

CRIST | KOLDER ASSOCIATES Volatility Report 2020

CRIST|KOLDER Volatility Report

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Methodology

The annual Crist|Kolder Volatility Report of America's Leading Companies examines the backgrounds and measures the turnover of C-Suite executives in a portfolio of 674 of America's leading companies from the Fortune 500 and the S&P 500 Indexes.

Crist|Kolder Associates examines each of the portfolio companies individually, noting personnel and organizational changes in the CEO, CFO, and COO roles. Each executive's background is explored, including the path taken to get to their current role: industry background, functional experience, and education. This includes demographic information such as age, gender, and race.

This is the seventeenth year of the Crist|Kolder Volatility Report, though information for the report goes back to 1995. This 2020 release of the Crist|Kolder Volatility Report contains data through December 31, 2020.

Methodology Notes

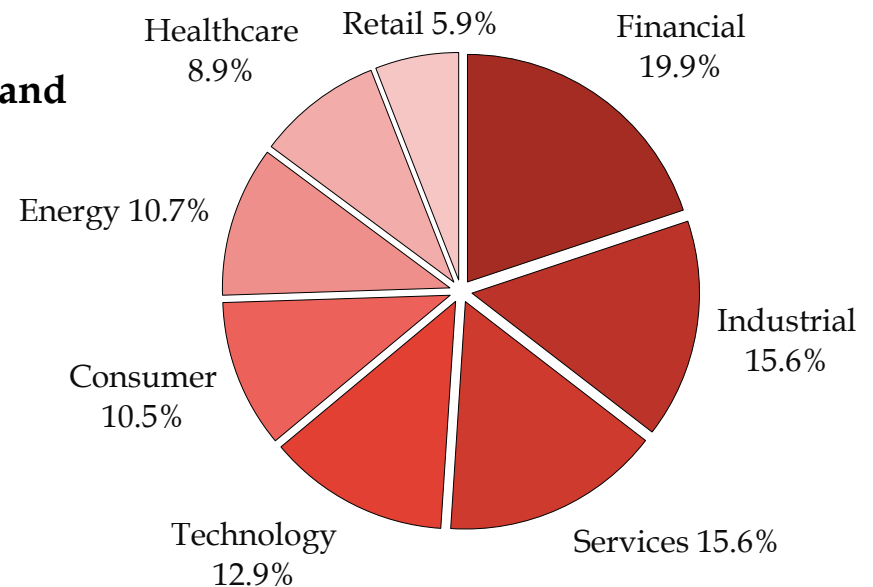
- **2020 Fortune 500 and S&P 500 Companies (674 Total)**
 - Companies Removed from 2019: 25
 - Companies Added: 29
 - Public Companies: 643
 - Private Companies: 31

Color Key
Blue = CEO
Green = CFO
Purple = COO

Graphs and data correspond with the color key above

- **Data tracked January 1, 1995 through December 31, 2020; update occurs every December**
- **Industries are broken down by Fortune’s classification system and then grouped into designated larger categories based on SIC codes and judgment of Crist | Kolder Associates**
- **Resources:**
 - Bloomberg: www.bloomberg.com
 - Businessweek: www.businessweek.com
 - Capital IQ: www.capitaliq.com
 - Fortune: www.fortune.com
 - LinkedIn: www.linkedin.com
 - SEC Company Filings: www.sec.gov
 - Yahoo Finance: www.finance.yahoo.com
 - Individual company websites

Industry Breakdown by Company



Definitions

Acquisitions: In the event an executive from the acquired company is appointed to a role in the acquiring company, it is an internal change.

COO Role: The COO role is strictly limited to individuals with the title “Chief Operating Officer”.

C-Suite: Limited to CEO, CFO, and COO roles.

External Change: An executive is recruited to a position at a company to which his/her previous position has no formal ties.

Internal Change: An executive is promoted to a role at the company where he/she is already employed.

Mergers: In a merger of equals, the combined company is considered a new entity. A change in leadership, therefore, is marked for all mergers. A change is internal if the executive was previously employed by either of the merging companies.

Partial Year: Designation indicates data gathered up to August 1, 2020.

Turnover: The rate at which there is a new hire for a C-Suite position.

Volatility: Turnover is noted when the executive starts in the new role (as opposed to the date of announcement).

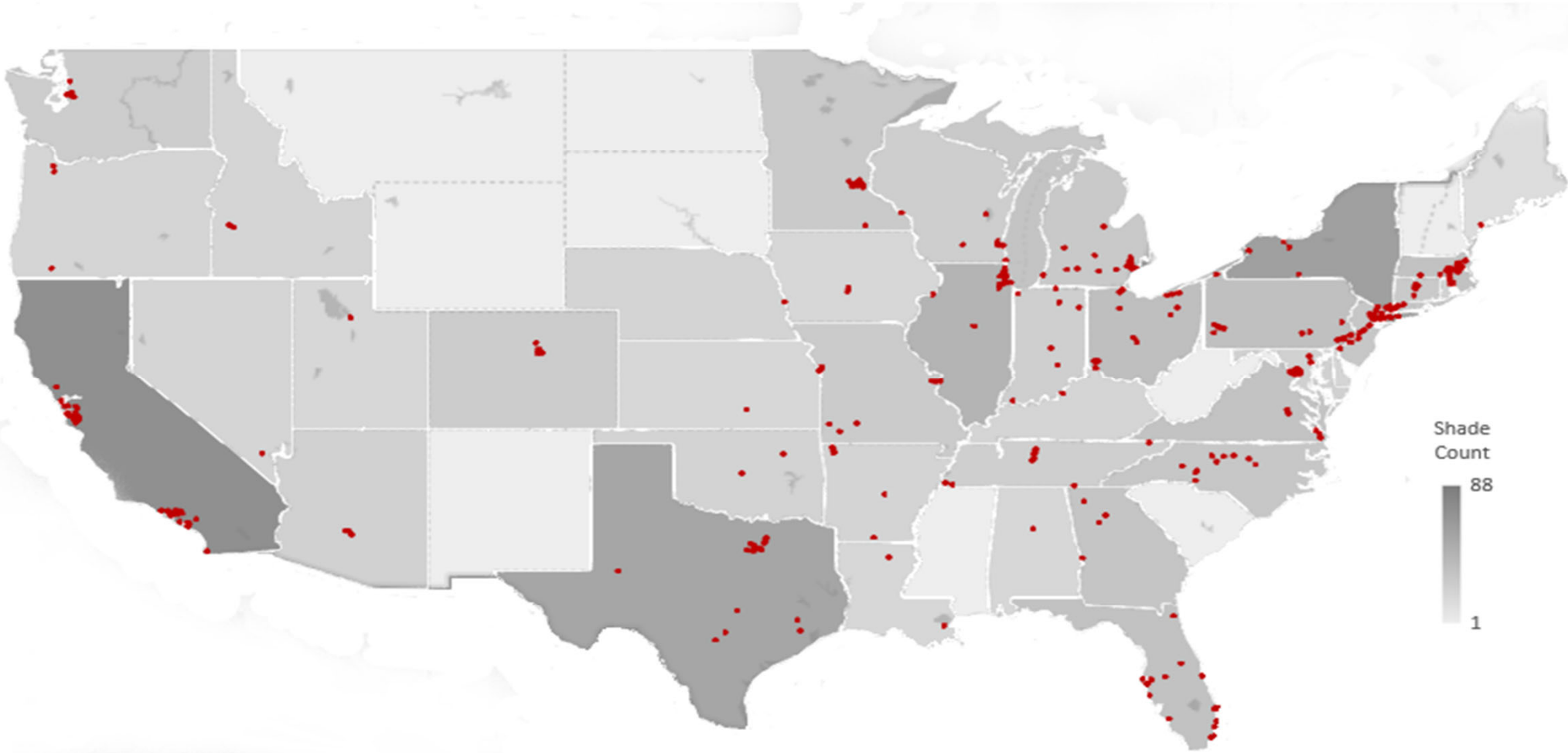
Report Highlights

- The rate of external hiring has slightly decreased for CEOs and increased for CFOs (Page 13)
- Internally promoted CFOs most often transition from a Corporate Finance position (Page 22)
- The average tenure of a CFO is just under five years (Page 23)
- Only 30% of CFOs have public accounting experience from the Big 5 (Page 25)
- For the first time in six years, the average age at hire for new CEOs and CFOs has decreased (Page 28)
- The percentage of Female CEOs and CFOs has shown slight change (Page 34)
- Despite positive trends, diversity is still lacking in CEO and CFO roles (Page 42)
- Over 45% of CFOs who have retired in 2020 hold a seat on an external public Board (Page 48)
- More CEOs and CFOs come from the Big Ten than any other U.S. college conference (Page 54, 55)

Locations

Company Headquarters by Location

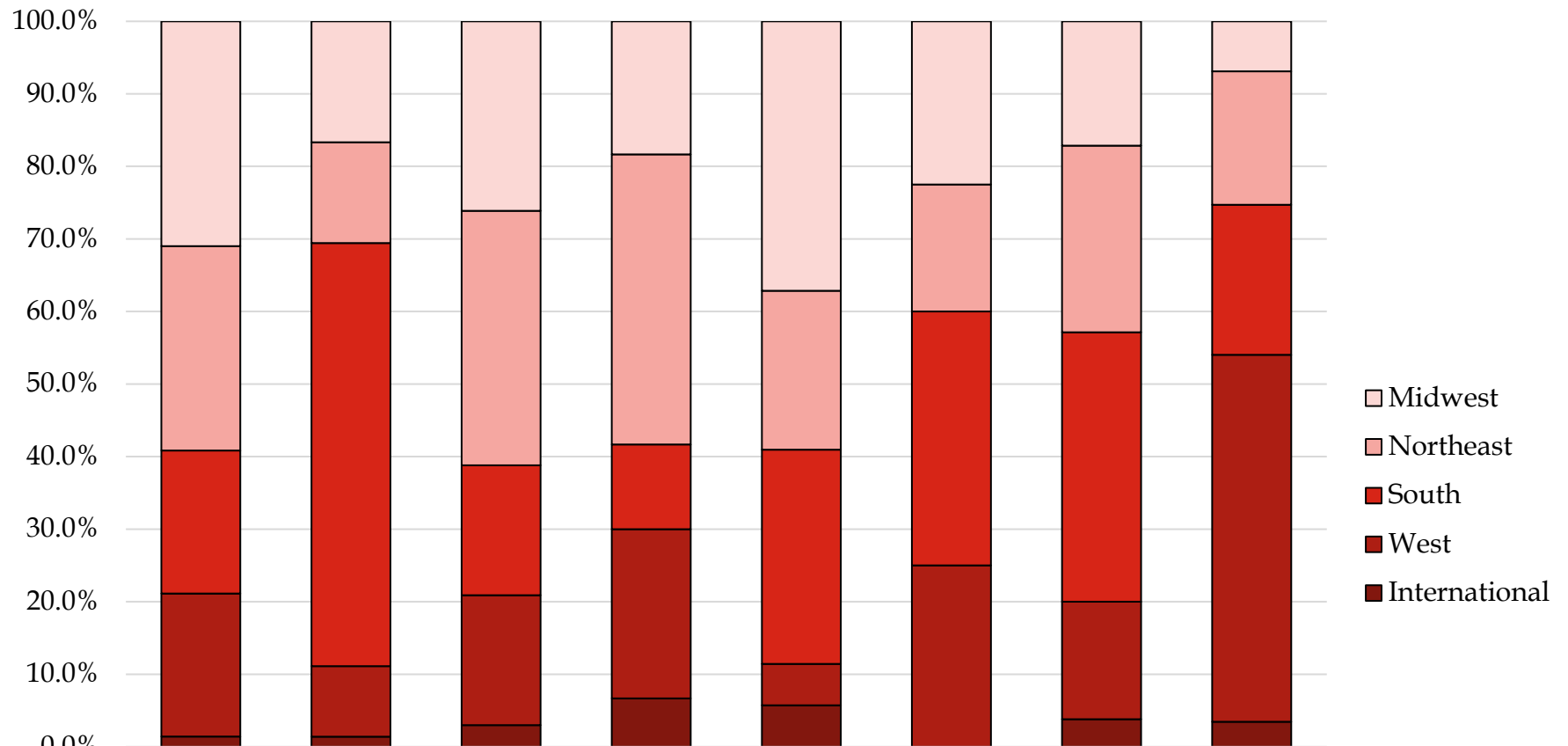
2020 Fortune 500 and S&P 500 (674 Companies)



*White states have no company HQ located within that state

Industry Breakdown by Region

2020 Fortune 500 and S&P 500 (674 Companies)

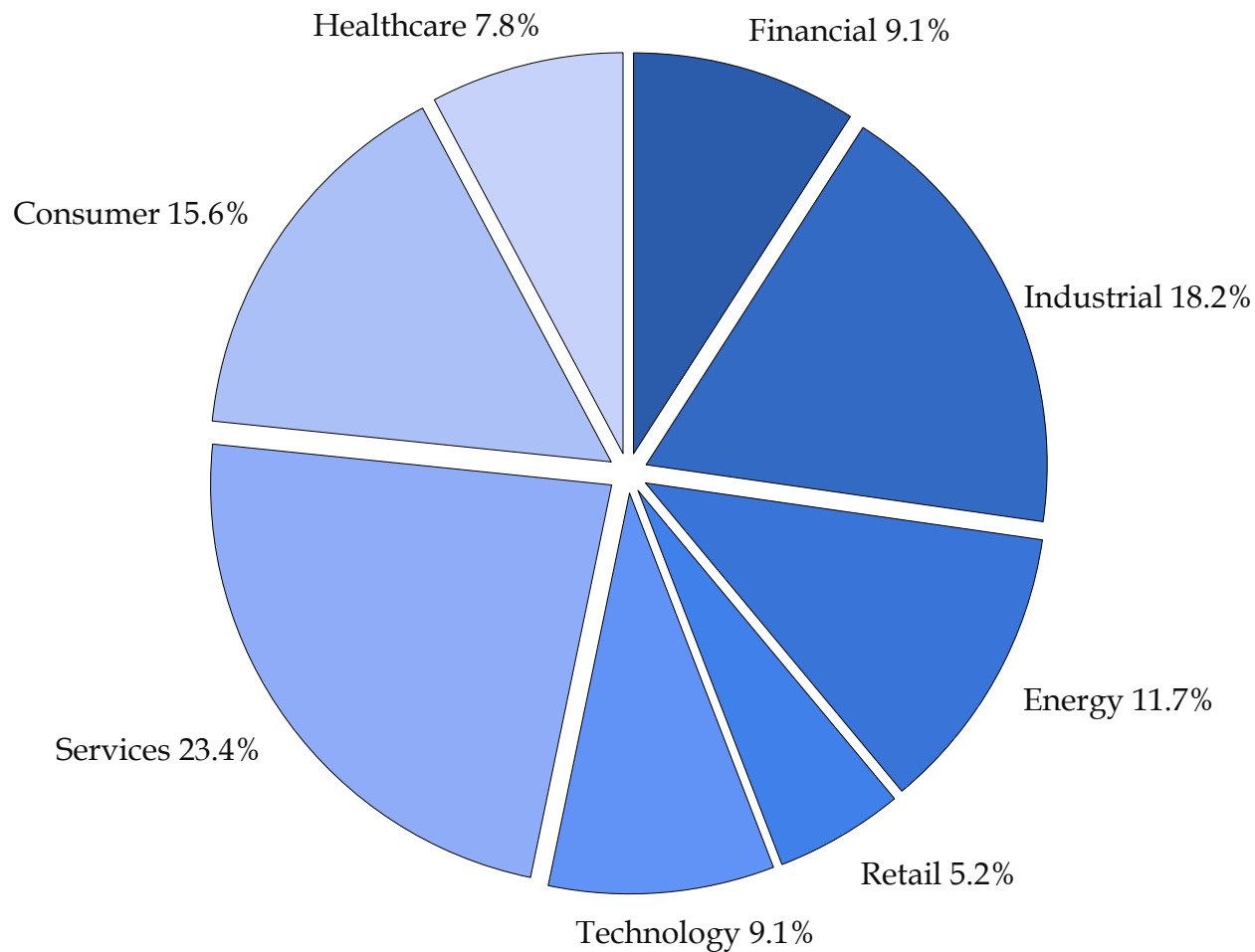


	Consumer	Energy	Financial	Healthcare	Industrial	Retail	Services	Technology
Midwest	31.0%	16.7%	26.1%	18.3%	37.1%	22.5%	17.1%	6.9%
Northeast	28.2%	13.9%	35.1%	40.0%	21.9%	17.5%	25.7%	18.4%
South	19.7%	58.3%	17.9%	11.7%	29.5%	35.0%	37.1%	20.7%
West	19.7%	9.7%	17.9%	23.3%	5.7%	25.0%	16.2%	50.6%
International	1.4%	1.4%	3.0%	6.7%	5.7%	0.0%	3.8%	3.4%

Executive Turnover

The Services sector accounts for the most CEO turnover

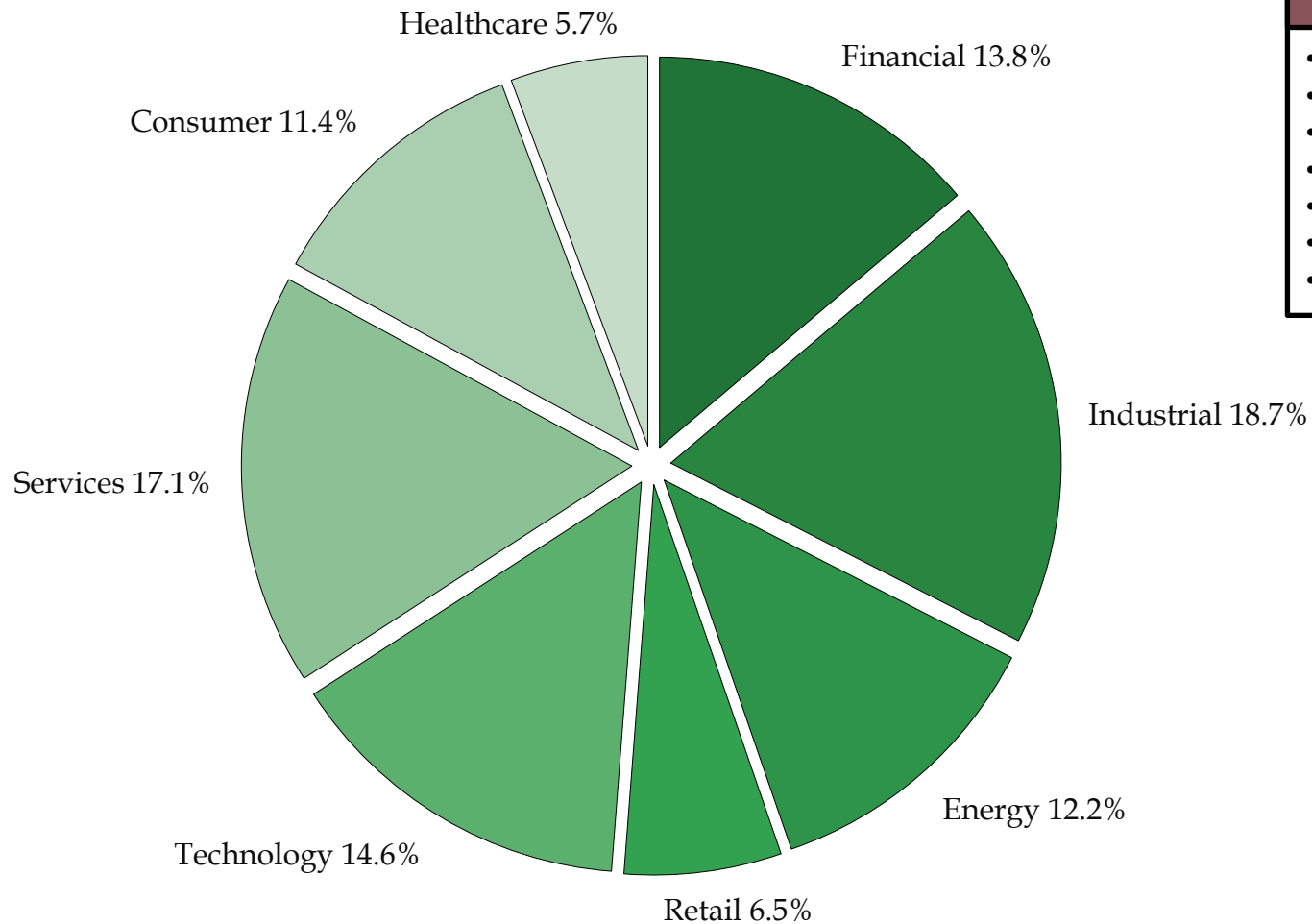
CEO Volatility by Industry
2020 Fortune 500 and S&P 500 (674 Companies)



- Notable CEO changes in 2020
- AT&T
 - Boeing
 - Disney
 - IBM
 - Nike
 - Sysco
 - UPS

The Industrial sector accounts for the most CFO turnover

CFO Volatility by Industry
2020 Fortune 500 and S&P 500 (674 Companies)

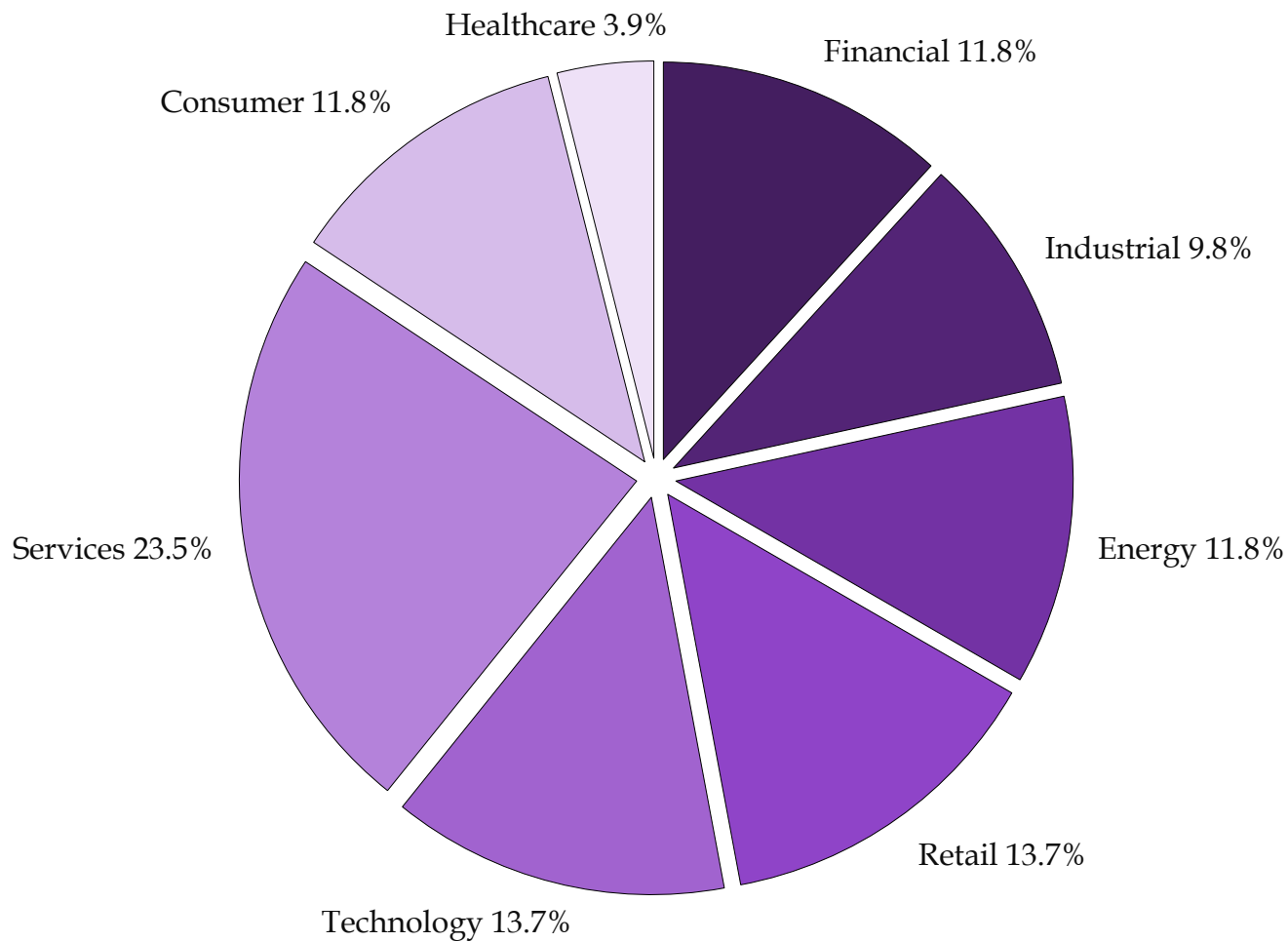


Notable CFO changes in 2020

- 3M
- Cardinal Health
- CHS
- GE
- Macy's
- Nike
- Northrop Grumman

The Services sector account for the most COO turnover

COO Volatility by Industry
2020 Fortune 500 and S&P 500 (674 Companies)

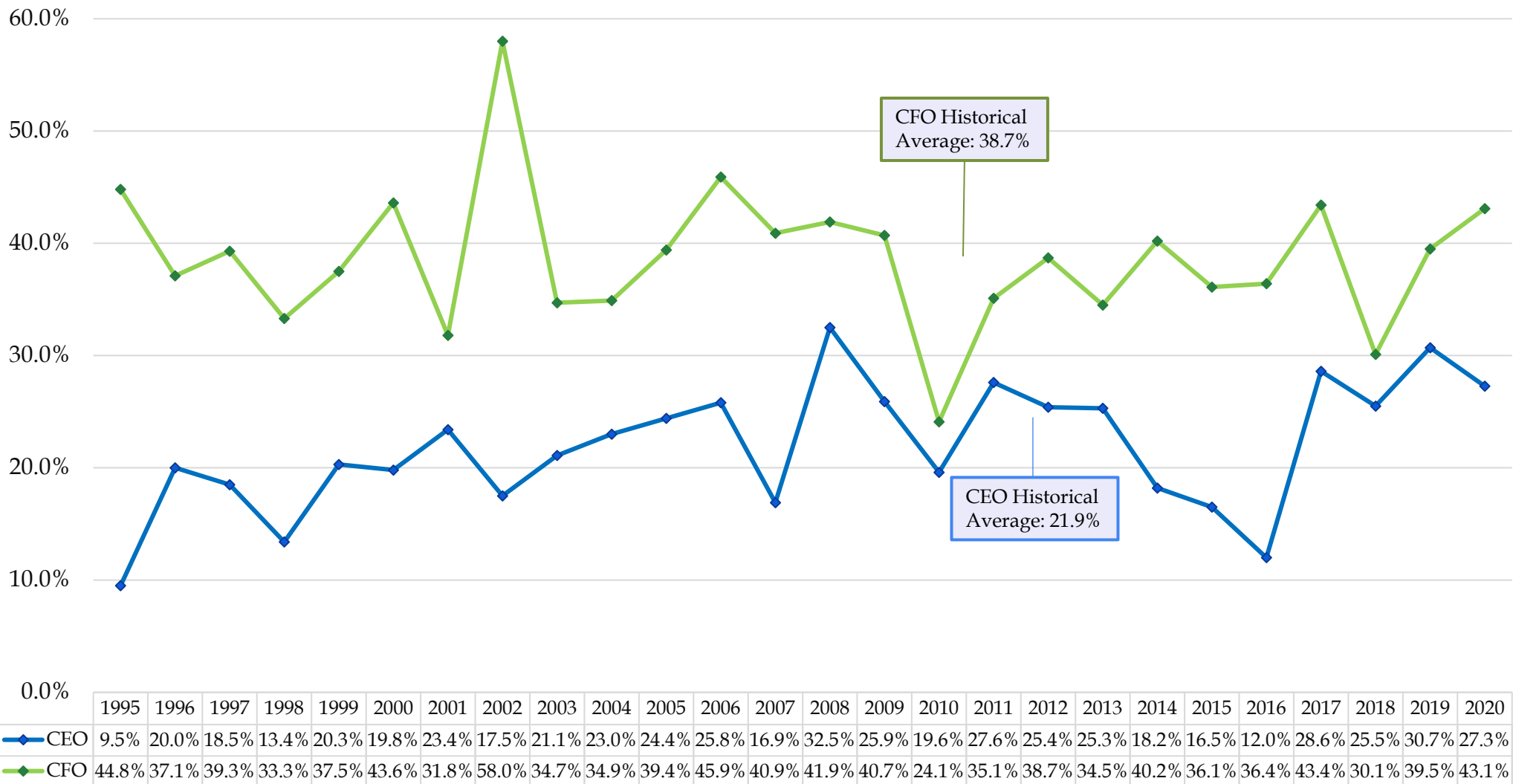


Notable COO changes in 2020

- Aflac
- Bed Bath & Beyond
- Ford
- Hewlett Packard
- Macy's
- Nike
- United Airlines

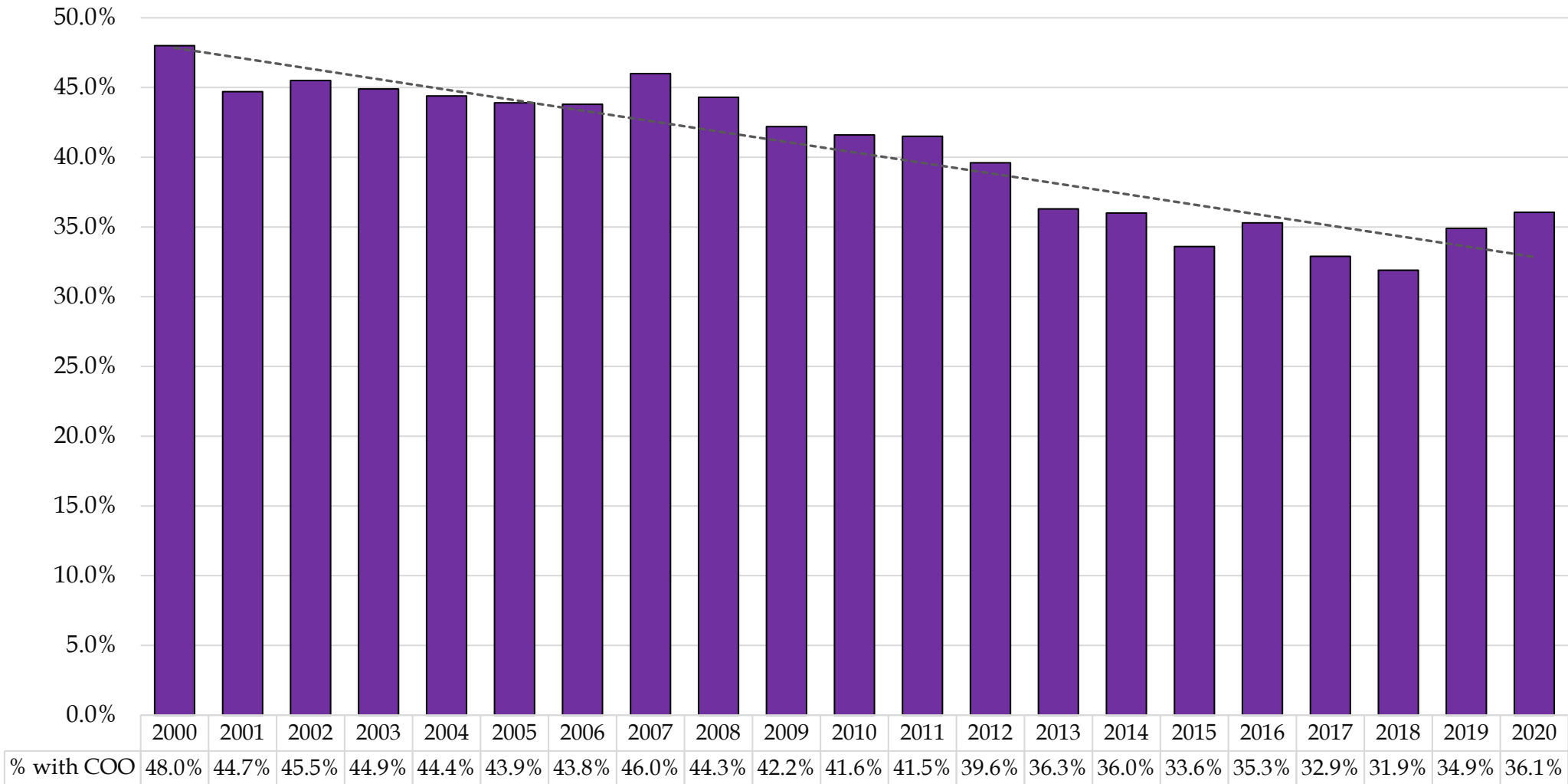
The rate of external hiring has slightly decreased for CEOs and increased for CFOs

Percentage of CEOs/CFOs Recruited from Outside the Company (1995-2020)
 2020 Fortune 500 and S&P 500 Companies (674 Companies; 683 Sitting CEOs; 675 Sitting CFOs)



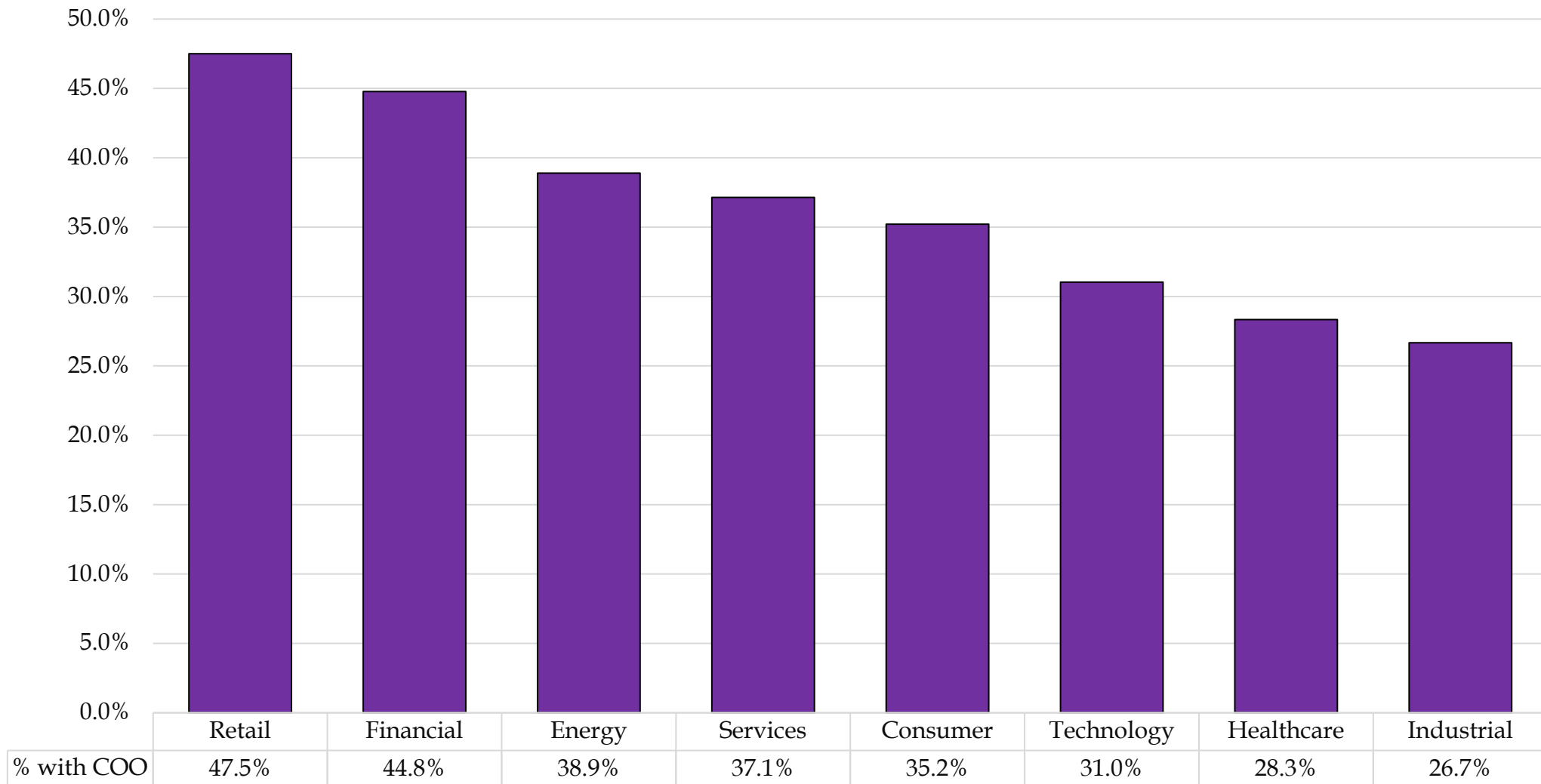
Fewer and fewer companies utilize the COO role

Percentage of Companies with a COO (2000-2020)
 2020 Fortune 500 and S&P 500 (674 Companies; 243 Sitting COOs)



The Industrial sector has the fewest COOs

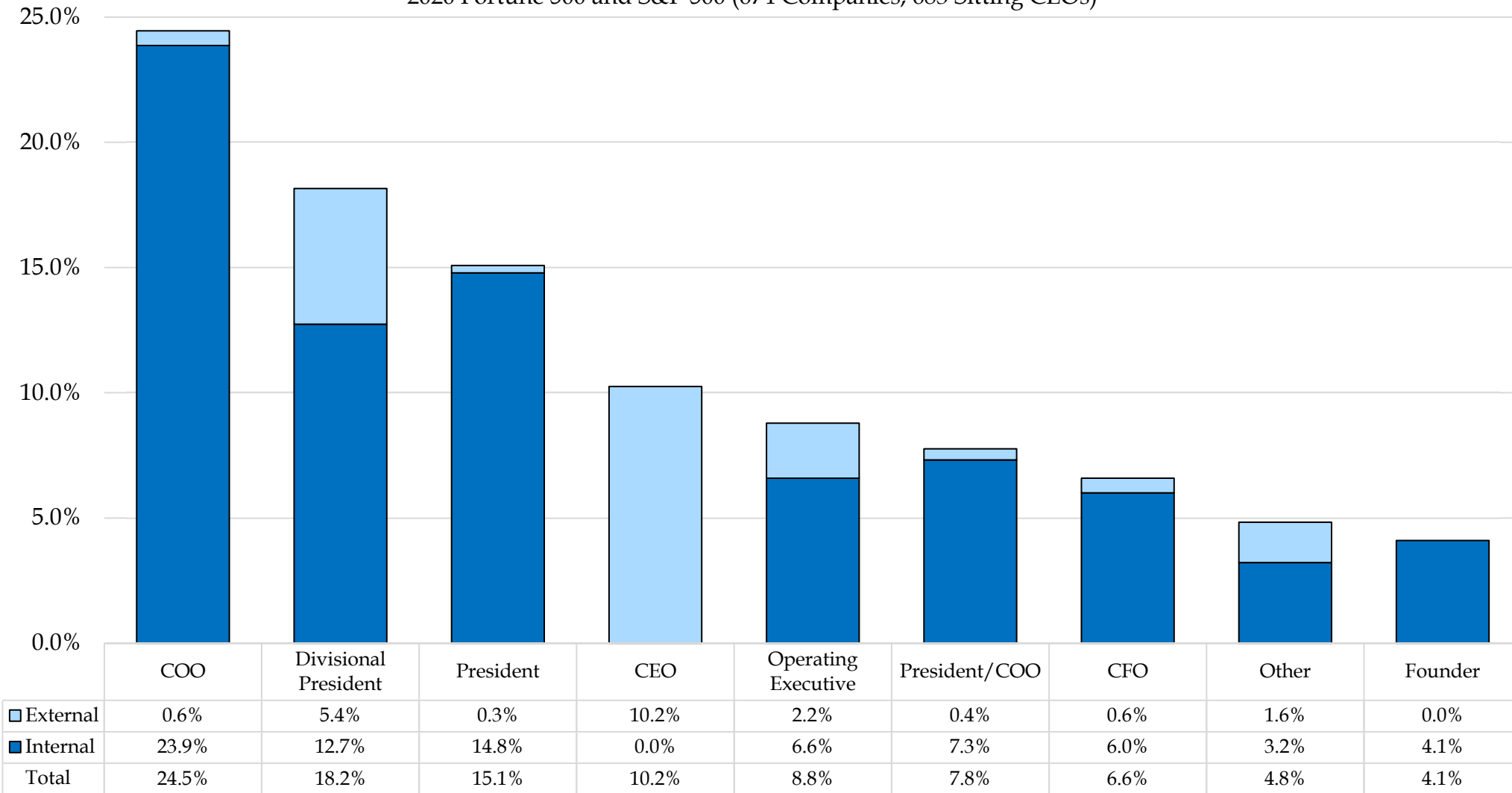
Percentage of Companies with a COO by Industry
 2020 Fortune 500 and S&P 500 Companies (674 Companies; 243 Sitting COOs)



C-Suite Career Paths

The most common path to CEO is an internal promotion from the COO role

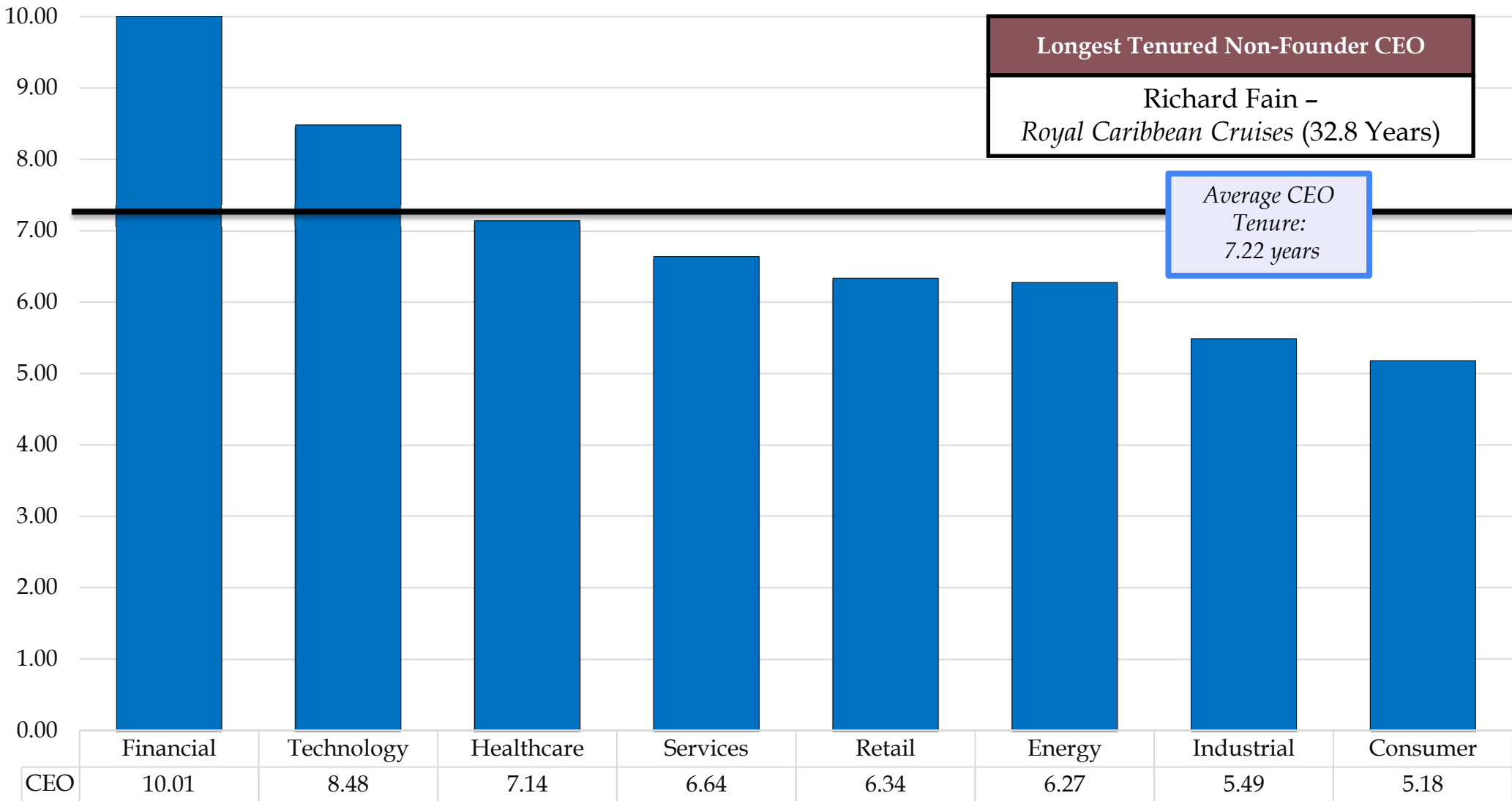
Immediate Previous Position of Sitting CEOs (Internal vs. External)
2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs)



- Internal Divisional President: Includes CEO of subsidiary company
- President/COO: Executive held both President and COO roles at the same time
- Operating Executive: VP/SVP/EVP of Operations
- Other: i.e. chairman, marketing, risk, consulting, commerce, investment officer, partner, managing director, general counsel

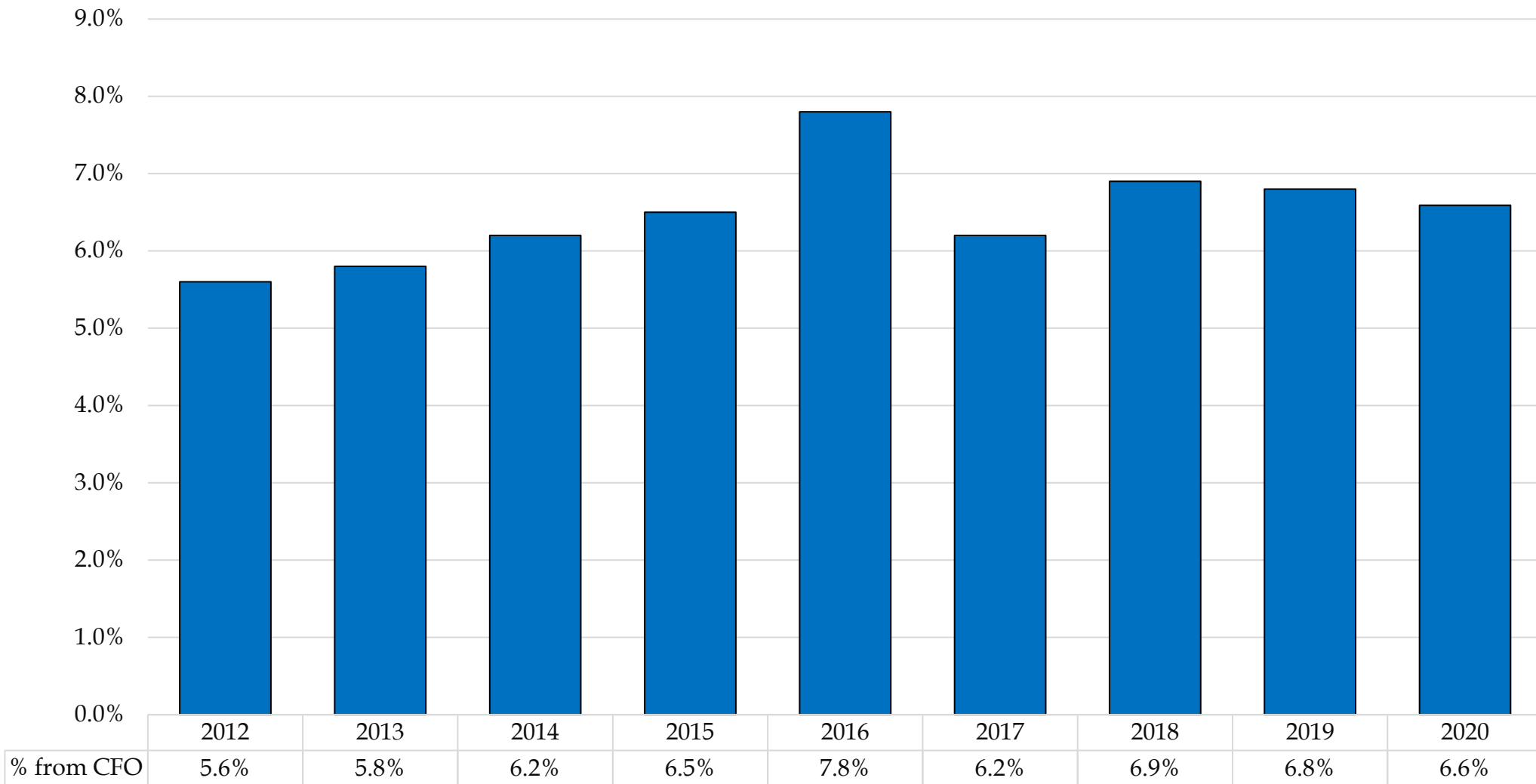
Financial sector CEOs have the longest tenure

Average Tenure of CEO by Industry
2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs)



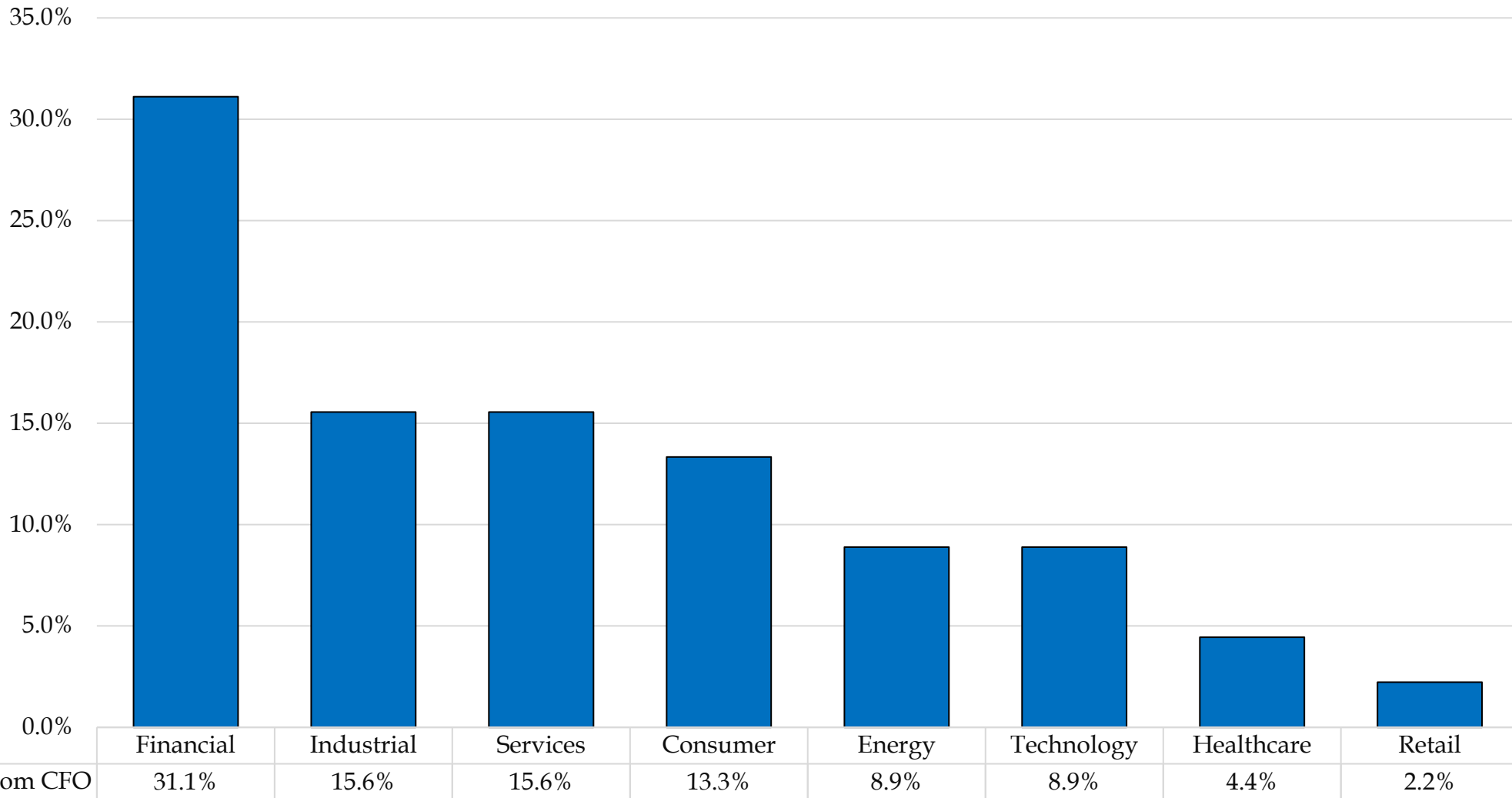
C-Suite promotion from CFO to CEO has decreased slightly since last year

Percentage of Sitting CEOs coming directly from a CFO Chair (Internal or External)
2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs, 45 CEOs Represented)



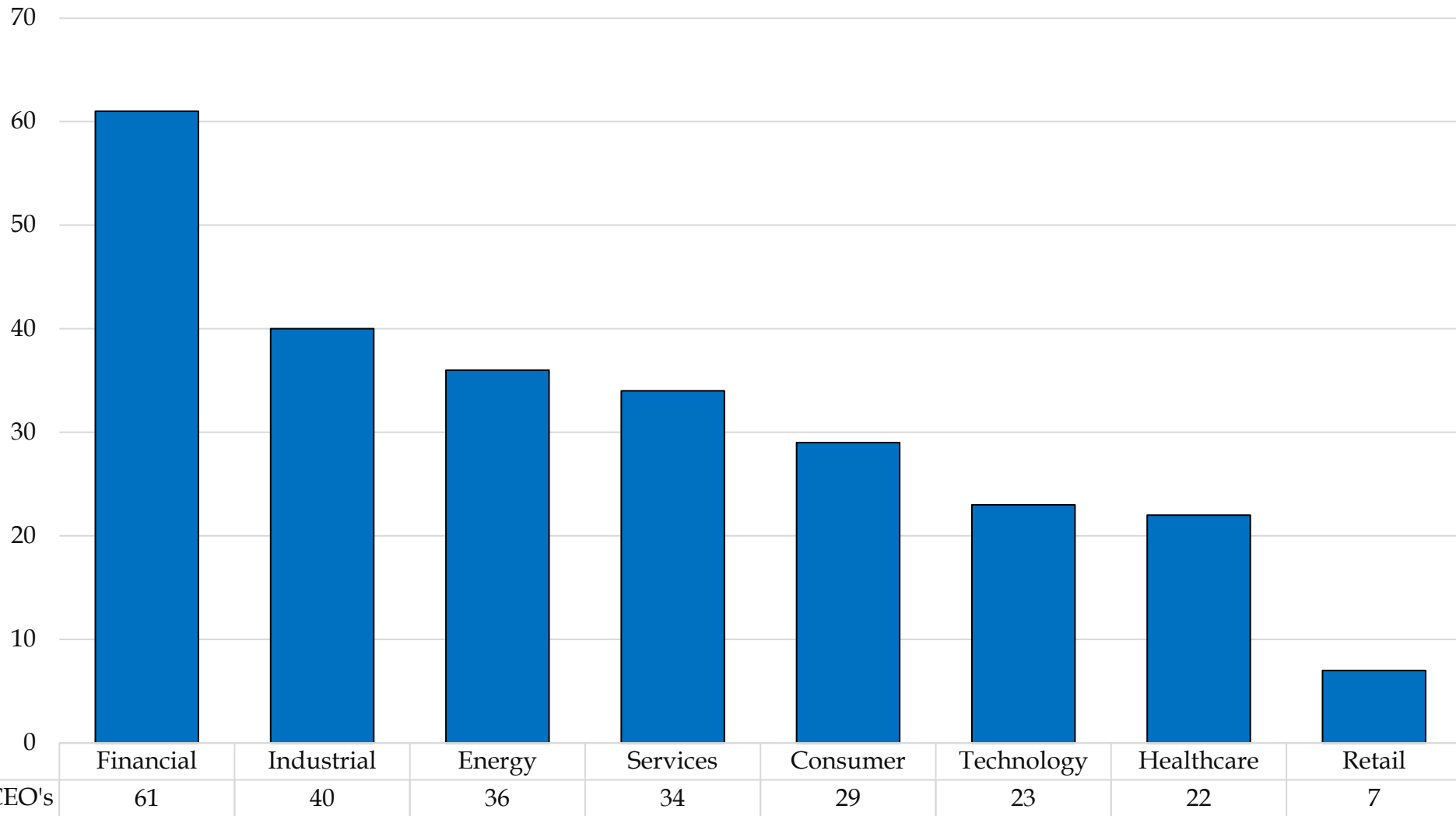
The Financial sector has the highest number of CEOs most recently in a CFO role

Percentage of Sitting CEOs coming from a CFO Chair by Industry (Internal or External)
2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs; 45 CEOs Represented)



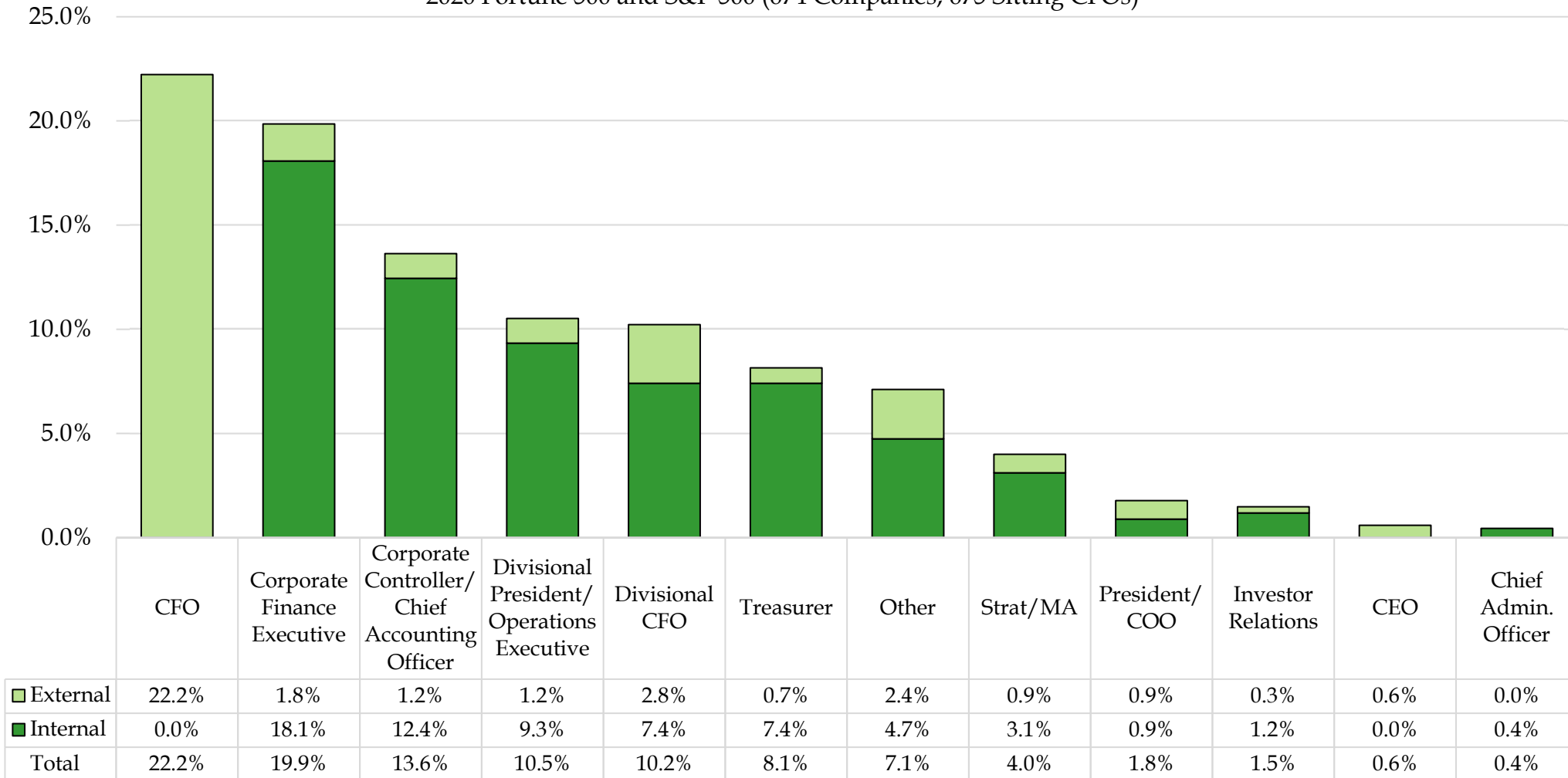
CEOs in the Financial sector hold the most Chairman titles

Sitting CEOs that are also Chairman
 2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs, 252 CEOs Represented)



Internally promoted CFOs most often transition from a Corporate Finance position

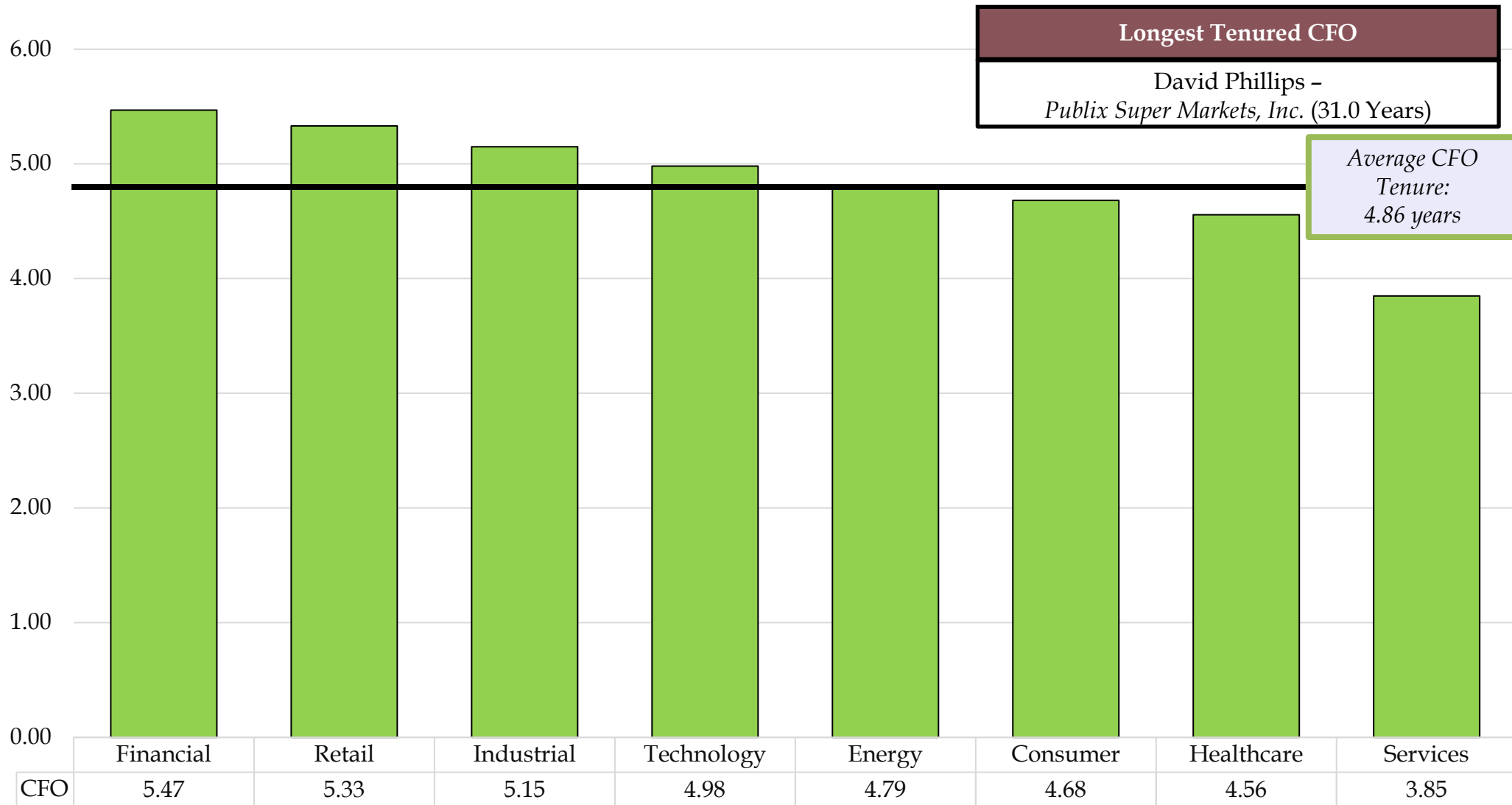
Percentage of Sitting CFOs by Immediate Previous Position (Internal or External)
2020 Fortune 500 and S&P 500 (674 Companies; 675 Sitting CFOs)



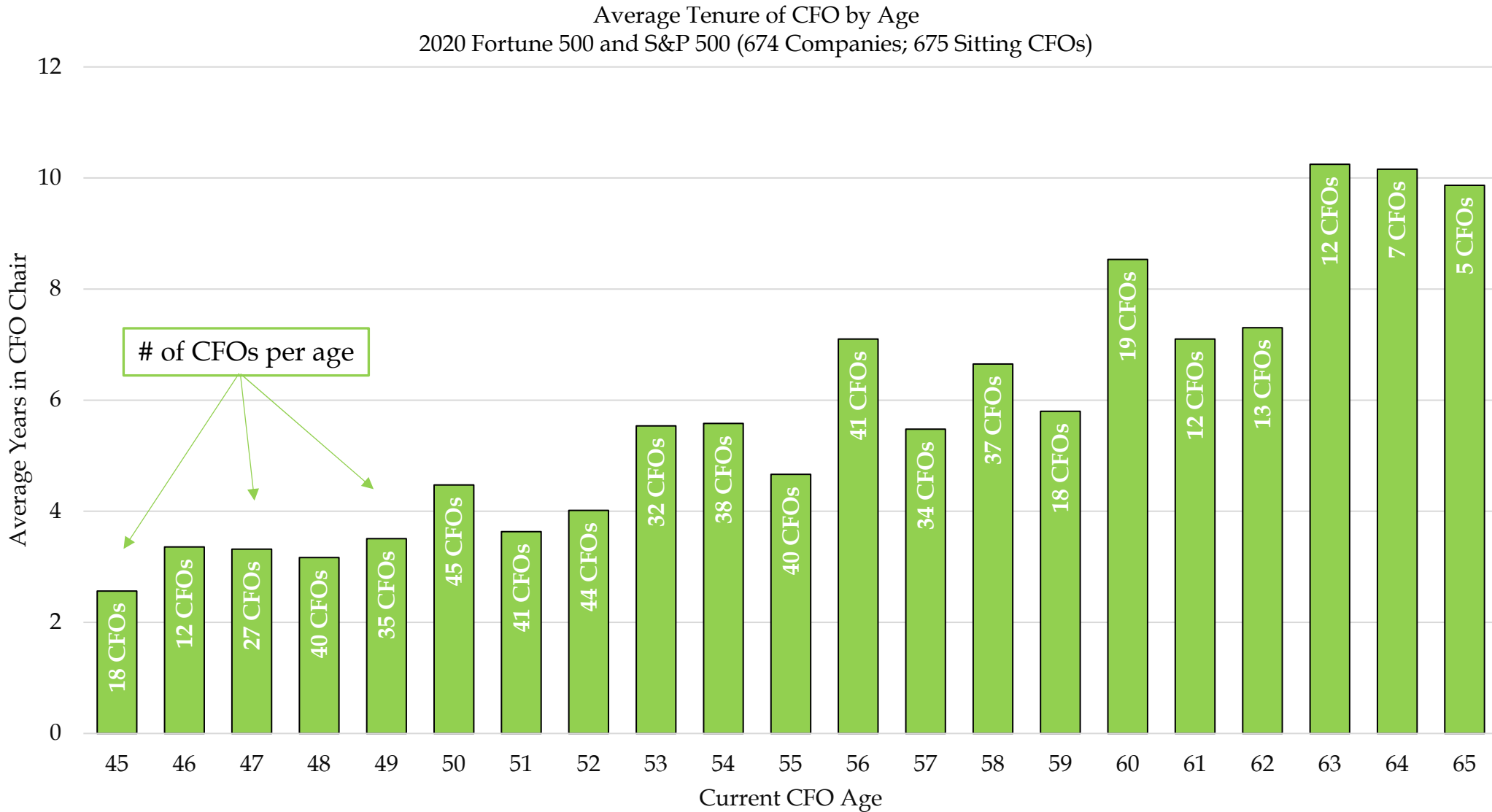
- Internal Divisional CFO: Includes CFOs of subsidiary companies
- External CFO recruitment means previous CFO of another company
- Operations Executive: President, VP/SVP/EVP Operations
- Corporate Finance Executive: VP, SVP, EVP of Finance
- Strategy/MA: Investment Banking, Development, Planning or Strategy
- Other: tax, law, IT, risk, consulting, etc.

The average tenure of a CFO is just under five years

Average Tenure of CFO by Industry
 2020 Fortune 500 and S&P 500 (674 Companies; 675 Sitting CFOs)

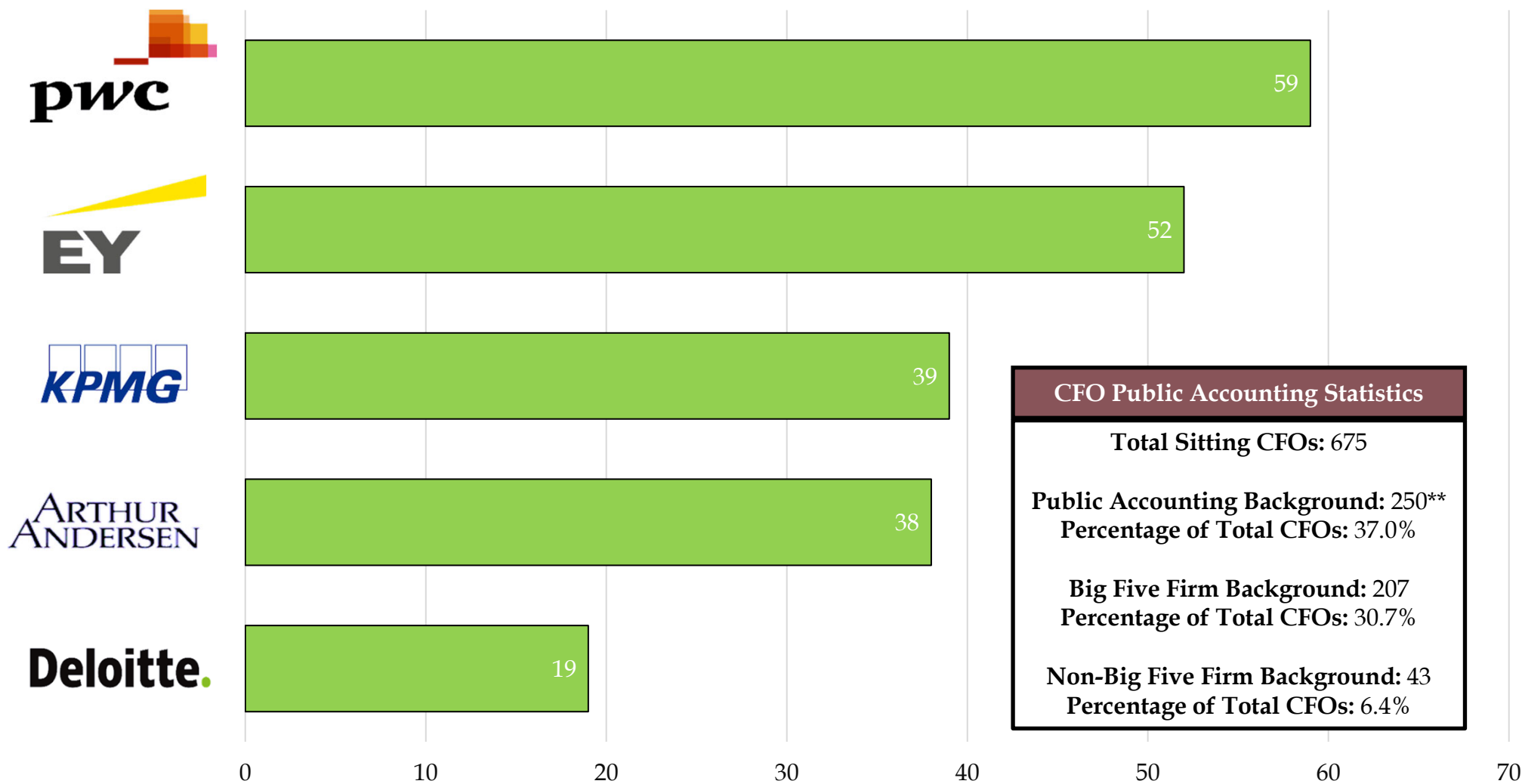


As CFOs age, tenure increases; once a CFO reaches mid-50s, the proclivity is to remain in the position



Only 30% of CFOs have public accounting experience from the Big 5

CFOs with Public Accounting Backgrounds
2020 Fortune 500 and S&P 500 (674 Companies; 675 Sitting CFOs)

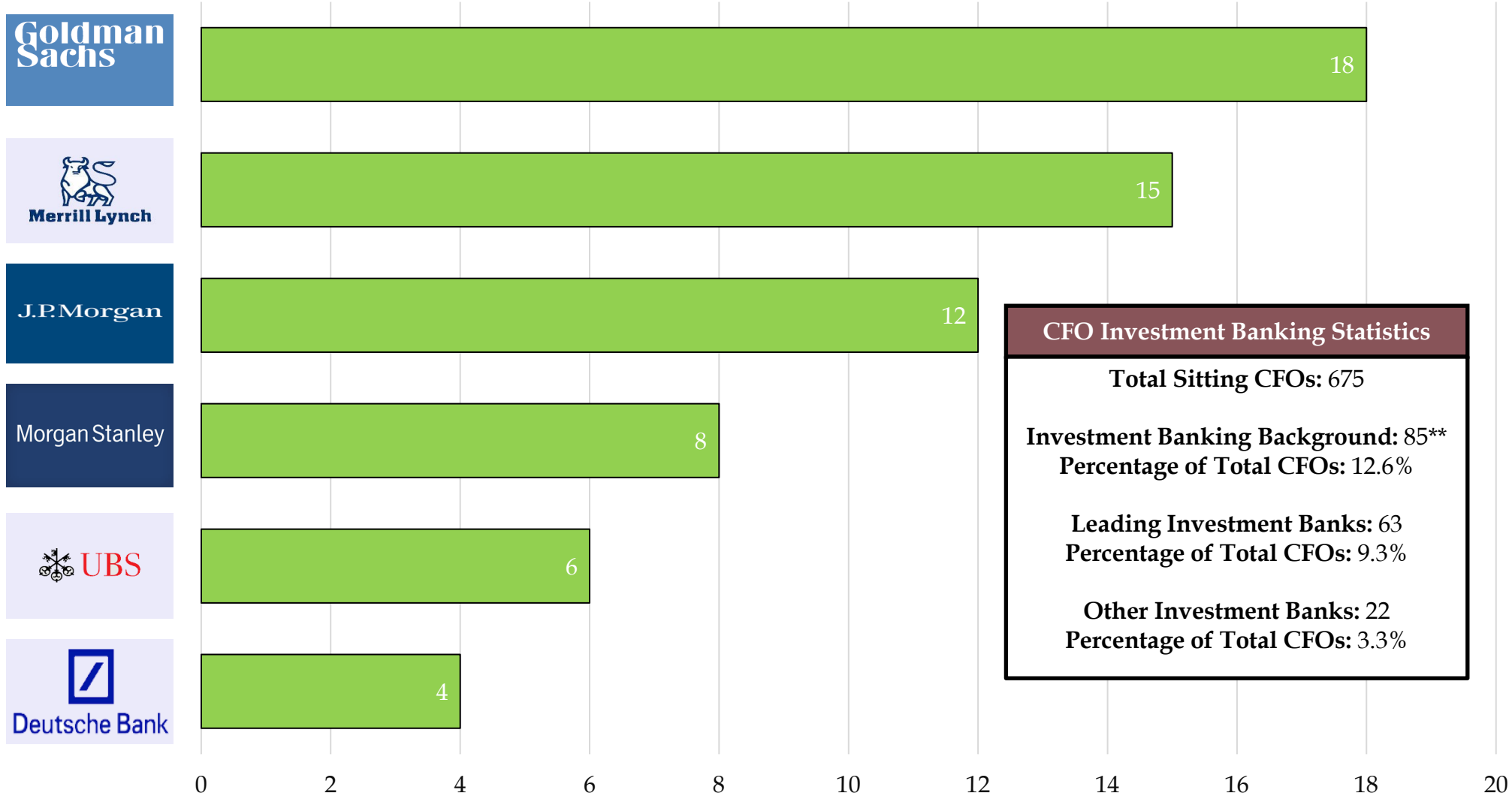


CFO Public Accounting Statistics	
Total Sitting CFOs:	675
Public Accounting Background:	250**
Percentage of Total CFOs:	37.0%
Big Five Firm Background:	207
Percentage of Total CFOs:	30.7%
Non-Big Five Firm Background:	43
Percentage of Total CFOs:	6.4%

**If a CFO has worked for more than one Big Five public accounting firm, they are included in each firm's total count

Nearly 13% of today's CFOs have investment banking experience

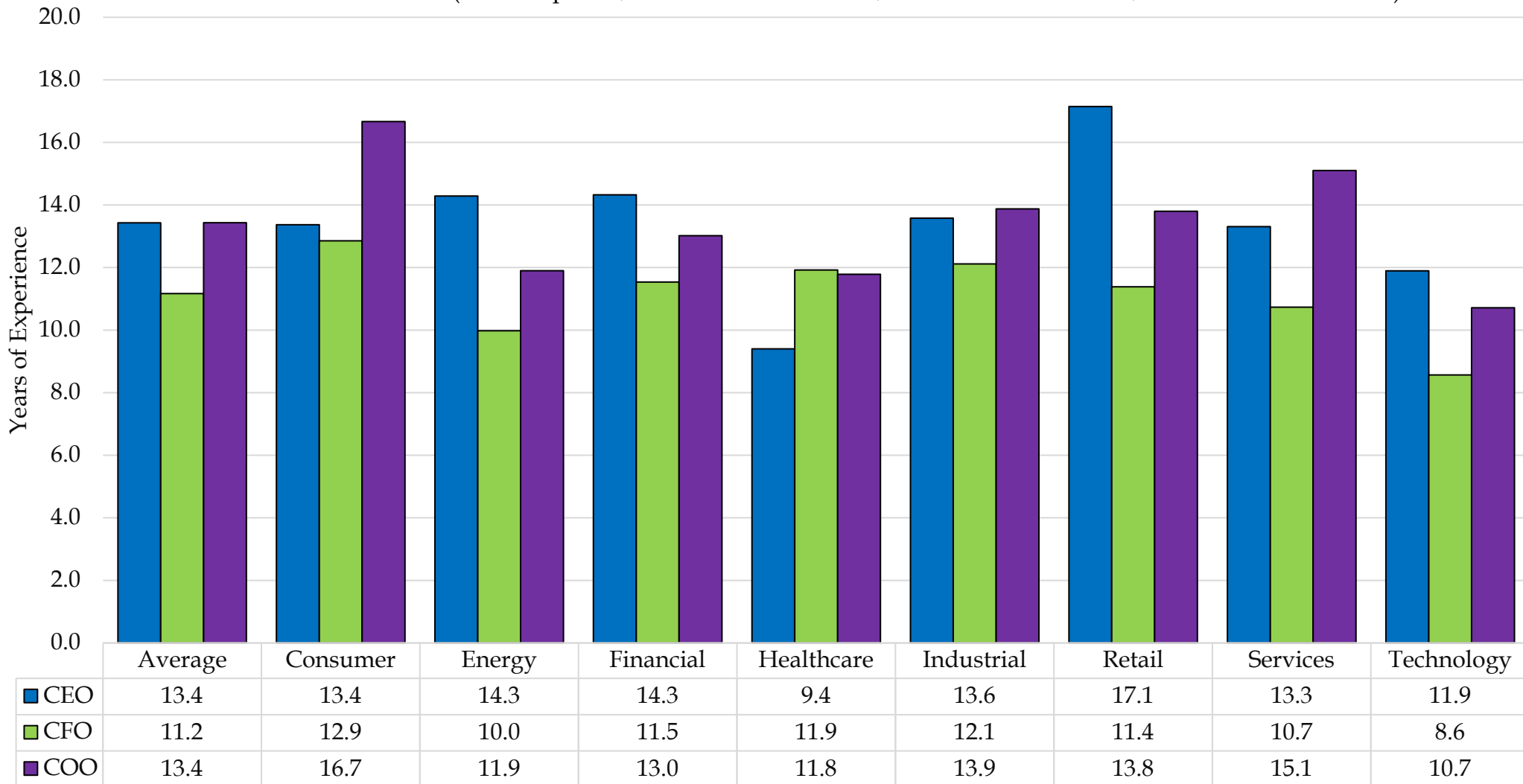
CFOs with Investment Banking Backgrounds
2020 Fortune 500 and S&P 500 (674 Companies; 675 Sitting CFOs)



**If a CFO has worked for more than one of these top investment banks, they are included in each firm's total count

Retail sector CEOs have the longest tenure with the company before assuming the CEO role

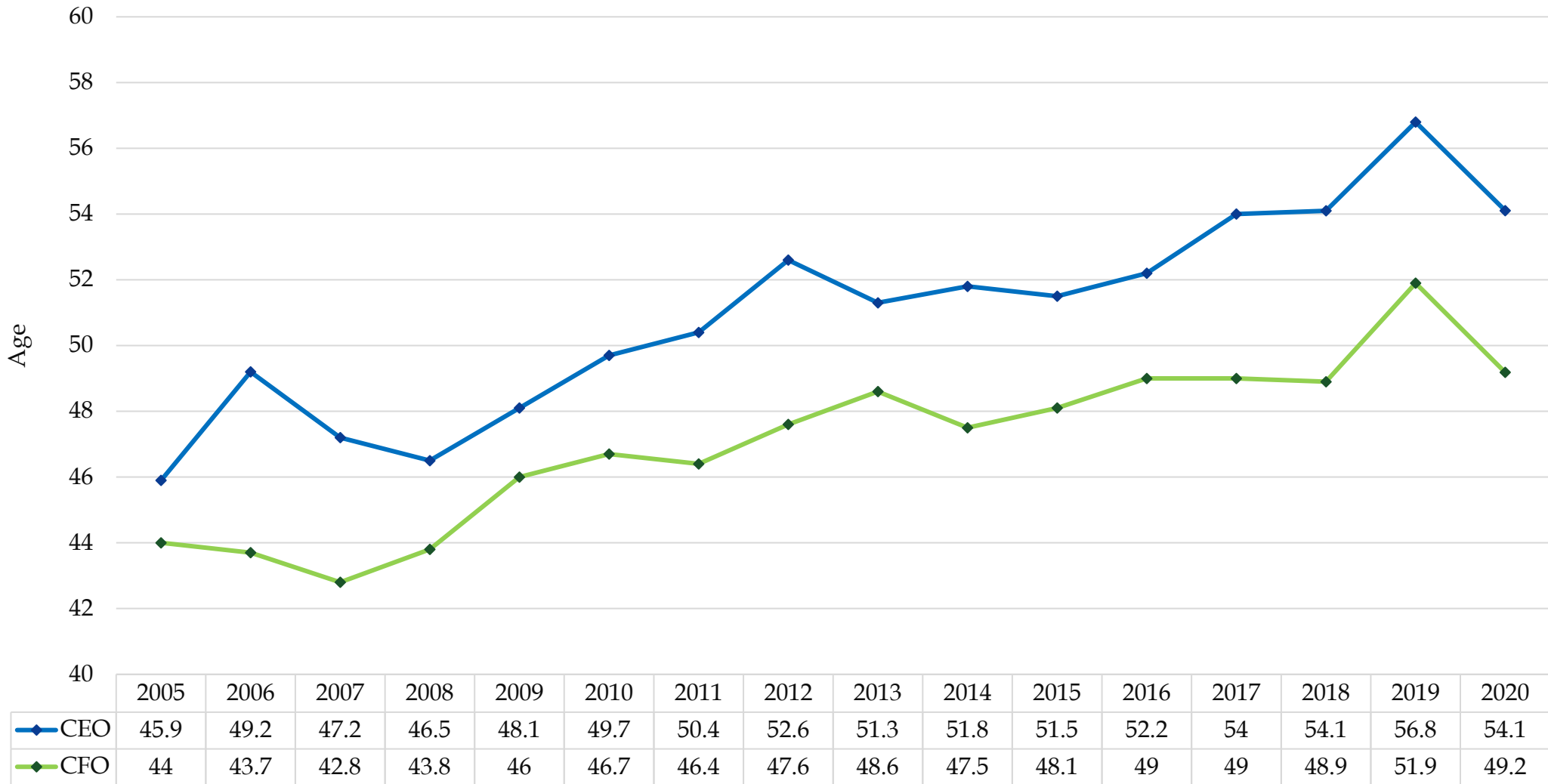
Average Years of Experience with Company before assuming Roles of CEO/CFO/COO at that Company* (Internal Hires)
 2020 Fortune 500 and S&P 500 (674 Companies; 537 Internal CEO Hires; 439 Internal CFO Hires; 209 Internal COO Hires)



*From start date with company to date of C-Suite appointment

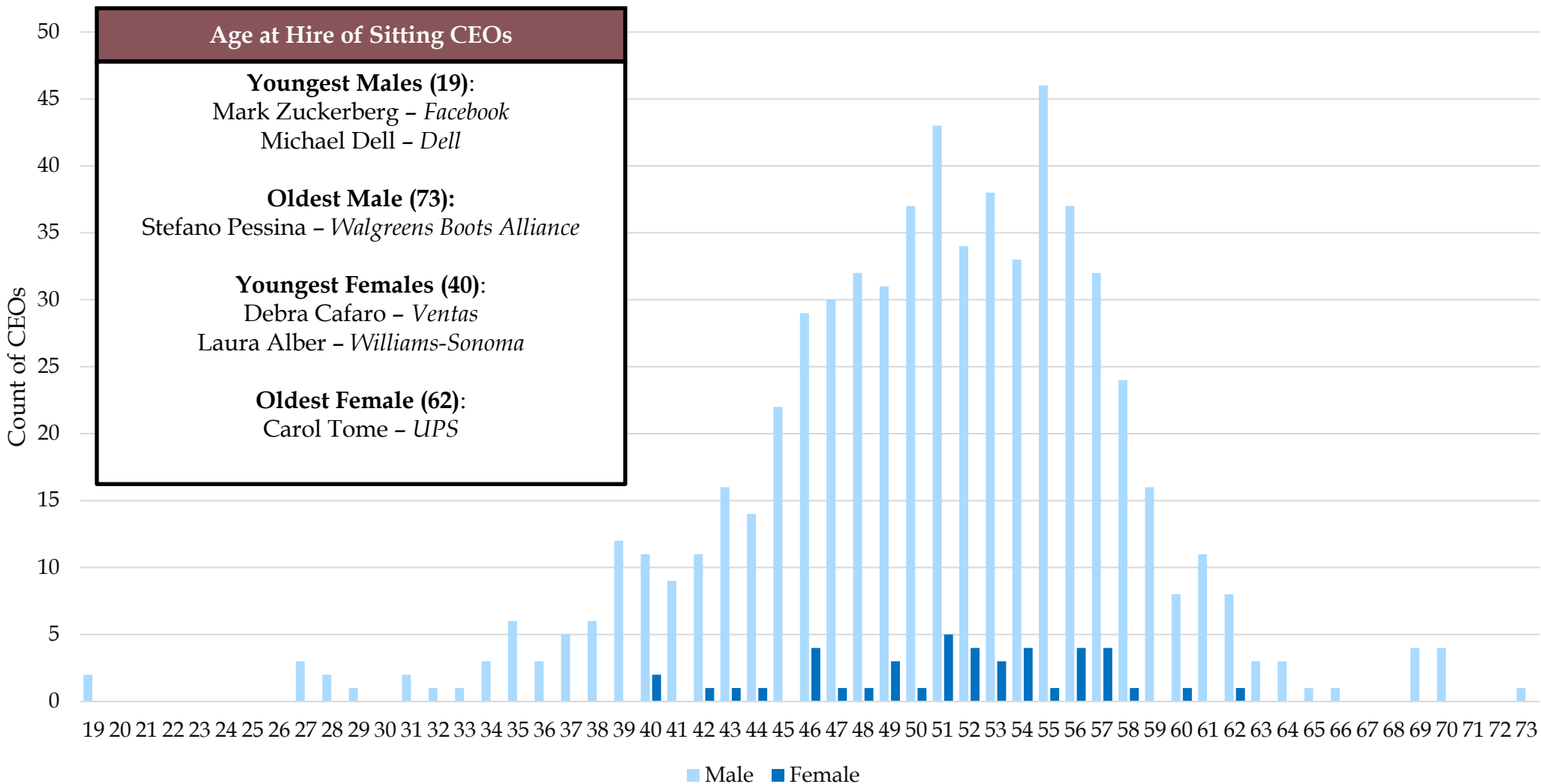
For the first time in six years, the average age at hire for new CEOs and CFOs has decreased

Age at Hire for new CEOs and CFOs
2020 Fortune 500 and S&P 500 (674 Companies; 679 Known CEO Ages at Hire; 650 Known CFO Ages at Hire)



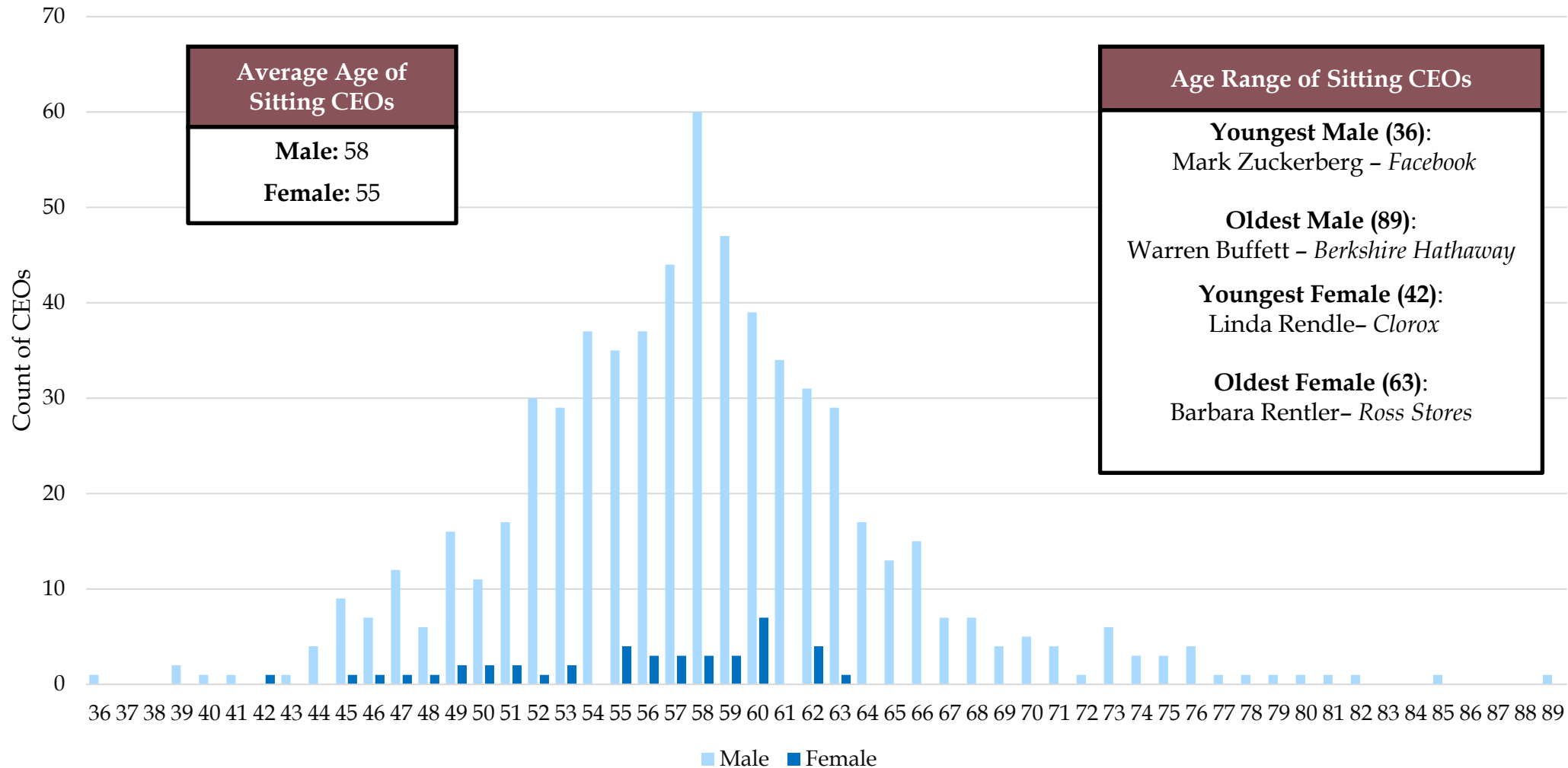
Half of CEOs were appointed to their role before age 51

Age at Hire for Sitting CEOs
 2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs; 679 Known CEO Ages at Hire)



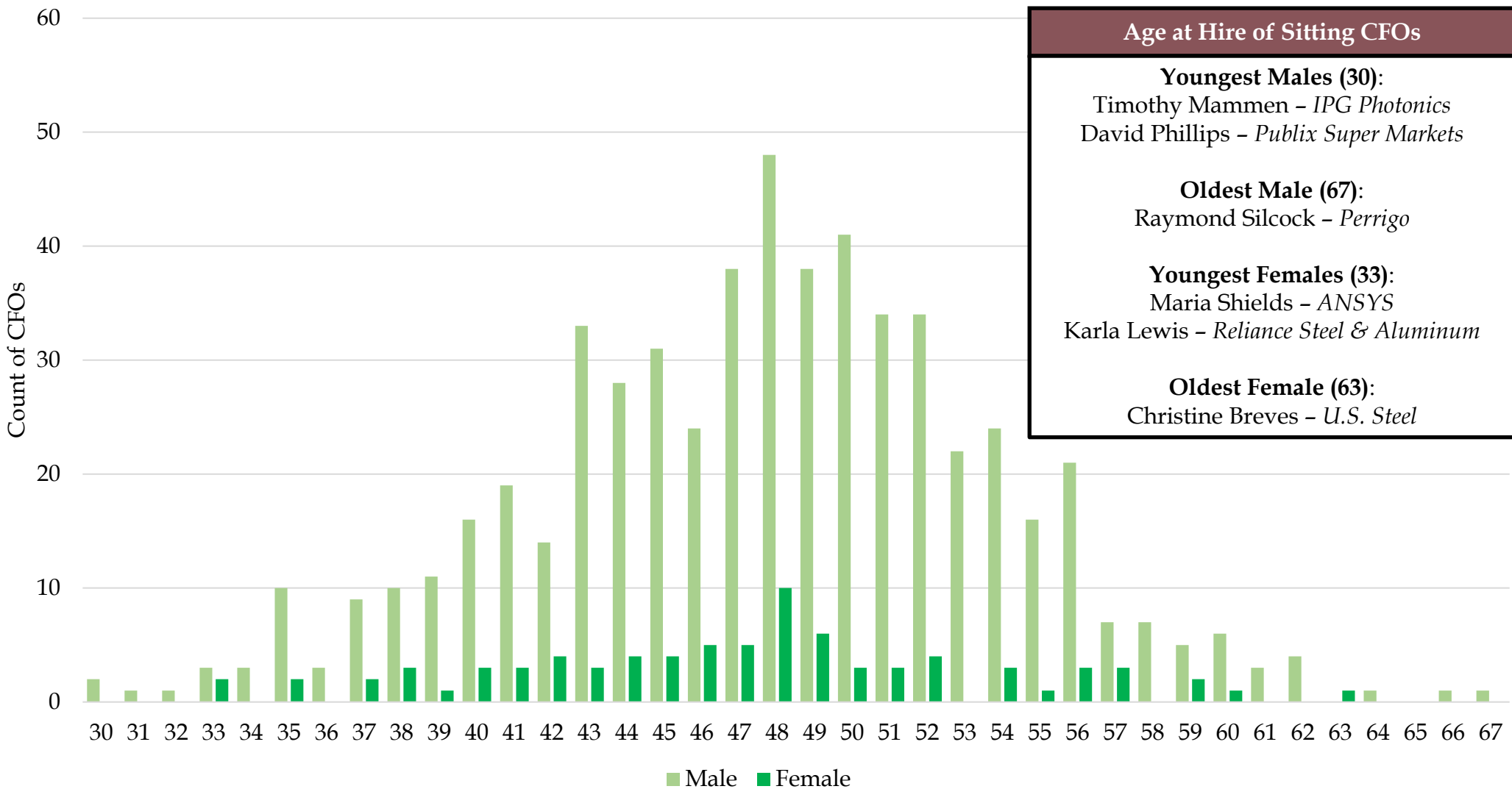
More than 60% of sitting CEOs are younger than 60

Age Distribution of Sitting CEOs
 2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs; 679 Known CEO Ages)



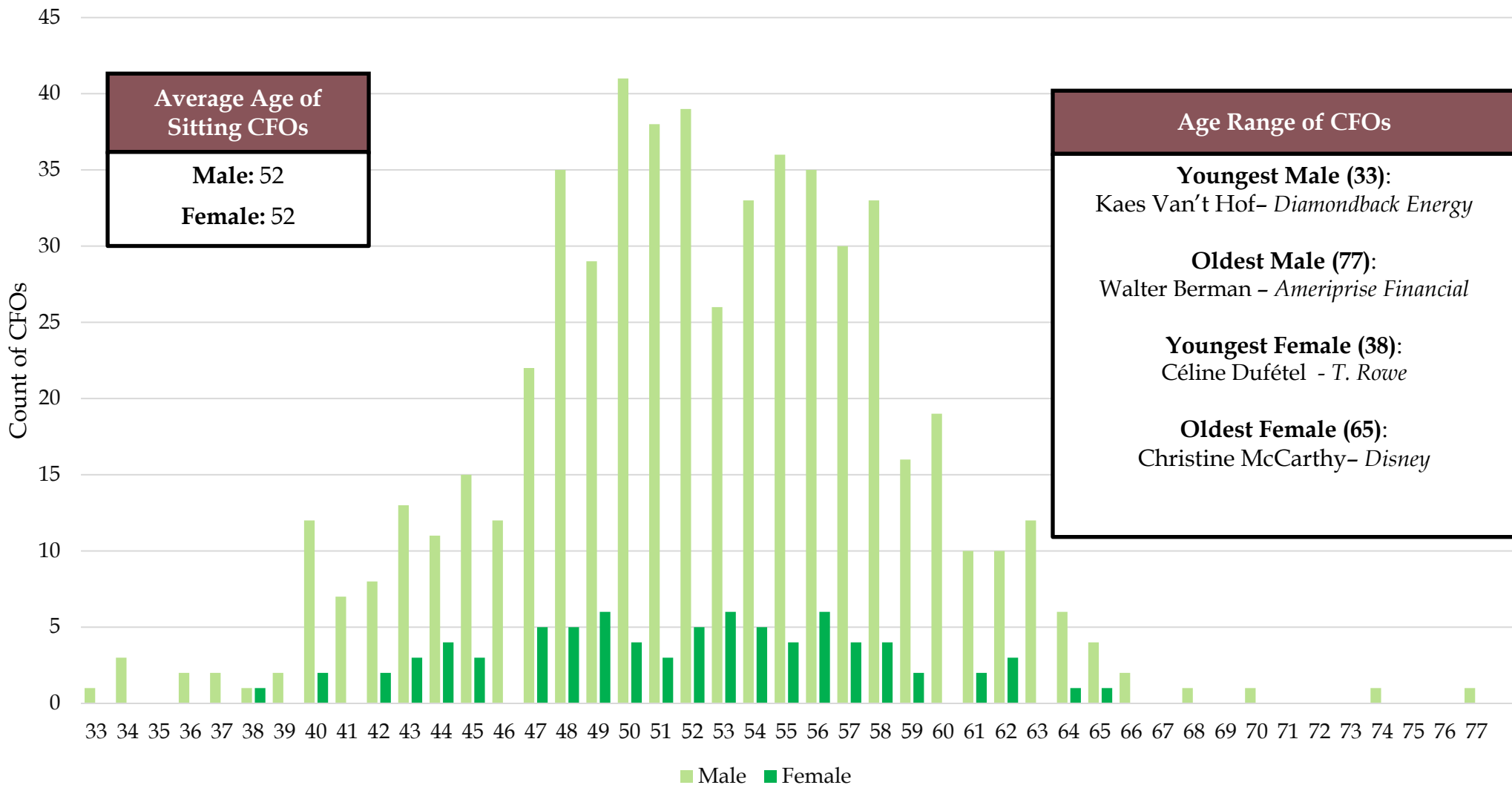
Over 60% of CFOs were younger than 50 when appointed to their role

Age at Hire of Sitting CFOs
 2020 Fortune 500 and S&P 500 (674 Companies; 675 Sitting CFOs; 650 Known CFO Ages at Hire)



More than 85% of sitting CFOs are younger than 60

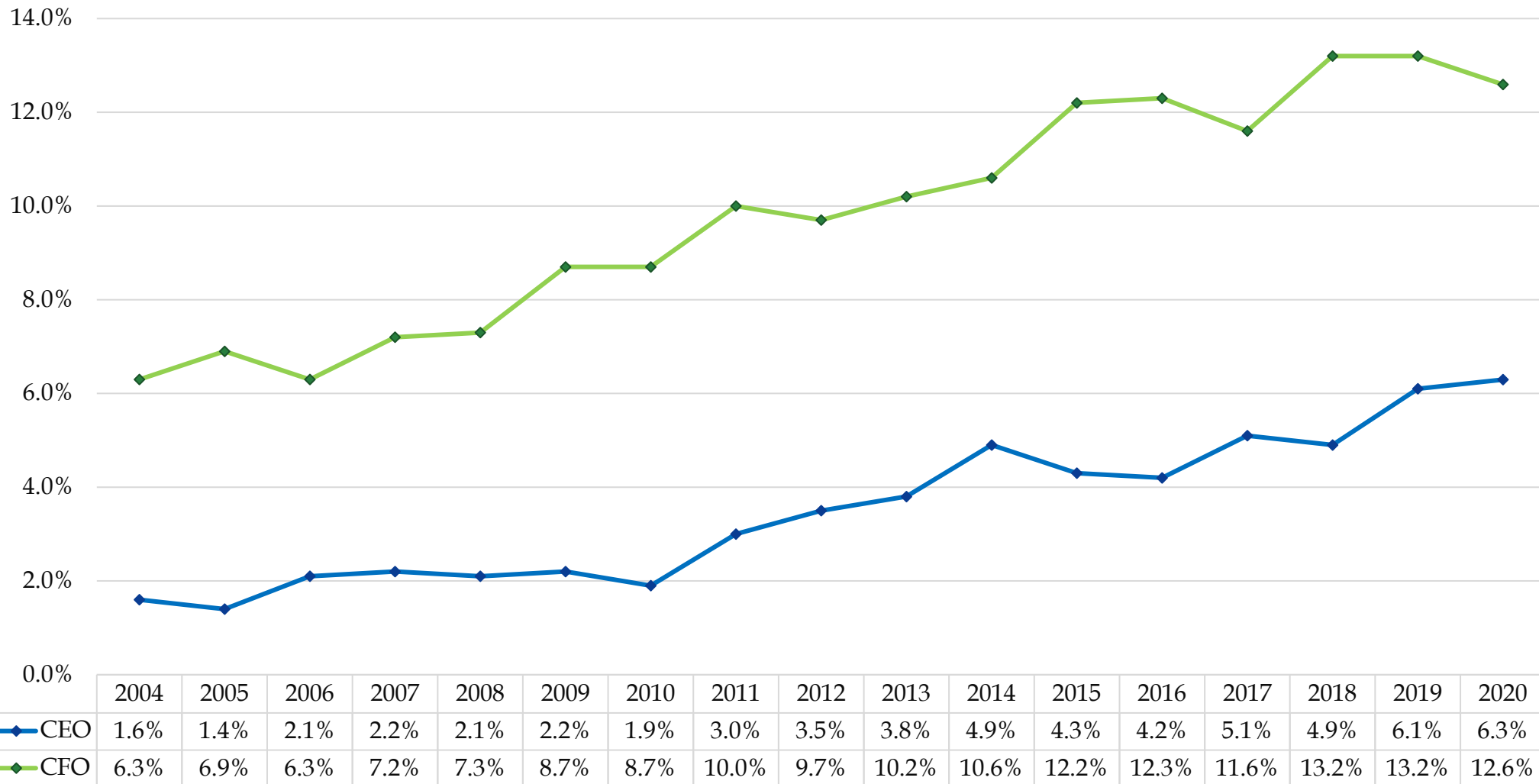
Age Distribution of Sitting CFOs
2020 Fortune 500 and S&P 500 (674 Companies; 675 Sitting CFOs; 650 Known CFO Ages)



Diversity Landscape

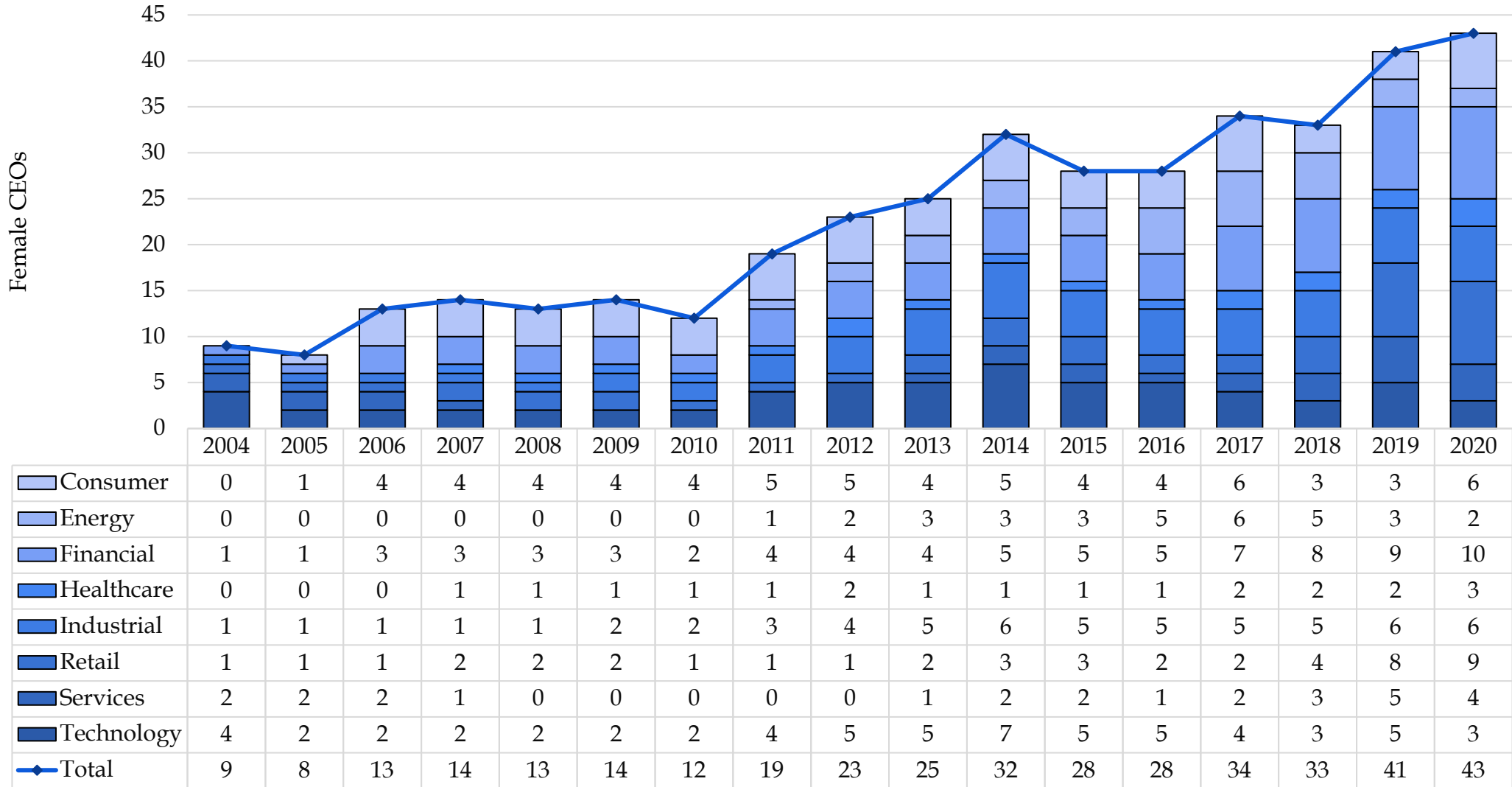
The percentage of Female CEOs and CFOs has shown slight change

Percentages of Companies with Female CEOs or CFOs (2004-2020)
 2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs; 675 Sitting CFOs)



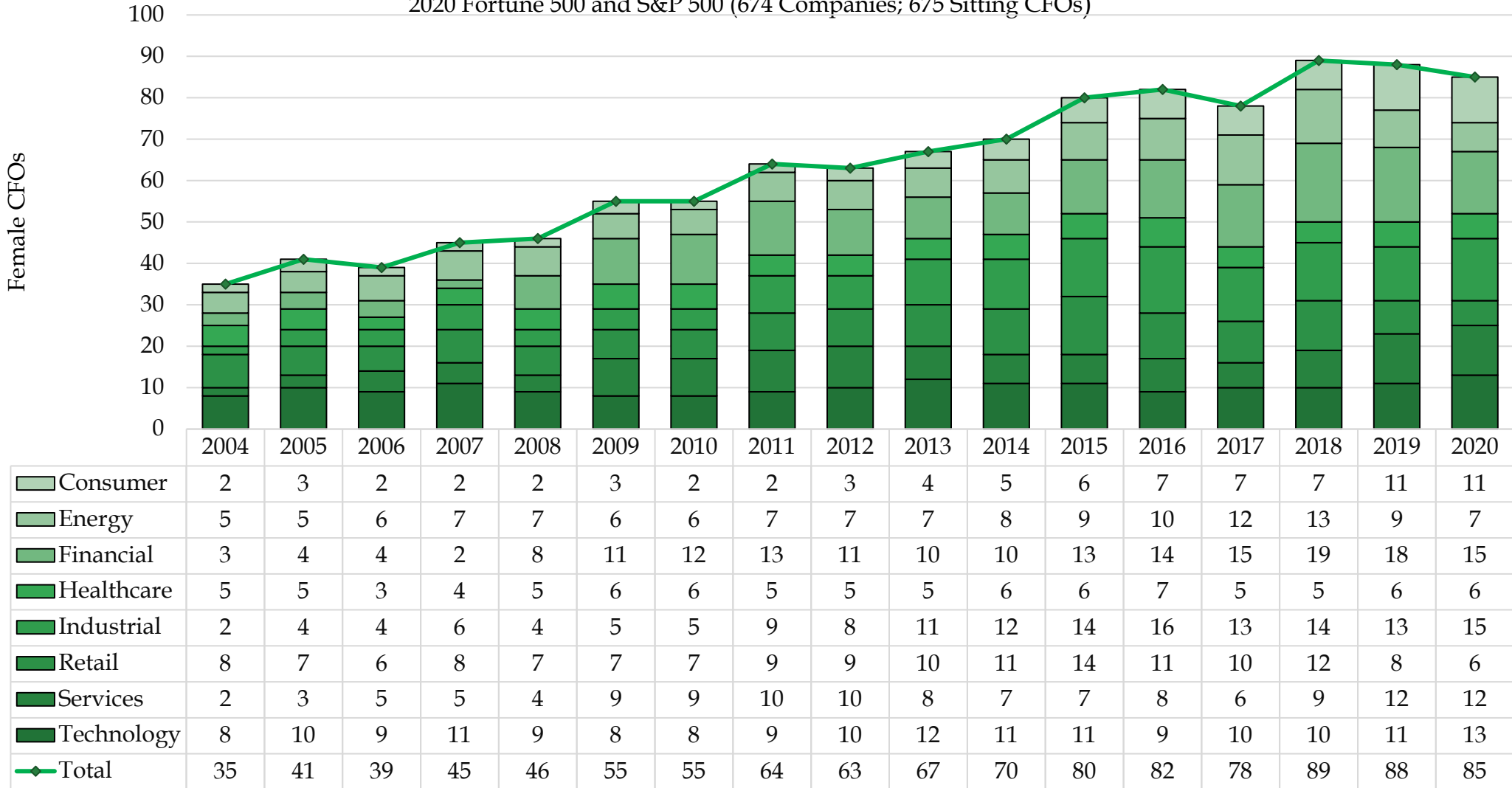
The number of Female CEOs has nearly quadrupled in the last decade

Number of Companies with Female CEOs by Industry (2004-2020)
2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs)



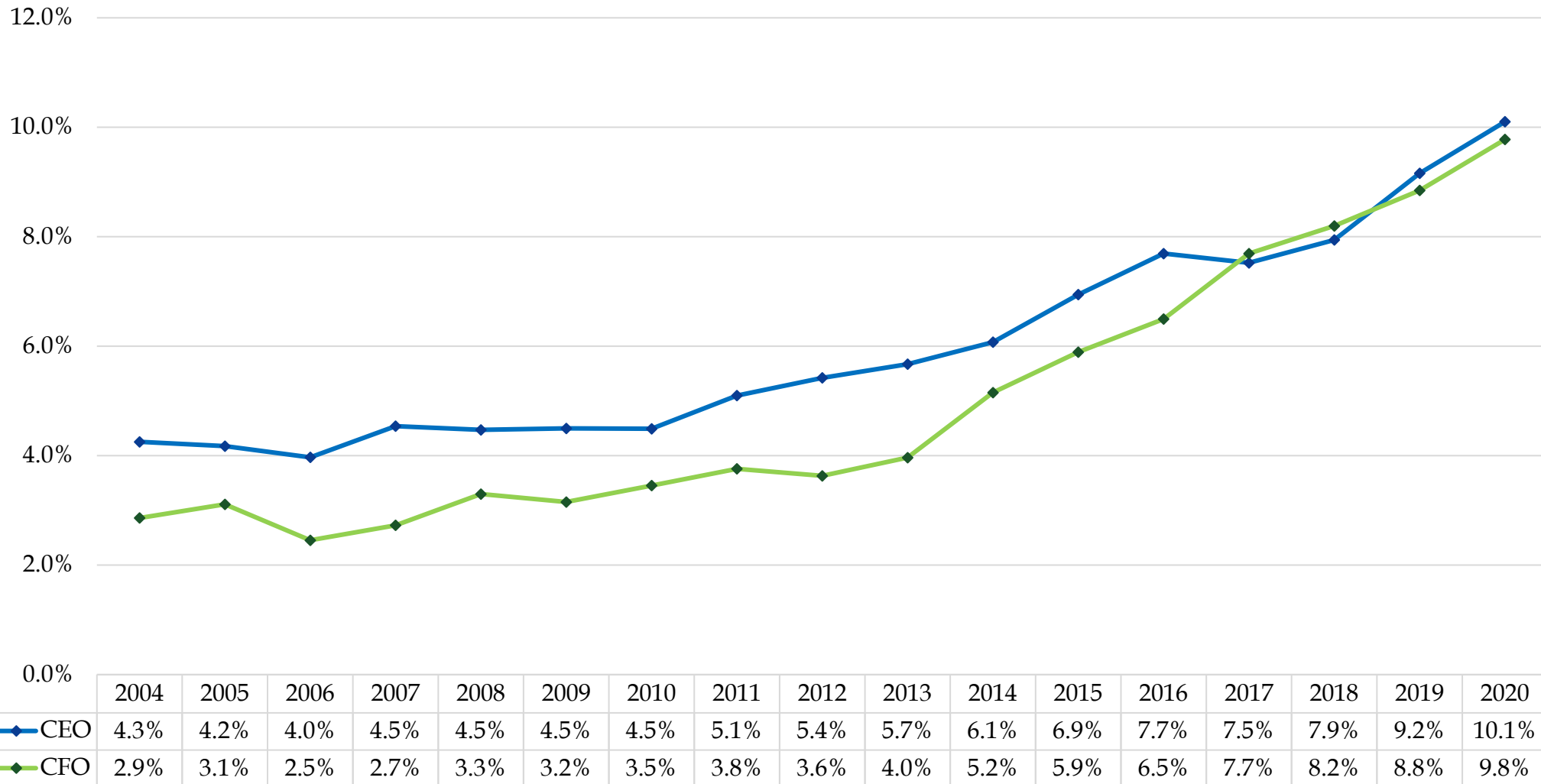
The number of Female CFOs in the Consumer and Services sectors has nearly doubled in the last five years

Number of Companies with Female CFOs by Industry (2004-2020)
2020 Fortune 500 and S&P 500 (674 Companies; 675 Sitting CFOs)



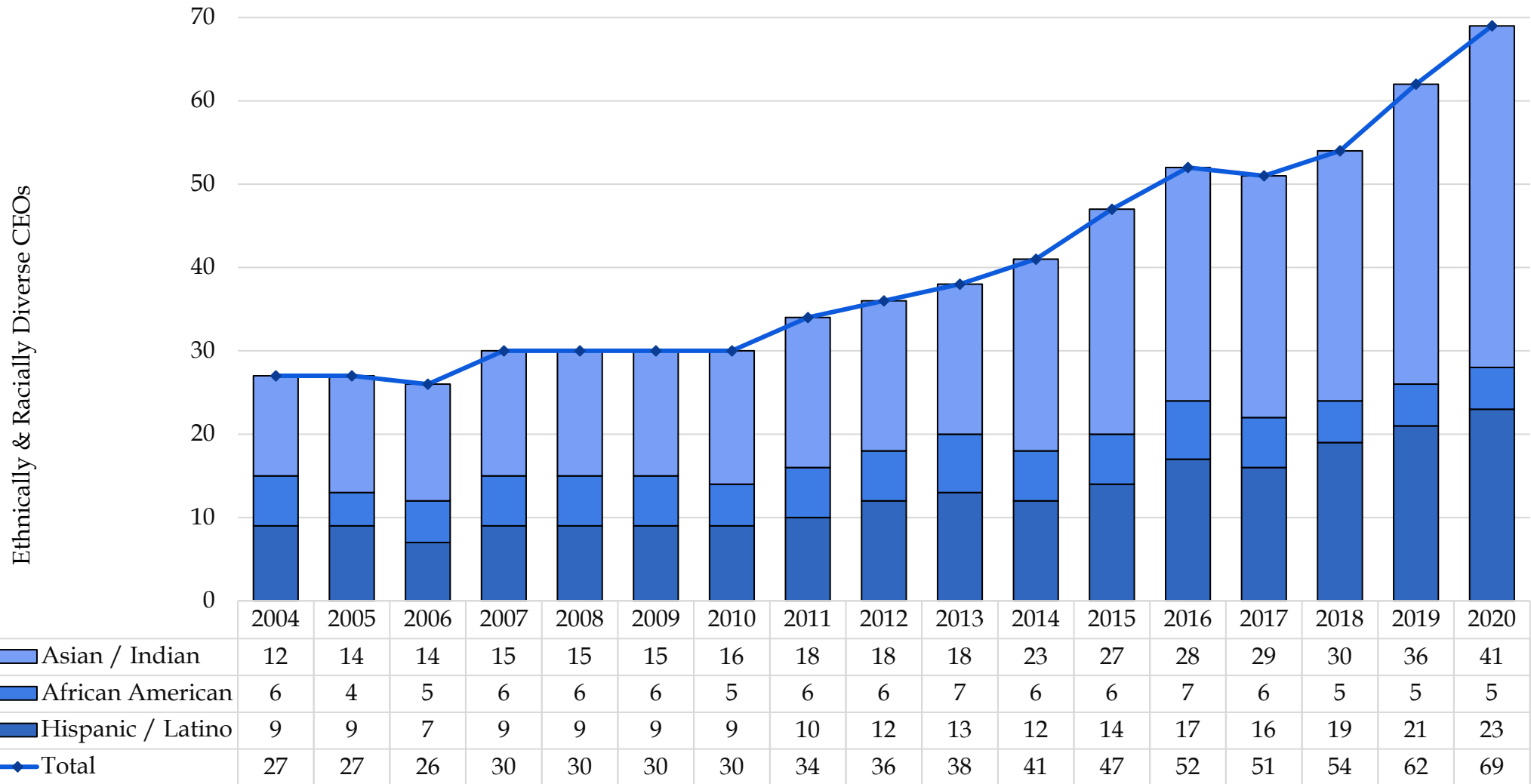
The percentage of ethnically and racially diverse CEOs and CFOs has more than doubled in the last 10 years

Percentages of Companies with Ethnically and Racially Diverse CEOs or CFOs (2004-2020)
2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs; 675 Sitting CFOs)



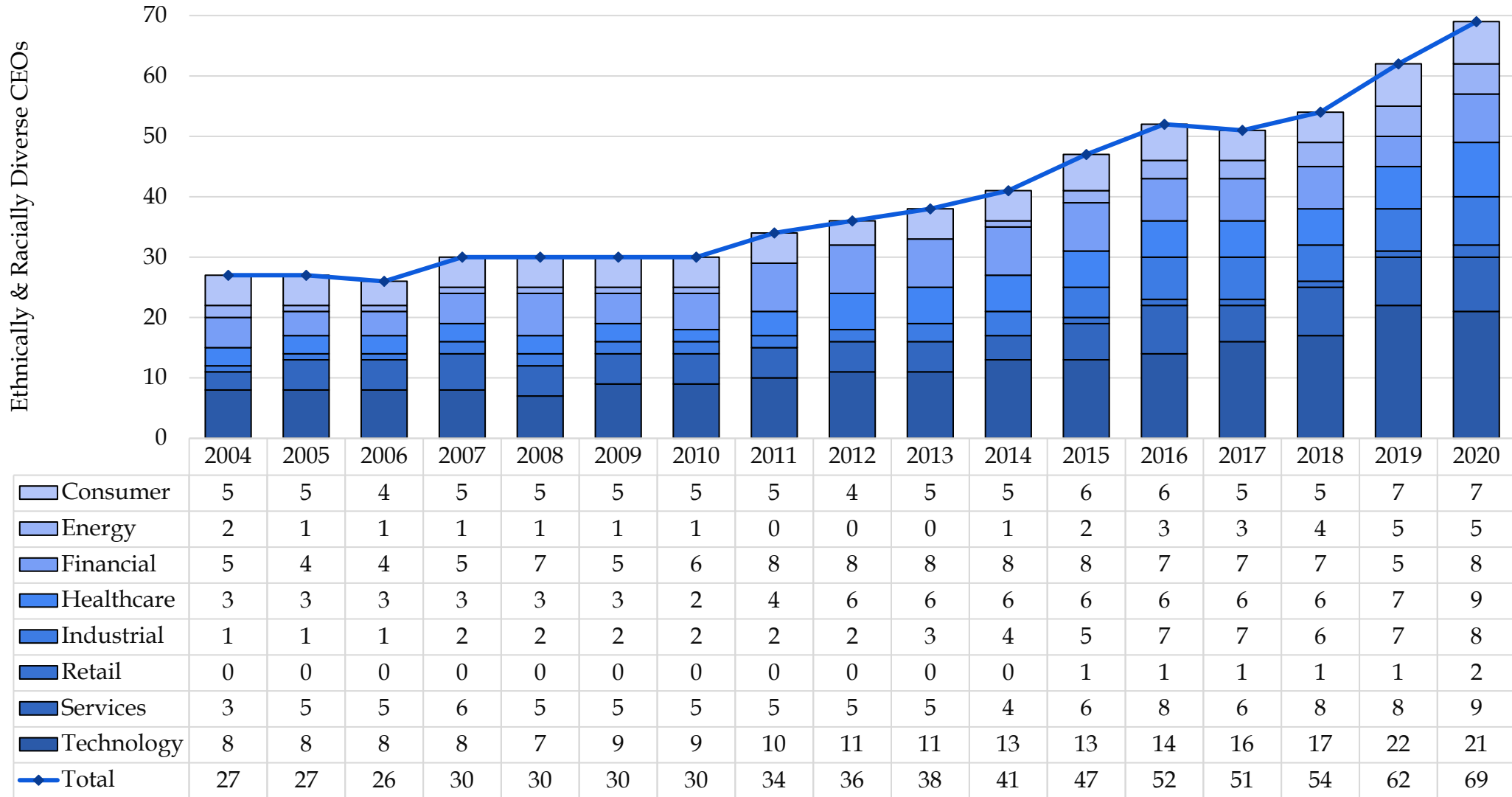
Ethnic and racial diversity in the CEO role continues to slowly grow, although African American remains static

Number of Companies with Ethnically and Racially Diverse CEOs (2004-2020)
2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs)



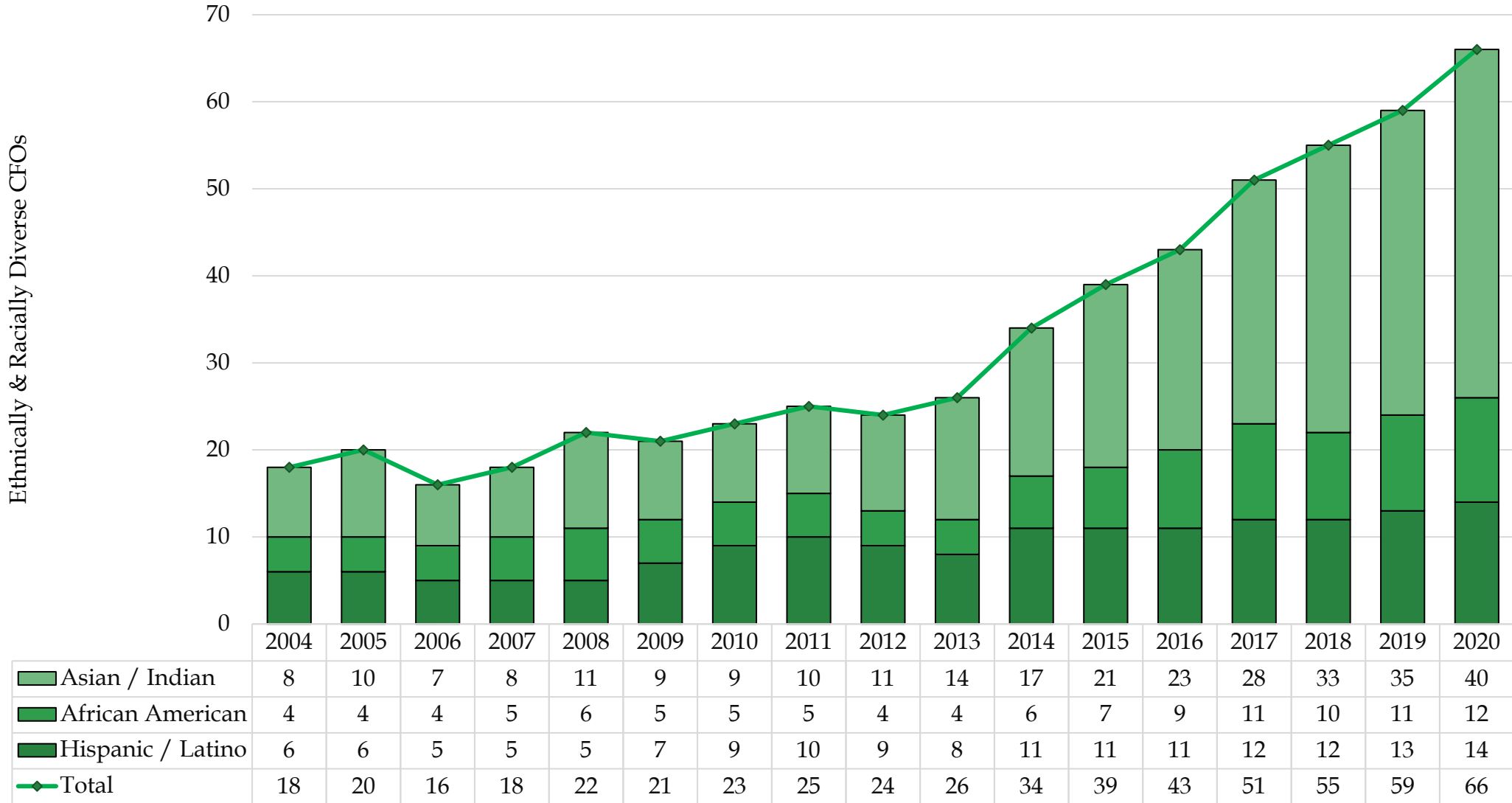
The Technology sector has led historically in the number of ethnically and racially diverse CEOs, and the margin is growing

Number of Companies with Ethnically and Racially Diverse CEOs by Industry (2004-2020)
2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs)



Ethnic and racial diversity in the CFO role has nearly tripled over the last decade, particularly for Asian/Indian executives

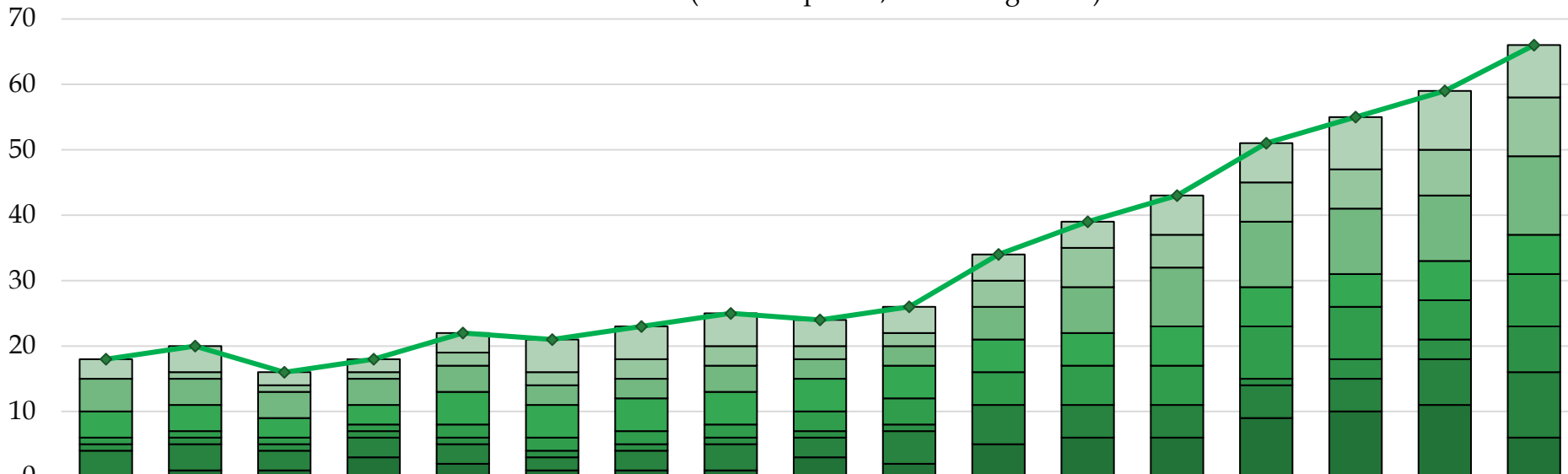
Number of Companies with Ethnically and Racially Diverse CFOs (2004-2020)
2020 Fortune 500 and S&P 500 (674 Companies; 675 Sitting CFOs)



Across industry sectors, ethnic and racial diversity in the CFO position has grown by more than 250% since 2013

Number of Companies with Ethnically and Racially Diverse CFOs by Industry (2004-2020)
2020 Fortune 500 and S&P 500 (674 Companies; 675 Sitting CFOs)

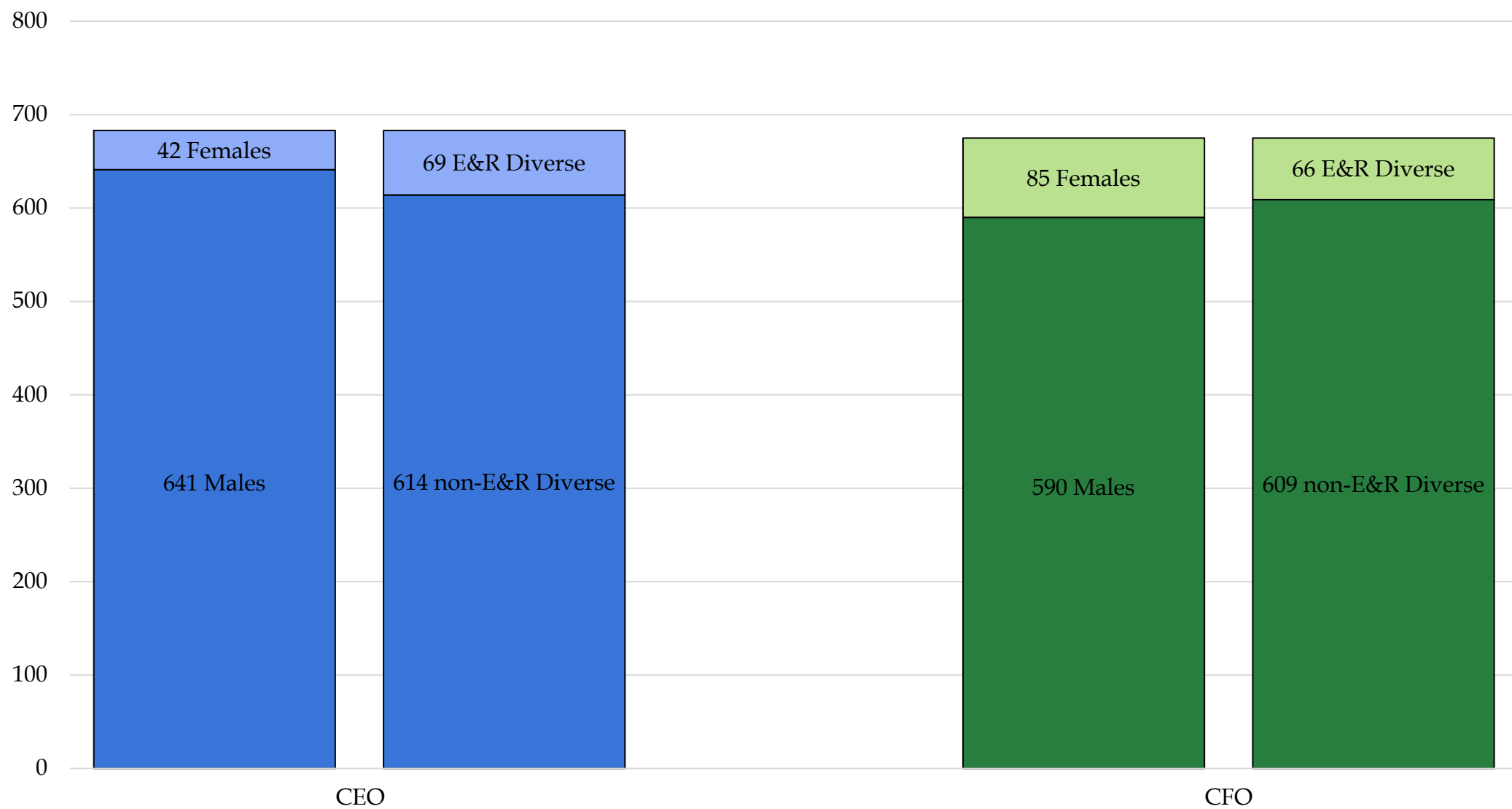
Ethnically & Racially Diverse CFOs



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Consumer	3	4	2	2	3	5	5	5	4	4	4	4	6	6	8	9	8
Energy	0	1	1	1	2	2	3	3	2	2	4	6	5	6	6	7	9
Financial	5	4	4	4	4	3	3	4	3	3	5	7	9	10	10	10	12
Healthcare	4	4	3	3	5	5	5	5	5	5	5	5	6	6	5	6	6
Industrial	1	1	1	1	2	2	2	2	3	4	5	6	6	8	8	6	8
Retail	1	1	1	1	1	1	1	1	1	1	0	0	0	1	3	3	7
Services	4	4	3	3	3	2	3	4	3	5	6	5	5	5	5	7	10
Technology	0	1	1	3	2	1	1	1	3	2	5	6	6	9	10	11	6
Total	18	20	16	18	22	21	23	25	24	26	34	39	43	51	55	59	66

Despite positive trends, diversity is still lacking in CEO and CFO roles

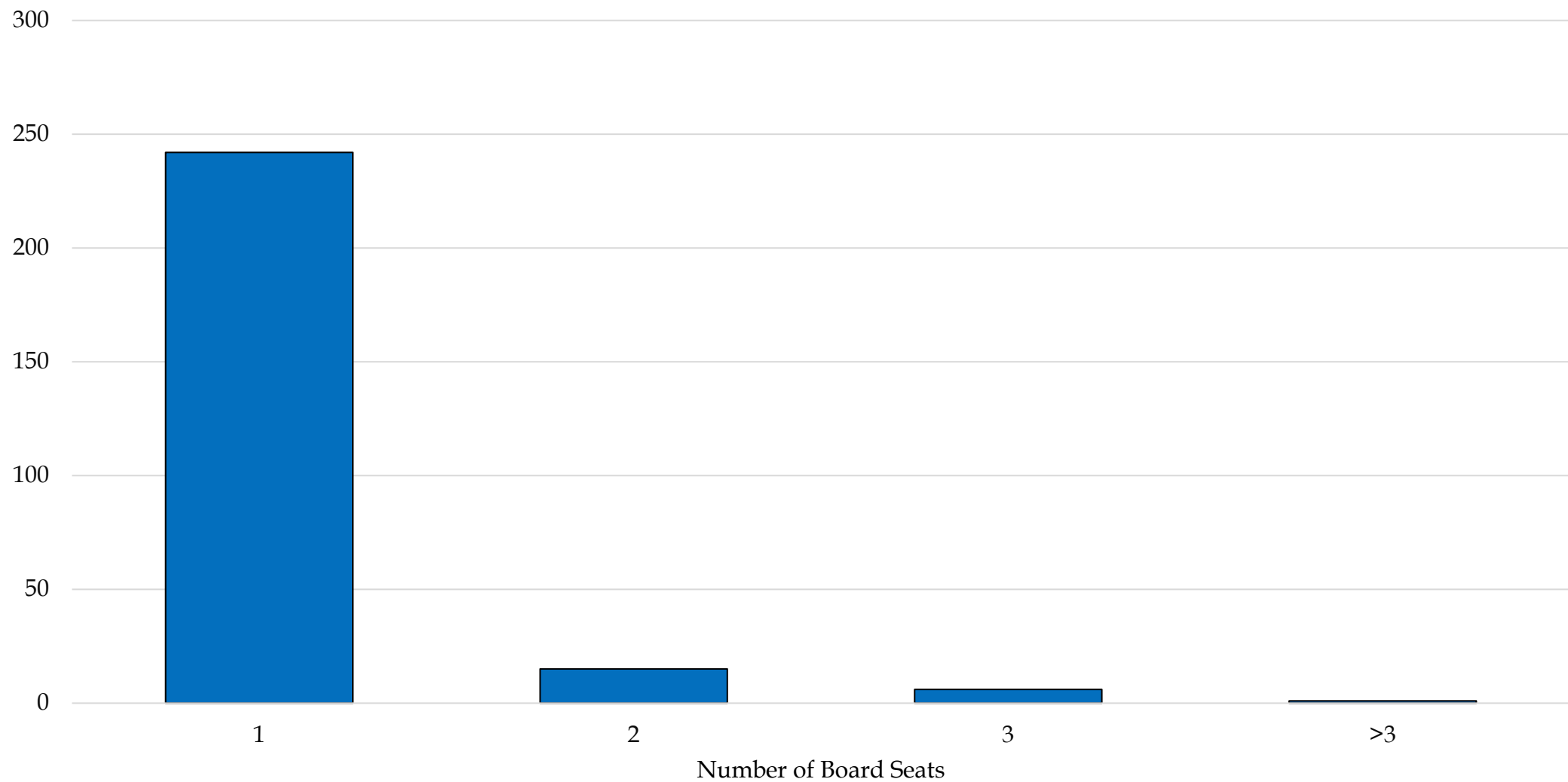
Male vs. Female CEOs and CFOs and Ethnically and Racially Diverse vs. Non-Ethnically and Racially Diverse CEOs and CFOs
2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs, 675 Sitting CFOs)



Boards

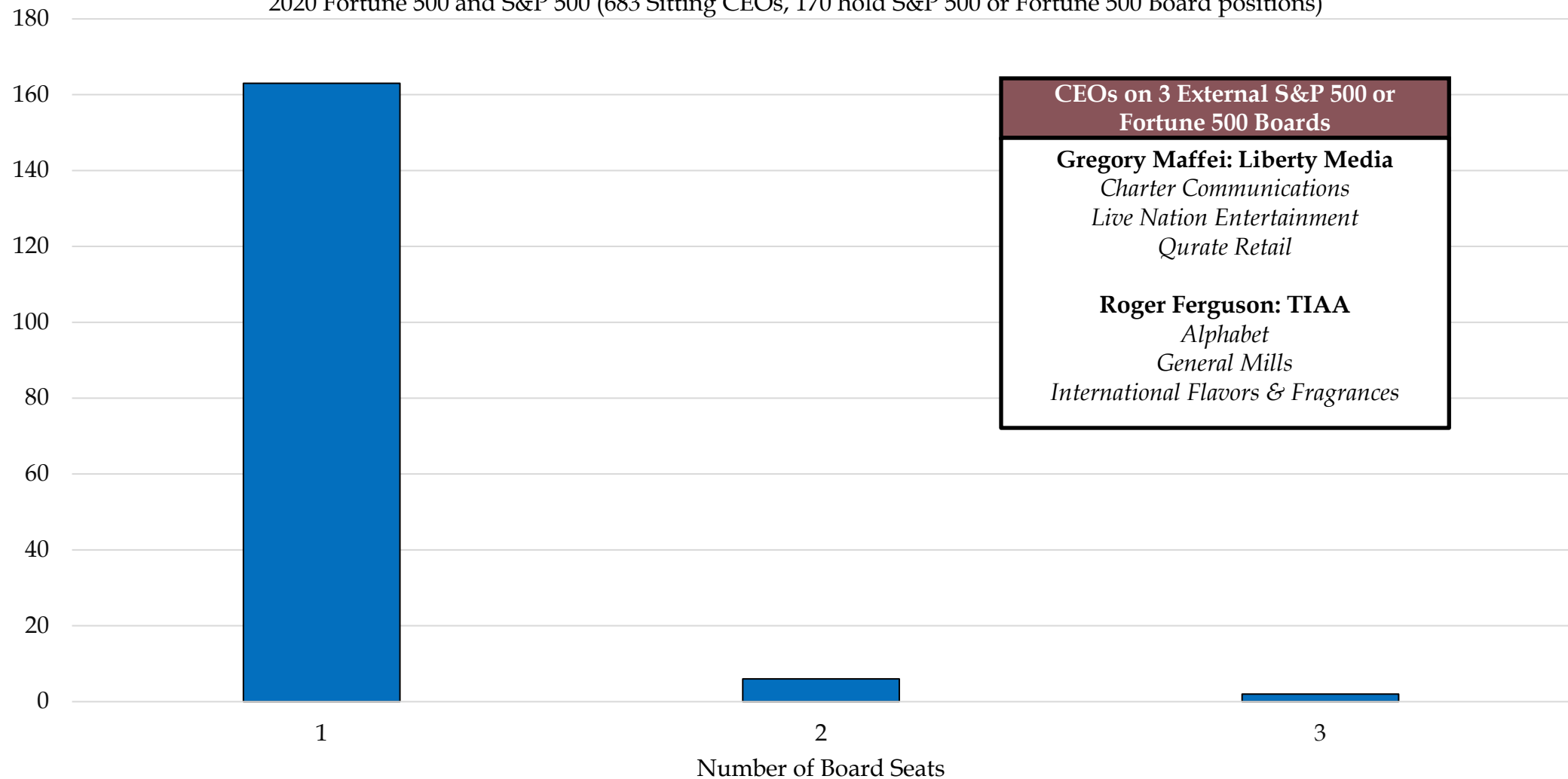
Nearly 40% of sitting CEOs hold only one external public Board seat

Sitting CEOs holding external public Board seat(s)
2020 Fortune 500 and S&P 500 (683 Sitting CEOs, 263 hold Board positions)



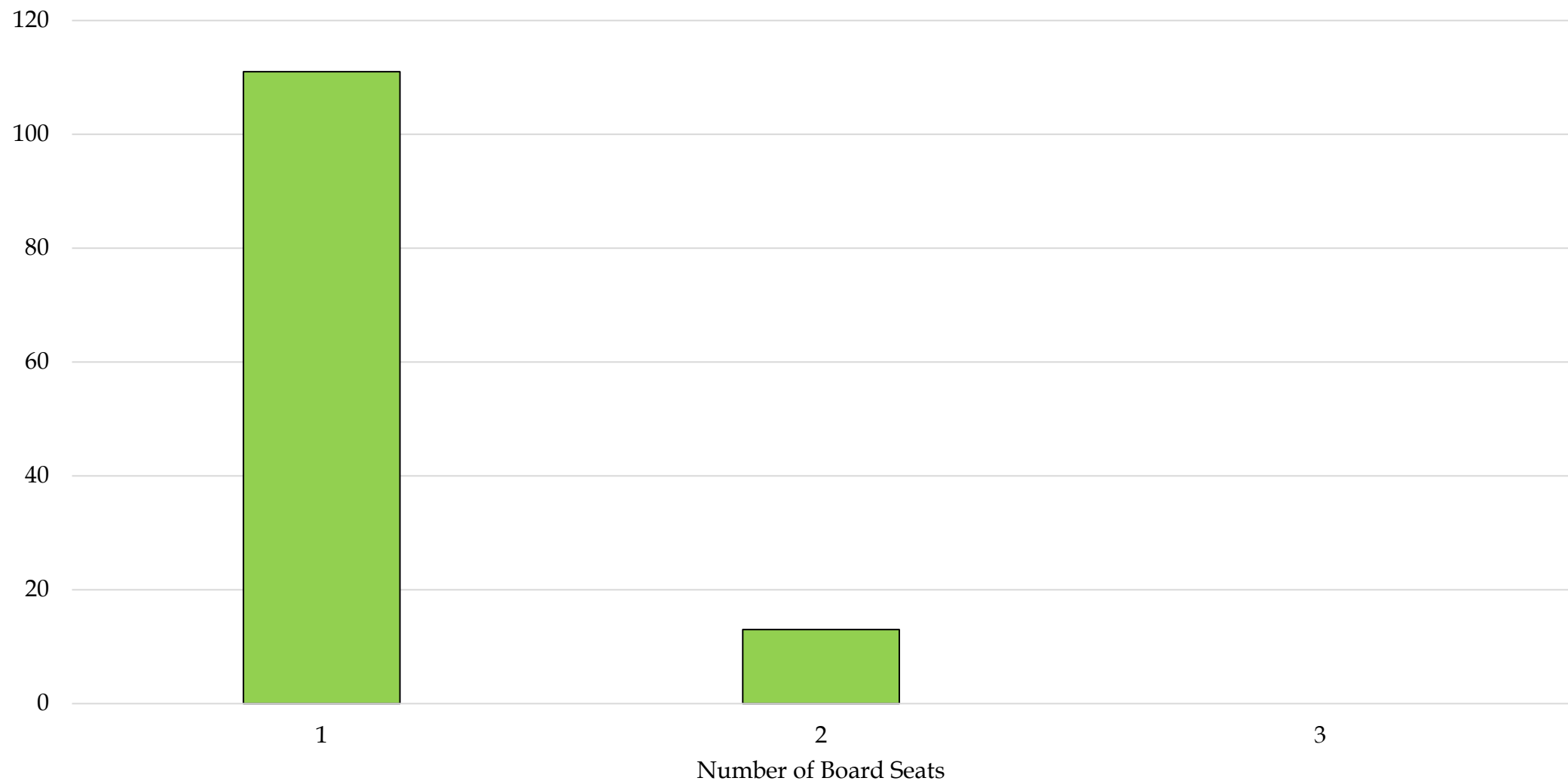
Nearly 25% of sitting CEOs hold at least one external Board seat on either an S&P 500 or Fortune 500 Company

Sitting CEOs holding external Board seat(s) in other S&P 500 and Fortune 500 Companies
2020 Fortune 500 and S&P 500 (683 Sitting CEOs, 170 hold S&P 500 or Fortune 500 Board positions)



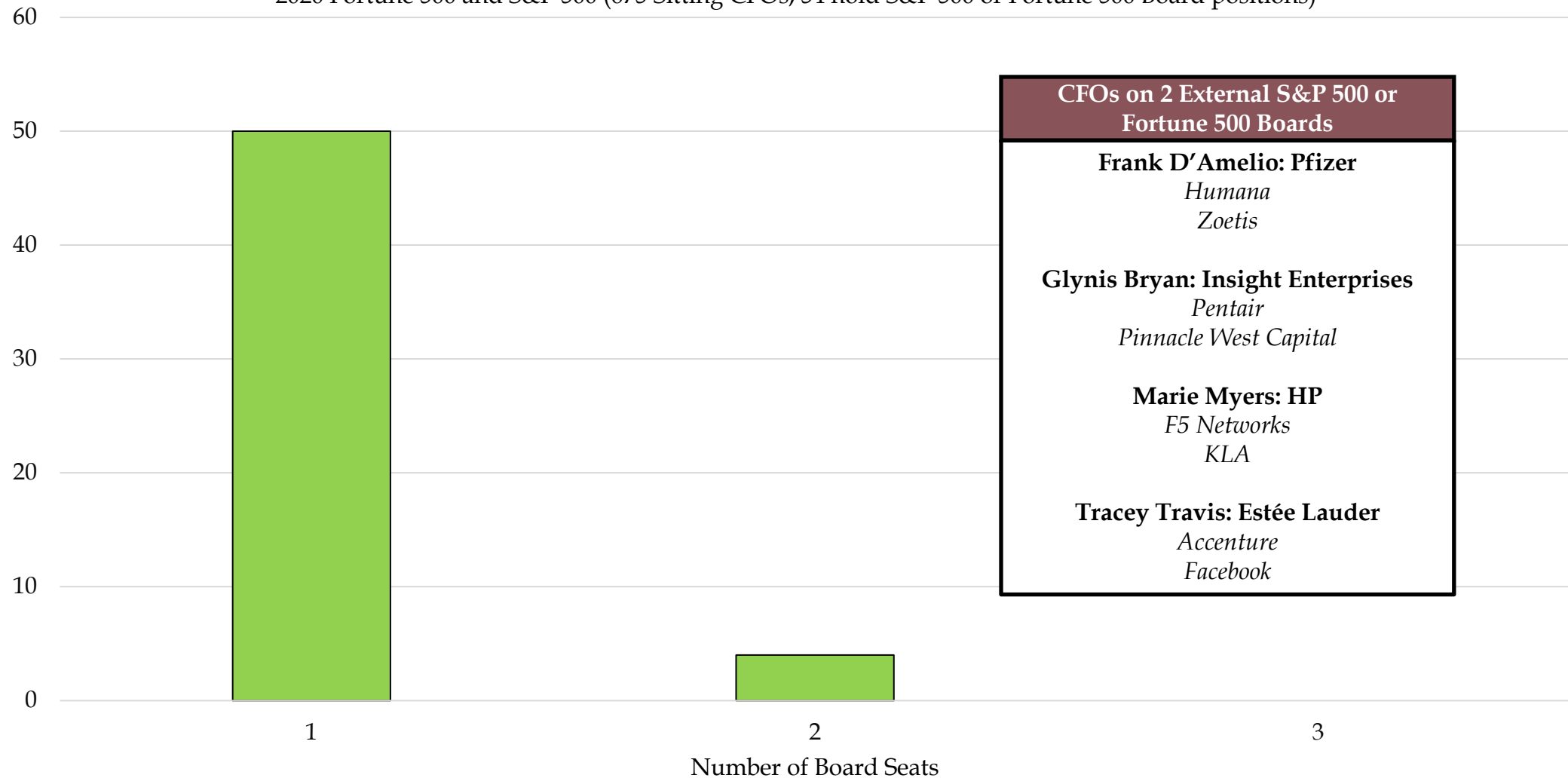
Over 18% of sitting CFOs hold an external public Board seat

Sitting CFOs holding external public Board seat(s)
2020 Fortune 500 and S&P 500 (675 Sitting CFOs, 124 hold Board positions)



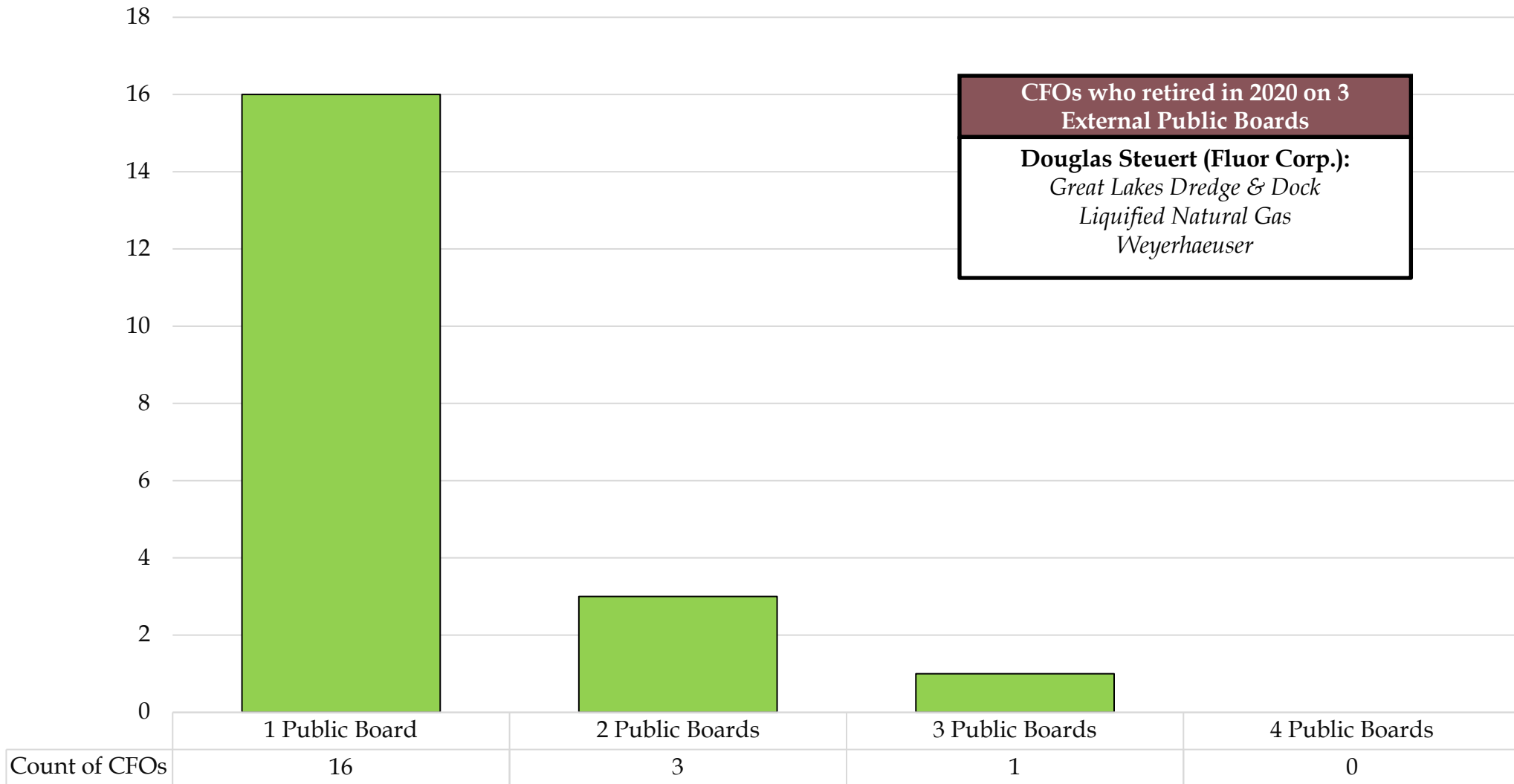
Less than 10% of sitting CFOs hold an external Board seat on either an S&P 500 or Fortune 500 Company

Sitting CFOs holding external Board seat(s) in other S&P 500 and Fortune 500 Companies
2020 Fortune 500 and S&P 500 (675 Sitting CFOs, 54 hold S&P 500 or Fortune 500 Board positions)



Over 40% of CFOs who have retired in 2020 hold a seat on an external public Board

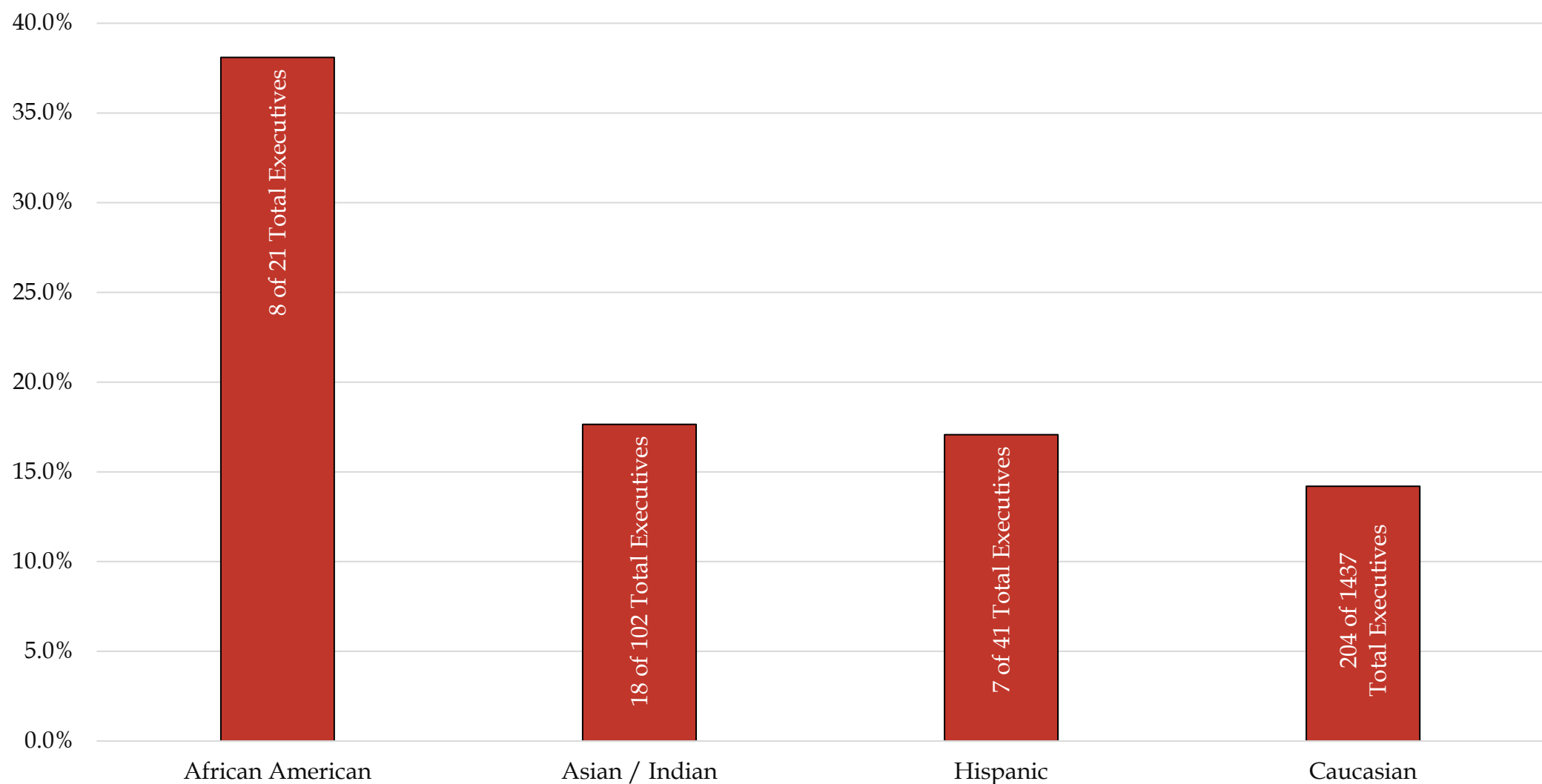
Recently retired CFOs holding public Board seat(s)
 2020 Fortune 500 and S&P 500 (43 Retired CFOs*, 20 hold board positions)



*Retired within the past calendar year

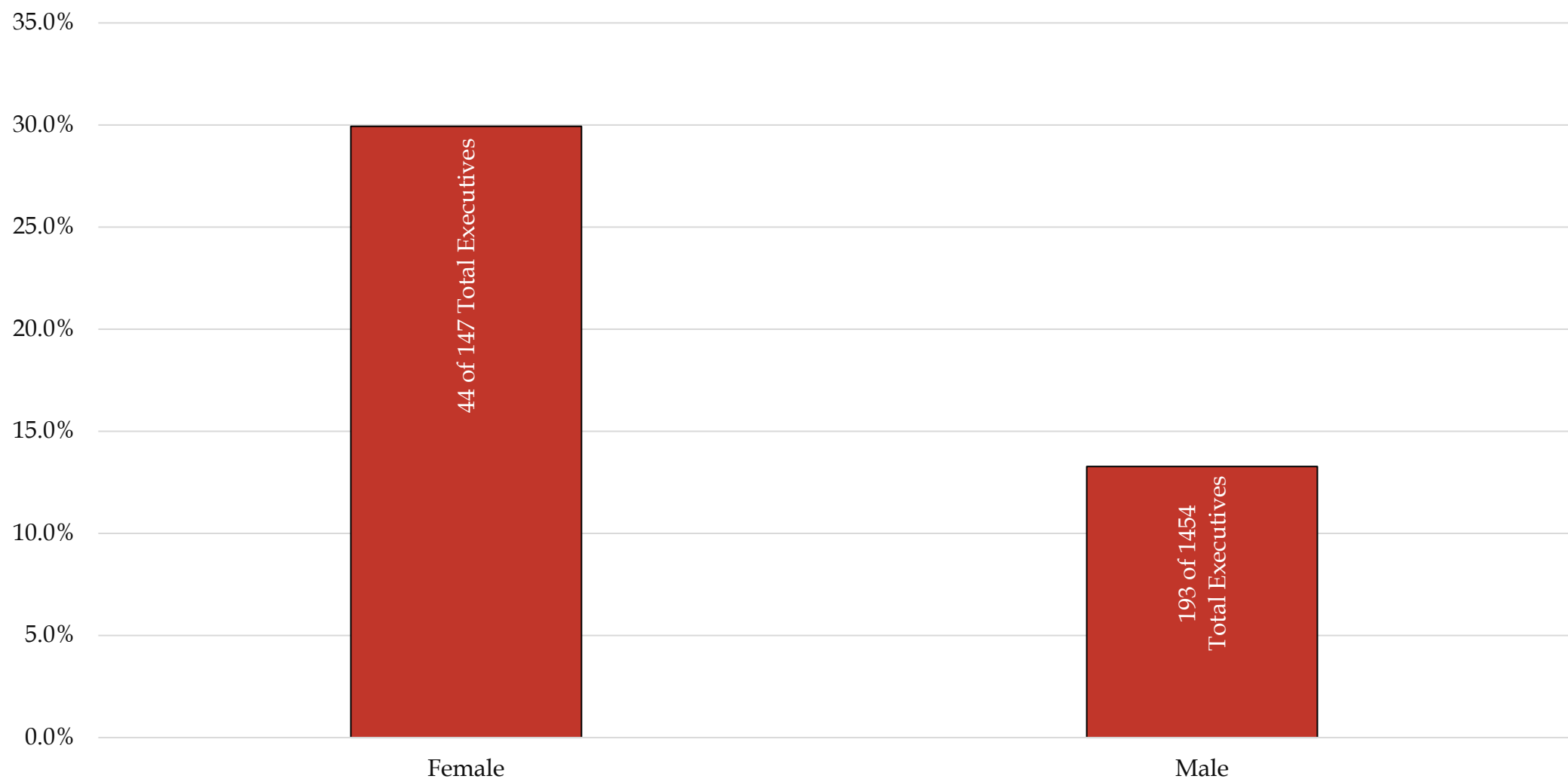
Of the 21 African Americans in the C-Suite (CEO, CFO, COO), only 8 serve on external Boards of either an S&P 500 or Fortune 500 Company

Percentage by race of C-Suite Executives on external Boards in either the S&P 500 or Fortune 500 Companies
 2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs, 170 hold S&P 500 or Fortune 500 Board positions; 675 Sitting CFOs, 54 hold S&P 500 or Fortune 500 Board positions; 243 Sittings COOs, 13 hold S&P 500 or Fortune 500 Board positions)



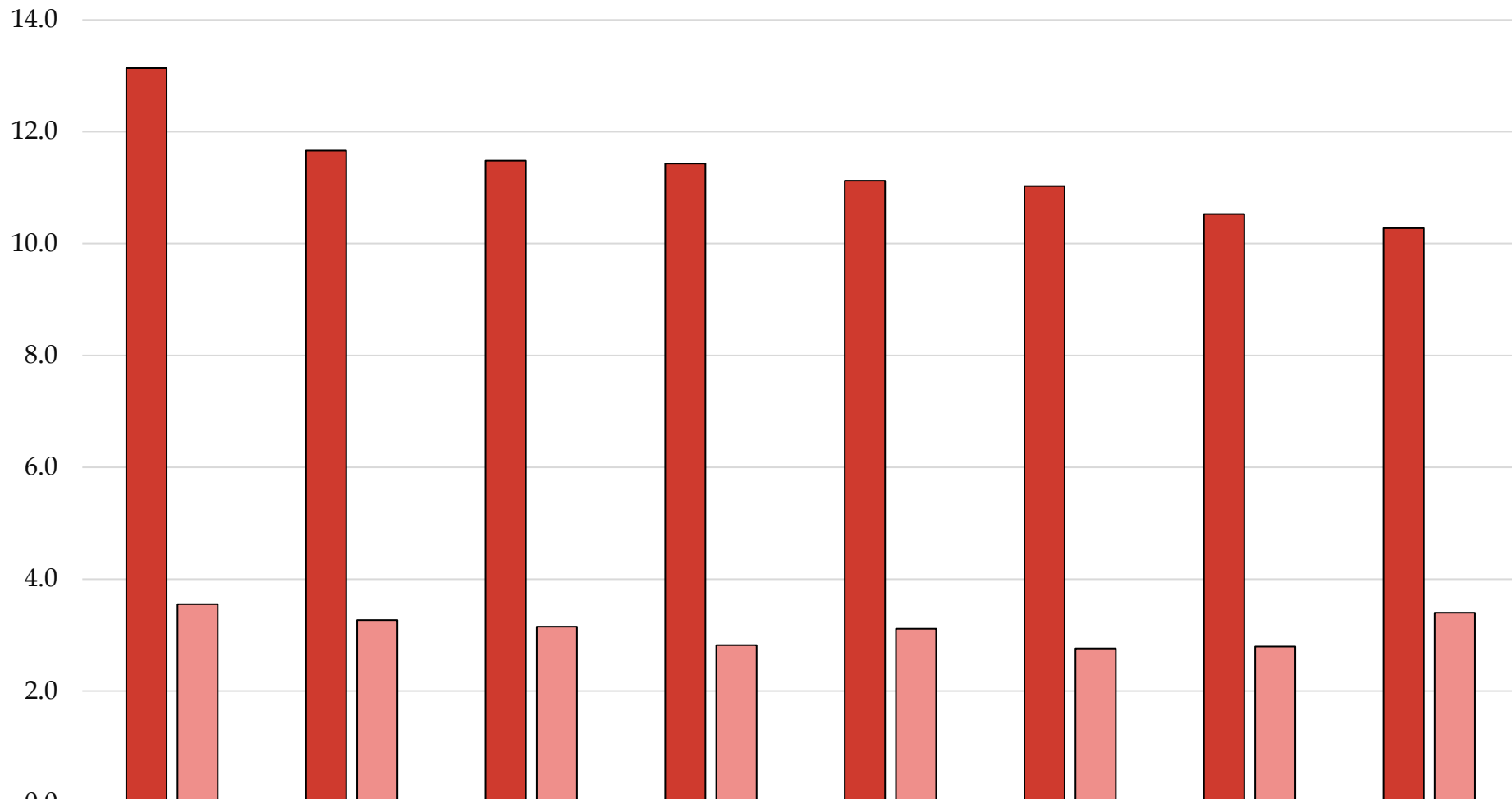
Only 30% of Female C-Suite (CEO, CFO, COO) executives have an external board position in either an S&P 500 or Fortune 500 Company

Percentage by gender of C-Suite Executives on external Boards in either the S&P 500 or Fortune 500 Companies
2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs, 170 hold S&P 500 or Fortune 500 Board positions; 675 Sitting CFOs, 54 hold S&P 500 or Fortune 500 Board positions; 243 Sittings COOs, 13 hold S&P 500 or Fortune 500 Board positions)



Average Board Seats vs. Average Female Board members by Industry

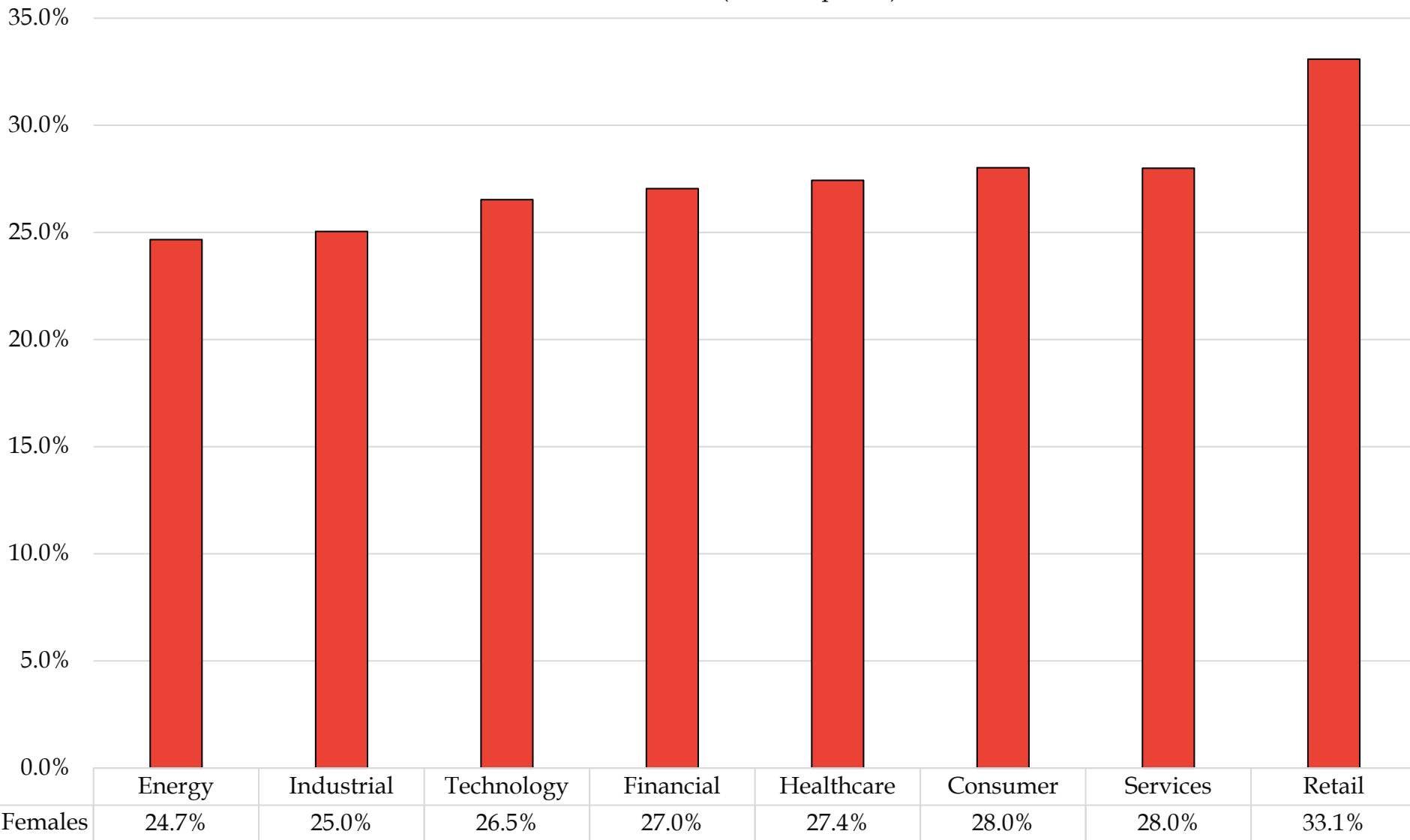
2020 Fortune 500 and S&P 500 (674 Companies)



	Financial	Consumer	Healthcare	Energy	Services	Industrial	Technology	Retail
■ Positions	13.1	11.7	11.5	11.4	11.1	11.0	10.5	10.3
■ Female Members	3.6	3.3	3.2	2.8	3.1	2.8	2.8	3.4

Retail leads in percentage of Female Board members

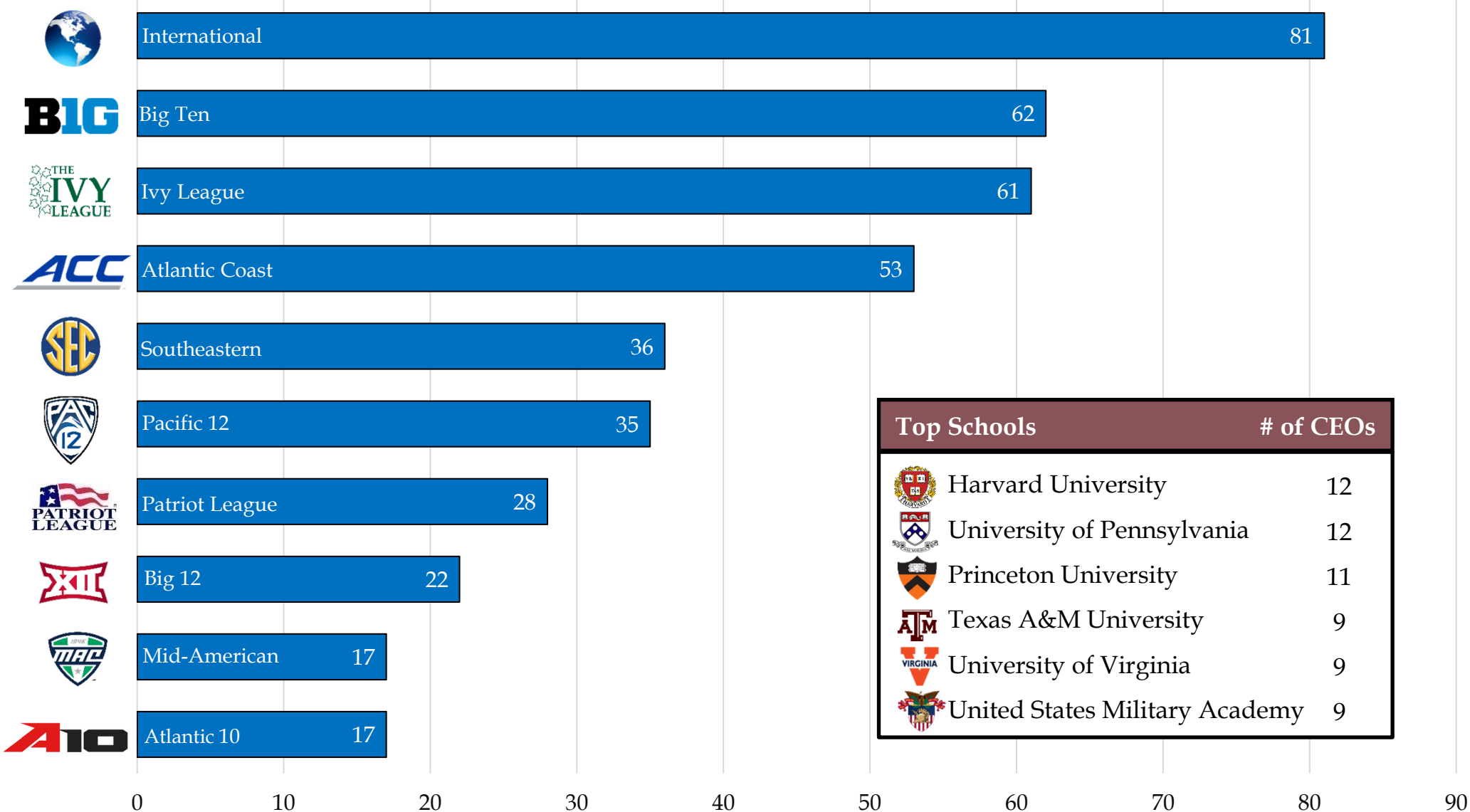
Percent Females on boards by Industry
2020 Fortune 500 and S&P 500 (674 Companies)



Educational Background

More CEOs come from the Big Ten than any other U.S. conference

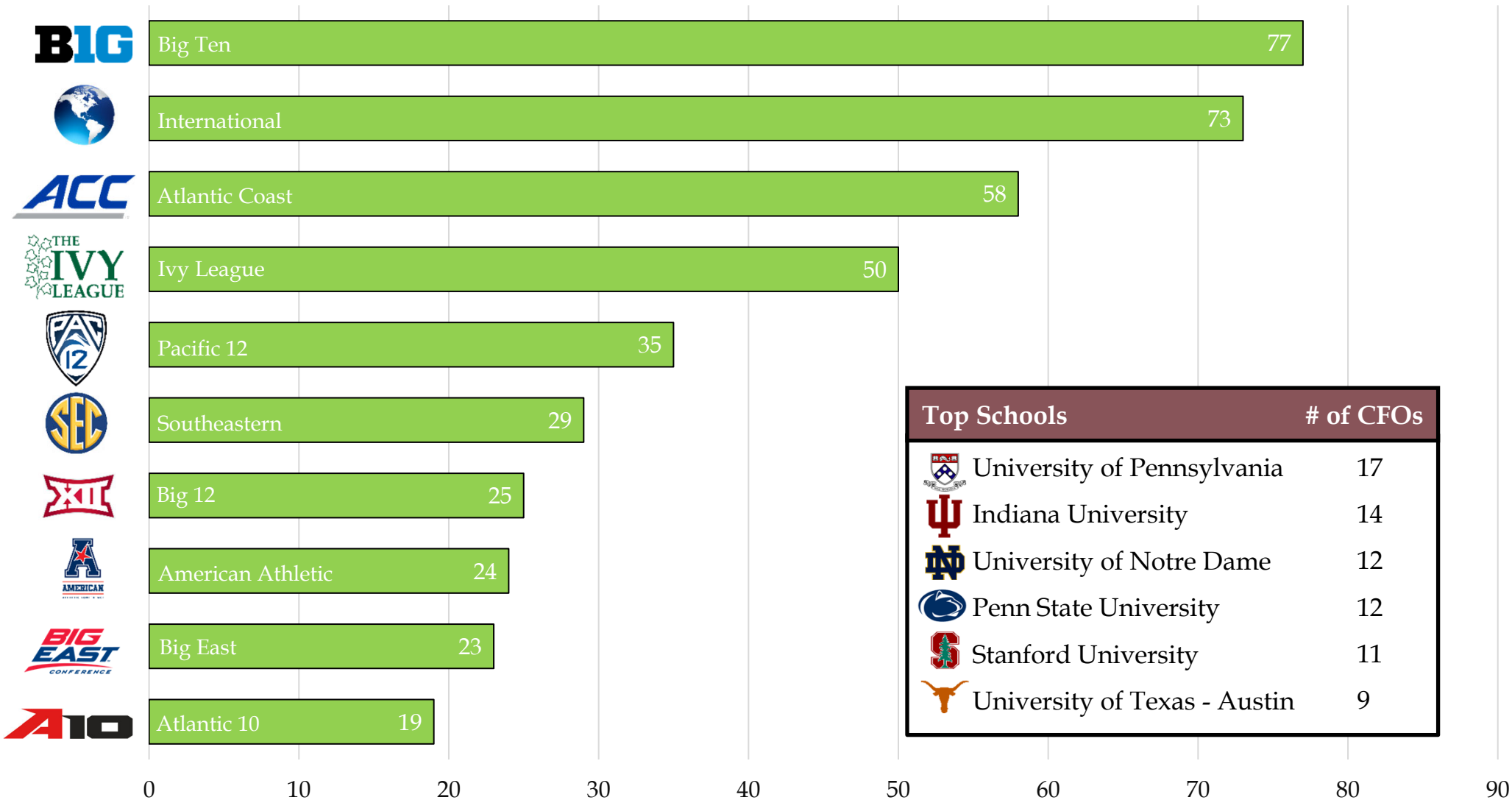
Sitting CEO Undergraduate University Conference Affiliation
 2020 Fortune 500 and S&P 500 Companies (683 Sitting CEOs; 651 Known Educational Backgrounds)



Top Schools	# of CEOs
Harvard University	12
University of Pennsylvania	12
Princeton University	11
Texas A&M University	9
University of Virginia	9
United States Military Academy	9

Big Ten Universities have produced the most CFOs for eight consecutive years

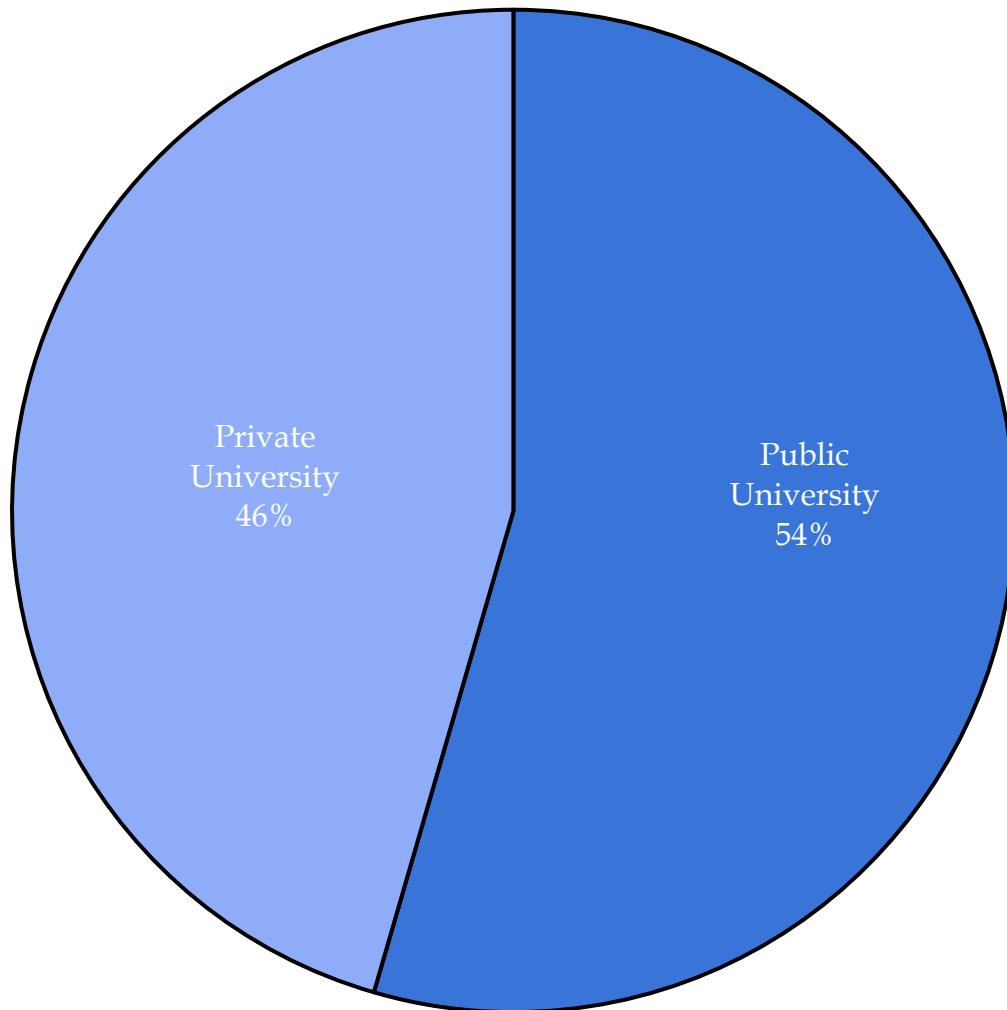
Sitting CFO Undergraduate University Conference Affiliation
 2020 Fortune 500 and S&P 500 Companies (675 Sitting CFOs; 642 Known Educational Backgrounds)










Top Schools	# of CFOs
University of Pennsylvania	17
Indiana University	14
University of Notre Dame	12
Penn State University	12
Stanford University	11
University of Texas - Austin	9

Public universities currently produce the most sitting CEOs

Sitting CEO Undergraduate University
 2020 Fortune 500 and S&P 500 Companies (683 Sitting CEOs; 651 Known Educational Backgrounds)

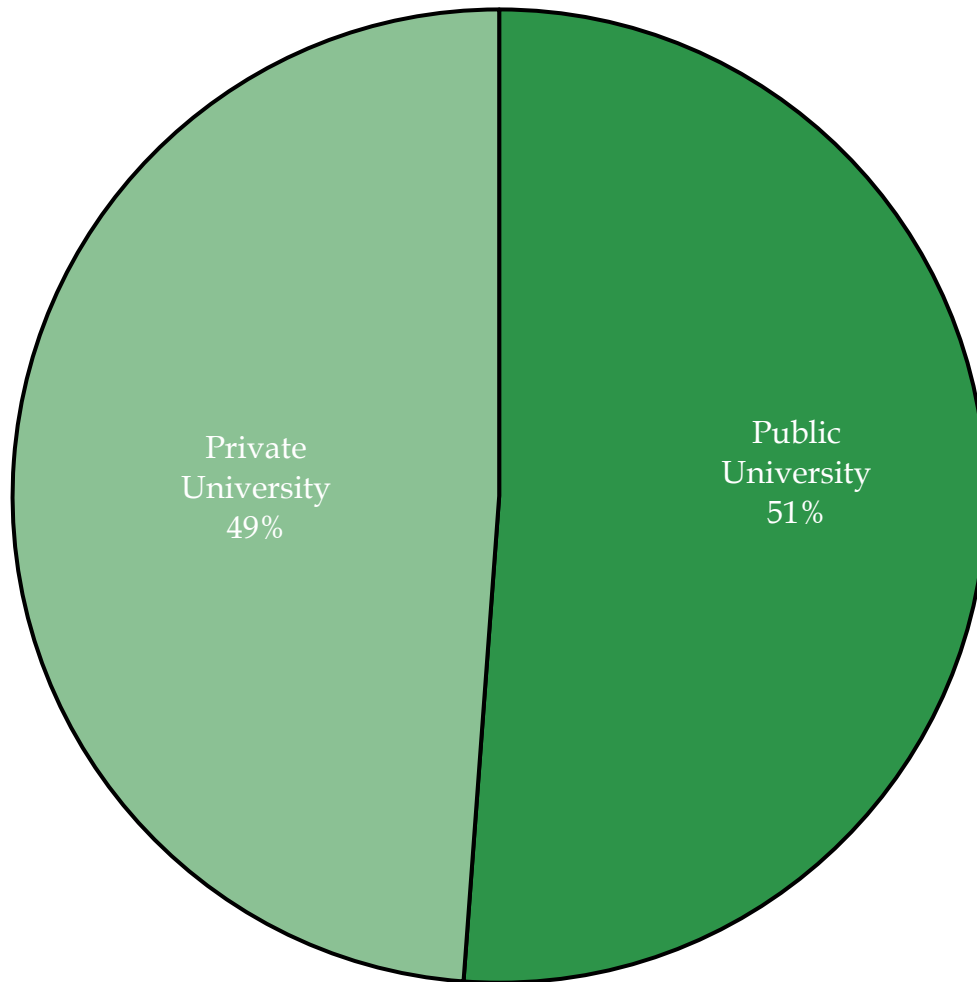


Top Public Schools	# of CEOs
 Penn State University	10
 Texas A&M University	9
 University of Virginia	9
 United States Military Academy	9
 Iowa State University	8
 Michigan State University	7
 University of Michigan	7




Top Private Schools	# of CEOs
 Harvard University	12
 University of Pennsylvania	12
 Princeton University	11
 Cornell University	8
 Stanford University	8
 Lehigh University	7
 Dartmouth College	7

The split between public and private university educated CFOs is nearly even

Sitting CFO Undergraduate University
 2020 Fortune 500 and S&P 500 Companies (675 Sitting CFOs; 642 Known Educational Backgrounds)

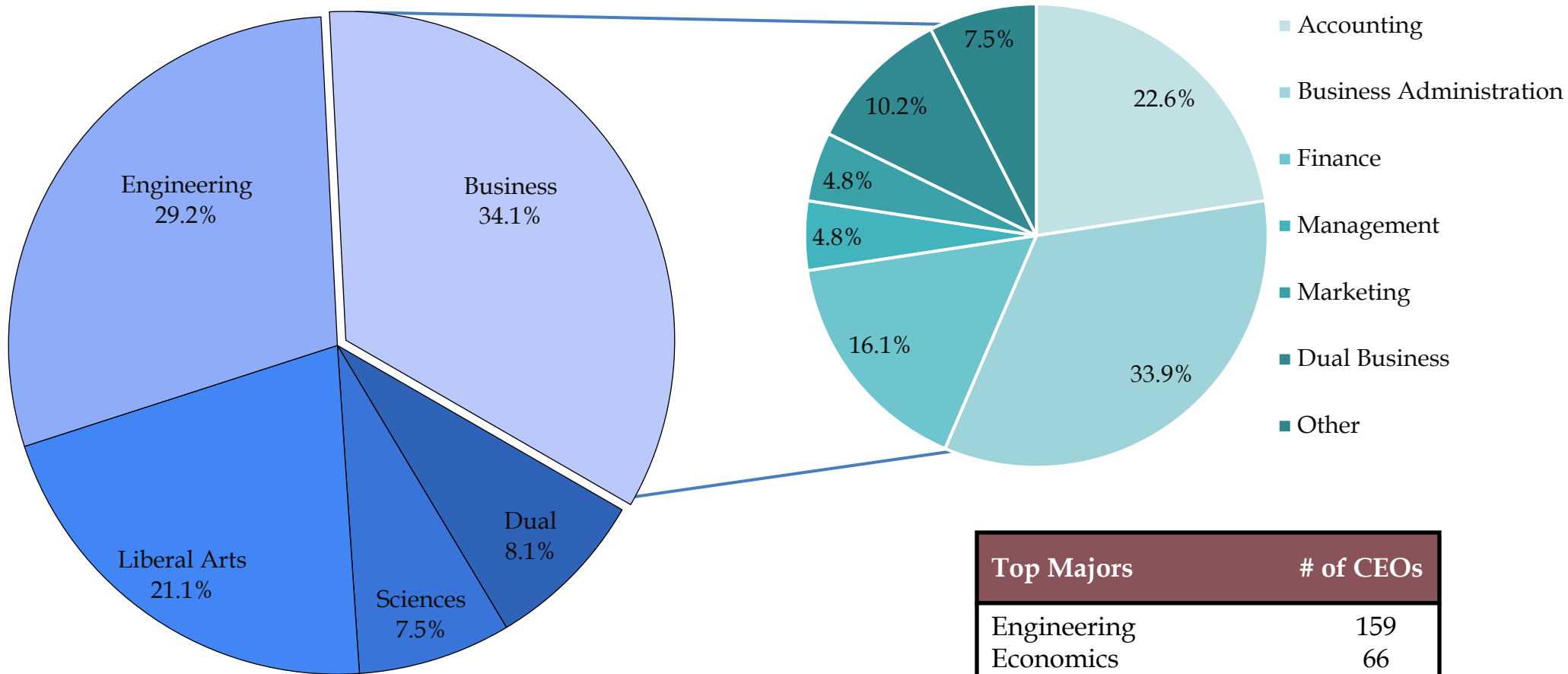


Top Public Schools	# of CFOs
 Indiana University	14
 Penn State University	12
 University of Texas - Austin	9
 University of Michigan	8
 University of Connecticut	7

Top Private Schools	# of CFOs
 University of Pennsylvania	17
 University of Notre Dame	12
 Stanford University	11
 Georgetown University	9
 Boston College	8

Over 60% of CEOs have an undergraduate degree in Business or Engineering

Percentage of CEOs from each Educational Background
2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs; 651 Known Educational Backgrounds)

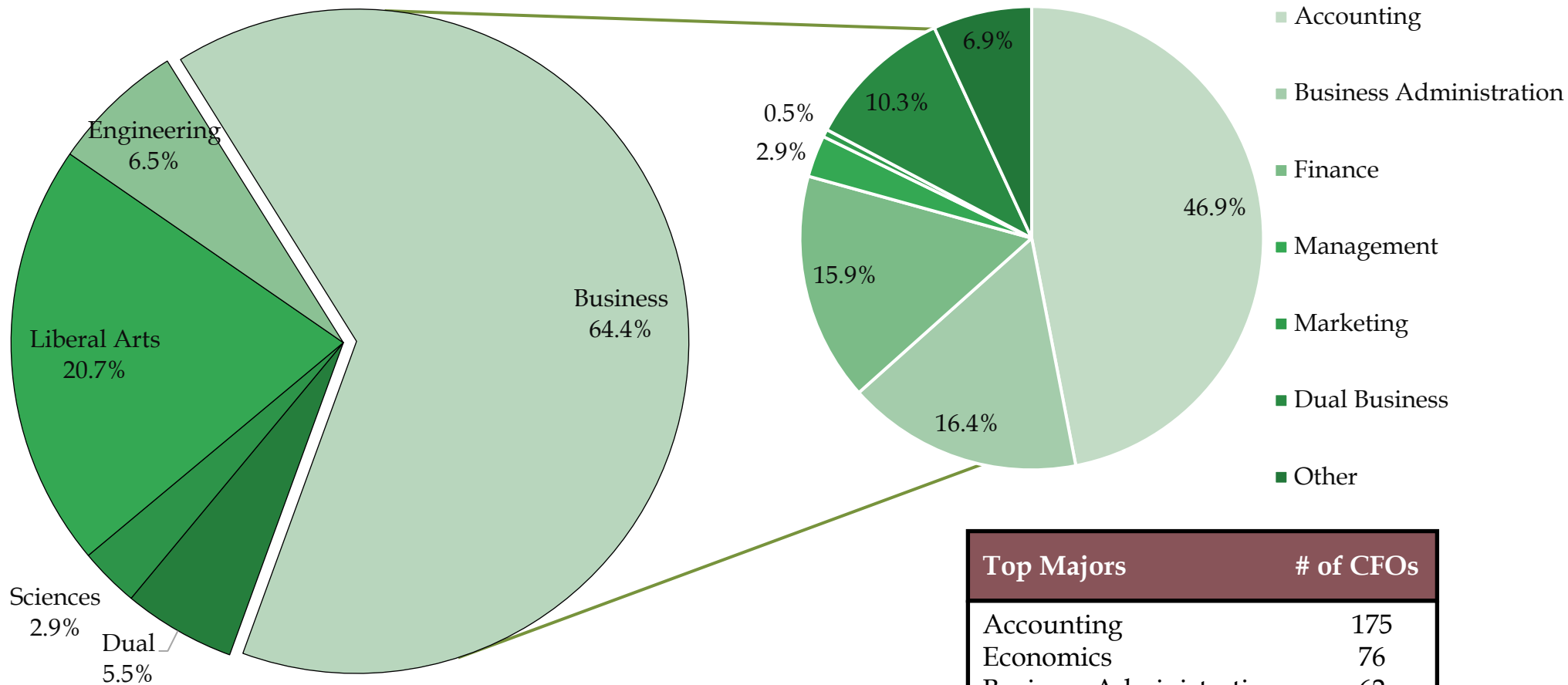


Top Majors	# of CEOs
Engineering	159
Economics	66
Business Administration	63
Accounting	42
Finance	30

- Economics is included in Liberal Arts
- Mathematics is included in Sciences
- Other includes: International Business, Commerce, Pre-Professional Studies, Retail, Operations
- Dual Business: holds degree with more than one of the above listed business majors

Approximately two-thirds of CFOs have an undergraduate degree in Business

Percentage of CFOs from each Educational Background
 2020* Fortune 500 and S&P 500 (674 Companies; 675 Sitting CFOs; 642 Known Educational Backgrounds)



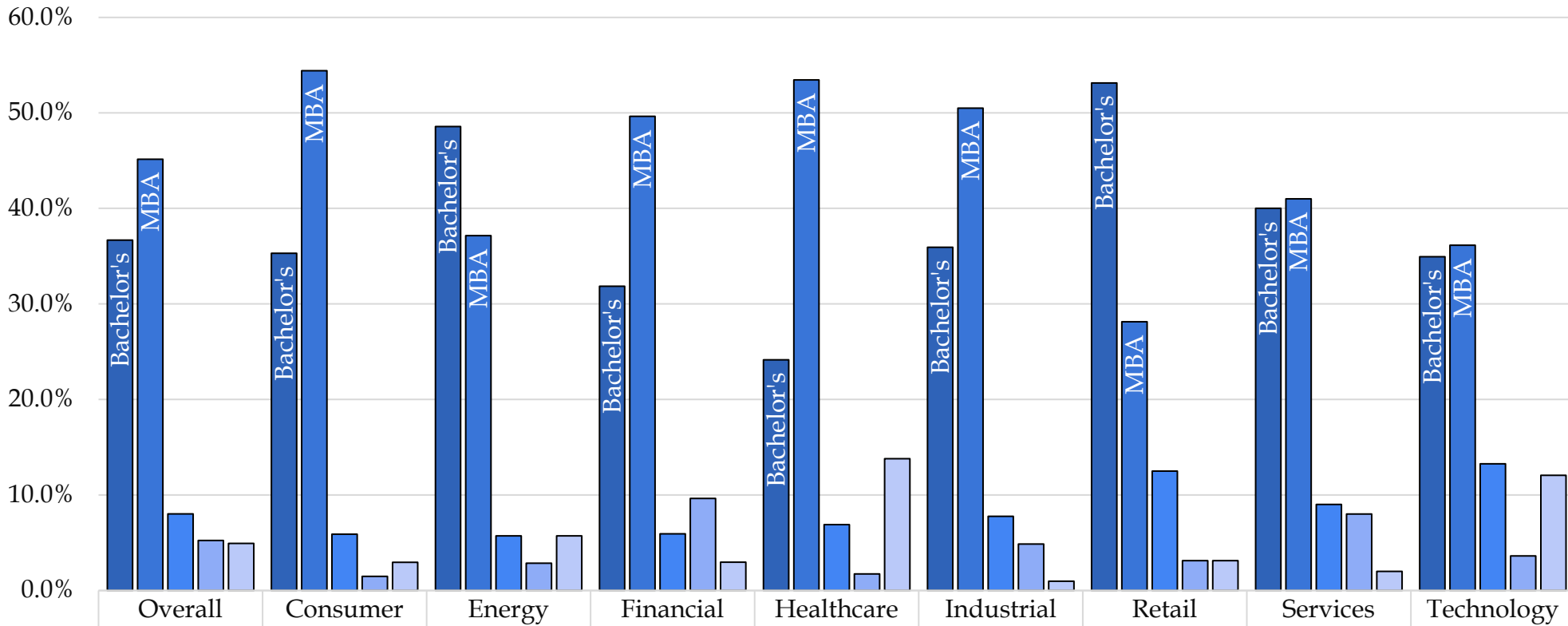
Top Majors	# of CFOs
Accounting	175
Economics	76
Business Administration	62
Finance	58
Engineering	38

- Economics is included in Liberal Arts
- Mathematics is included in Sciences
- Other includes: International Business, Commerce, Pre-Professional Studies, Retail, Operations
- Dual Business: holds degree with more than one of the above listed business majors

*Denotes Partial Year

Close to 60% of CEOs hold an advanced degree

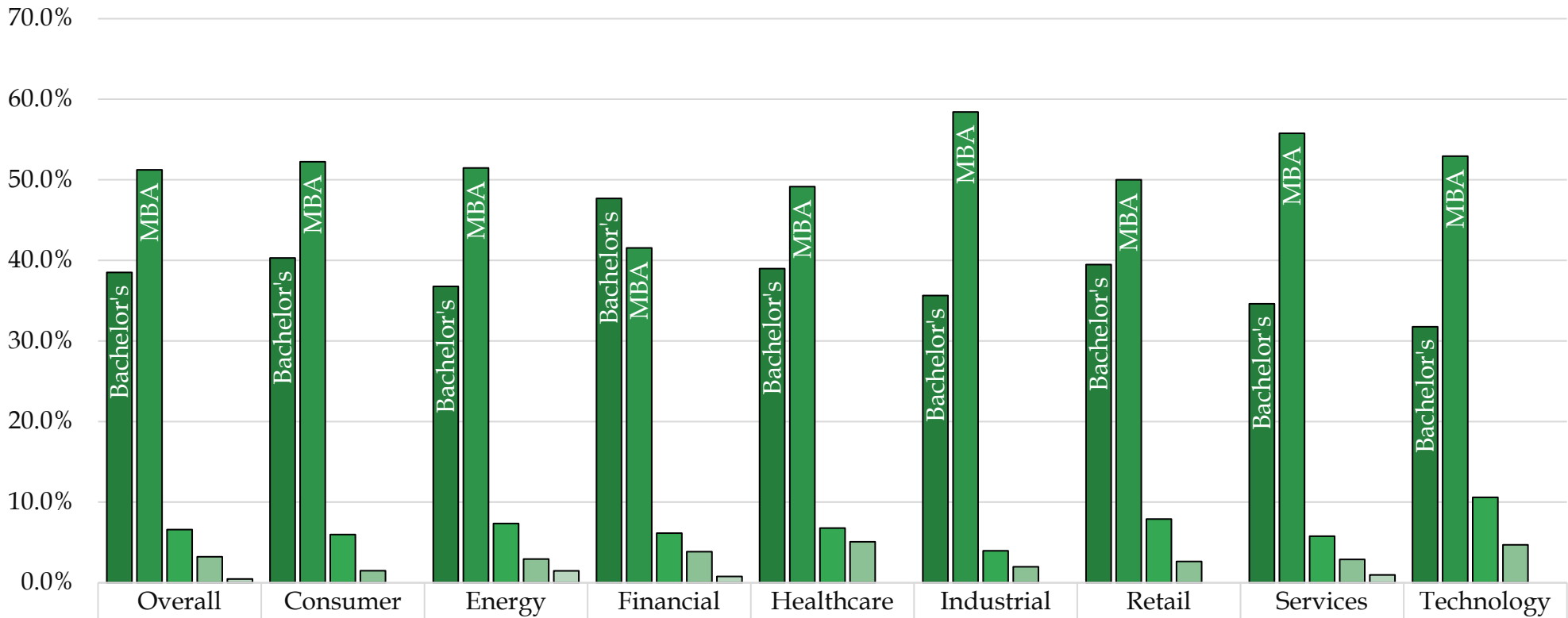
CEO Terminal Degree Educational Background
2020 Fortune 500 and S&P 500 (674 Companies; 683 Sitting CEOs; 651 Known Educational Backgrounds)



■ Bachelor's	36.7%	35.3%	48.6%	31.9%	24.1%	35.9%	53.1%	40.0%	34.9%
■ MBA	45.1%	54.4%	37.1%	49.6%	53.4%	50.5%	28.1%	41.0%	36.1%
■ Master's	8.0%	5.9%	5.7%	5.9%	6.9%	7.8%	12.5%	9.0%	13.3%
■ JD	5.2%	1.5%	2.9%	9.6%	1.7%	4.9%	3.1%	8.0%	3.6%
■ PhD	4.9%	2.9%	5.7%	3.0%	13.8%	1.0%	3.1%	2.0%	12.0%

Over 50% of CFOs hold an MBA degree

CFO Terminal Degree Educational Background
 2020 Fortune 500 and S&P 500 (674 Companies; 675 Sitting CFOs; 642 Known Educational Backgrounds)



■ Bachelor's	38.5%	40.3%	36.8%	47.7%	39.0%	35.6%	39.5%	34.6%	31.8%
■ MBA	51.2%	52.2%	51.5%	41.5%	49.2%	58.4%	50.0%	55.8%	52.9%
■ Master's	6.6%	6.0%	7.4%	6.2%	6.8%	4.0%	7.9%	5.8%	10.6%
■ JD	3.2%	1.5%	2.9%	3.8%	5.1%	2.0%	2.6%	2.9%	4.7%
■ PhD	0.5%	0.0%	1.5%	0.8%	0.0%	0.0%	0.0%	1.0%	0.0%

The most common path to the CEO and CFO role runs through these eight leading MBA programs

Top MBA Schools
 2020 Fortune 500 and S&P 500 (674 Companies; 652 CEOs and 642 CFOs Known Educational Backgrounds)

