversity. The proportion of S&P 1500 firms that added one or more female directors after expanding the size of their boards generally rose over the study period. The biggest gains in diversity via board size expansion occurred in 2015 when more than one-third (nearly 36 percent) of the S&P 1500 boards that added seats to their boards filled the new slots with female nominees – almost identical prevalence levels as in 2016.

Over the study period, large-cap companies’ directors were more likely than their peers at smaller firms to add women to their boards after they expanded the size of their boards. In 2013 and 2015, more than 40 percent of board expansions by large-cap boards led to gender diversity gains. Notably, middle-market (S&P 400) firm boards also cleared this 40 percent hurdle in 2015.

The vast majority of firms that have enlarged their boards did not shed female directors as a result. The proportion of firms where female directors departed following an increase in board size, however, has been rising in recent years, particularly at S&P 400 companies.
By contrast, board size shrinkage appears to erode gender diversity. Over the study period, an average of 14 percent of S&P 1500 firms that downsized their boards lost female board members—with the highest rate of attrition (17 percent of firms) of female directors occurring in 2011. Conversely, a lower proportion of firms (five percent on average) in the S&P 1500 composite index added female directors to their boardrooms following board size compression.
Do board size changes boost ethnic/racial diversity in the boardroom?

Yes. Board size increases appear to open seats for ethnic/racial minority directors. While the proportion of S&P 1500 firms that augmented the size of their boards and added ethnic/racial minority directors ebbed and flowed over the review period, the gains were small and steady. The gains for these racially and ethnically diverse candidates, however, pale in comparison to the boost that board size increases provide to women directors.
In all years examined, S&P 500 companies have had the highest incidence of adding minority directors following a board size expansion. The peak year was 2013, when almost 28 percent of all large-cap firms that increased the size of their boards also added minority directors to their rosters.

While a minority of S&P 1500 firms (just two percent on average over the study period) have enlarged their boards and lost minority directors, the proportion of firms where minority directors have departed following a board size increase has risen in several years, with the highest increase witnessed in 2016.
Boards do not appear to increase in size to simply tick off more boxes by adding ethnically or racially diverse women to their boards. S&P 1500 companies that expanded the size of their boards added female ethnic/racial minority candidates to their boards at a slower pace than the addition of either women or minority directors. Between 2008 and 2016 YTD, on average, five percent of firms added female minority directors to their boards, with the highest prevalence occurring in 2015 (seven percent of firms).
Few S&P 1500 companies (less than one percent on average) increased their board size and lost a female minority director.

Shrinking board size appears to be a warning sign with respect to raising levels of ethnic/racial diversity on boards. Over the study period, 12 percent of S&P 1500 firms, on average, decreased their board size and lost minority board members as a result.
A much lower proportion of firms (3.6 percent on average) in the S&P 1500 composite index added ethnically diverse directors to the ranks of their boards subsequent to board size contractions.

Less than three percent of S&P 1500 firms, on average, contracted their boards over the period under review and lost female minority board members. The highest incidences of female minority director departures following board size compression were witnessed at S&P 500 firms (four percent, on average) and the lowest rate of departures occurred at S&P 600 companies (one percent on average).

The proportion of S&P 1500 firms that reduced board size and gained female minorities also remains low (0.9 percent on average over the study period). It is highest at S&P 500 firms, is virtually non-existent at S&P 600 companies with the exception of 2015, and it has been on the rise in recent years at S&P 400 companies – where, conversely, the prevalence of firms losing female minorities following board downsizing has generally been on the decline.
Do directors make *ad hoc* changes in board size to bring on younger directors?

No. Boards do not appear to be targeting younger directors in any systematic fashion. At S&P 1500 firms, new directors joining boards following increases in board size between 2008 and 2016 YTD vary in age from 80 to 27. Focusing on the most prevalent ages in each of the years under review (in ordinal rank), 61, and 59 and 54 (tied) are the most frequently occurring ages for new nominees.
following board expansions over the study period. This trio of fairly wide-ranging ages is followed in popularity by some ages on the younger side of the spectrum—a three-way tie between 55, 56, and 57.