

CRIST | KOLDER ASSOCIATES  
Volatility Report 2017

# 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 673 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 fourteenth year of the Crist|Kolder Volatility Report, though information for the report goes back to 1995. This Summer 2017 release of the Crist|Kolder Volatility Report contains data through August 1, 2017.

# Methodology Notes

- 2017 Fortune 500 and S&P 500 Companies (673 Total)
  - Companies Removed from 2016: 49
  - Companies Added: 47
  - Public Companies: 640
  - Private Companies: 33

## Color Key

Blue = CEO

Green = CFO

Purple = COO

*Graphs and data correspond with the color key above*

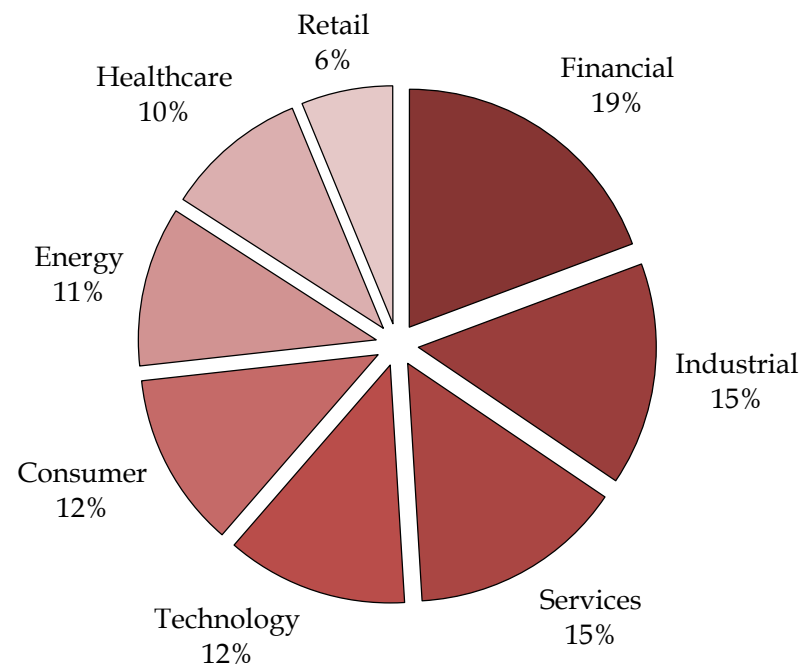
- Data tracked January 1, 1995 through August 1, 2017; annual update occurs every December

- Industries broken down by Fortune's classification system and then combined into designated larger categories based on SIC codes

## Resources:

- Bloomberg: [www.bloomberg.com](http://www.bloomberg.com)
- Businessweek: [www.businessweek.com](http://www.businessweek.com)
- Capital IQ: [www.capitaliq.com](http://www.capitaliq.com)
- Fortune: [www.fortune.com](http://www.fortune.com)
- LinkedIn: [www.linkedin.com](http://www.linkedin.com)
- SEC Company Filings: [www.sec.gov](http://www.sec.gov)
- Yahoo Finance: [www.finance.yahoo.com](http://www.finance.yahoo.com)
- Individual company websites

## Company Industry Breakdown



# Definitions

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

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

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

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

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

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

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

Partial year: Designation indicates data gathered up to August 1, 2017, not a projection

# Report Highlights

- The increase in C-Suite turnover coincides with the recent peak in the S&P 500 Index (Page 11)
- The number of COOs continues to decrease (Page 16)
- Only 6% of sitting CEOs are promoted from the CFO role (Page 19)
- The Financial sector provides the most job security for CEOs and CFOs (Pages 29-30)
- 50% of current CEOs were age 50 or younger when appointed to the chair (Page 31)
- The average age of CEOs and CFOs has increased (Pages 32, 35)
- For the first time in eight years, diversity in the CEO role has decreased (Page 39)
- The number of female CFOs has doubled in 10 years and the female CEO count has reached an all time high (Pages 38, 42)
- International universities currently produce more sitting CEOs than any single U.S. conference (Page 46)
- The U.K. and France currently produce the most sitting CEOs out of all international countries in this study (Page 47)
- Big Ten universities currently produce the most sitting CFOs (Page 48)
- Over 65% of the CEOs in this study have an advanced degree ( Page 54)
- The path to the C-Suite runs through eight leading MBA programs (Page 56)

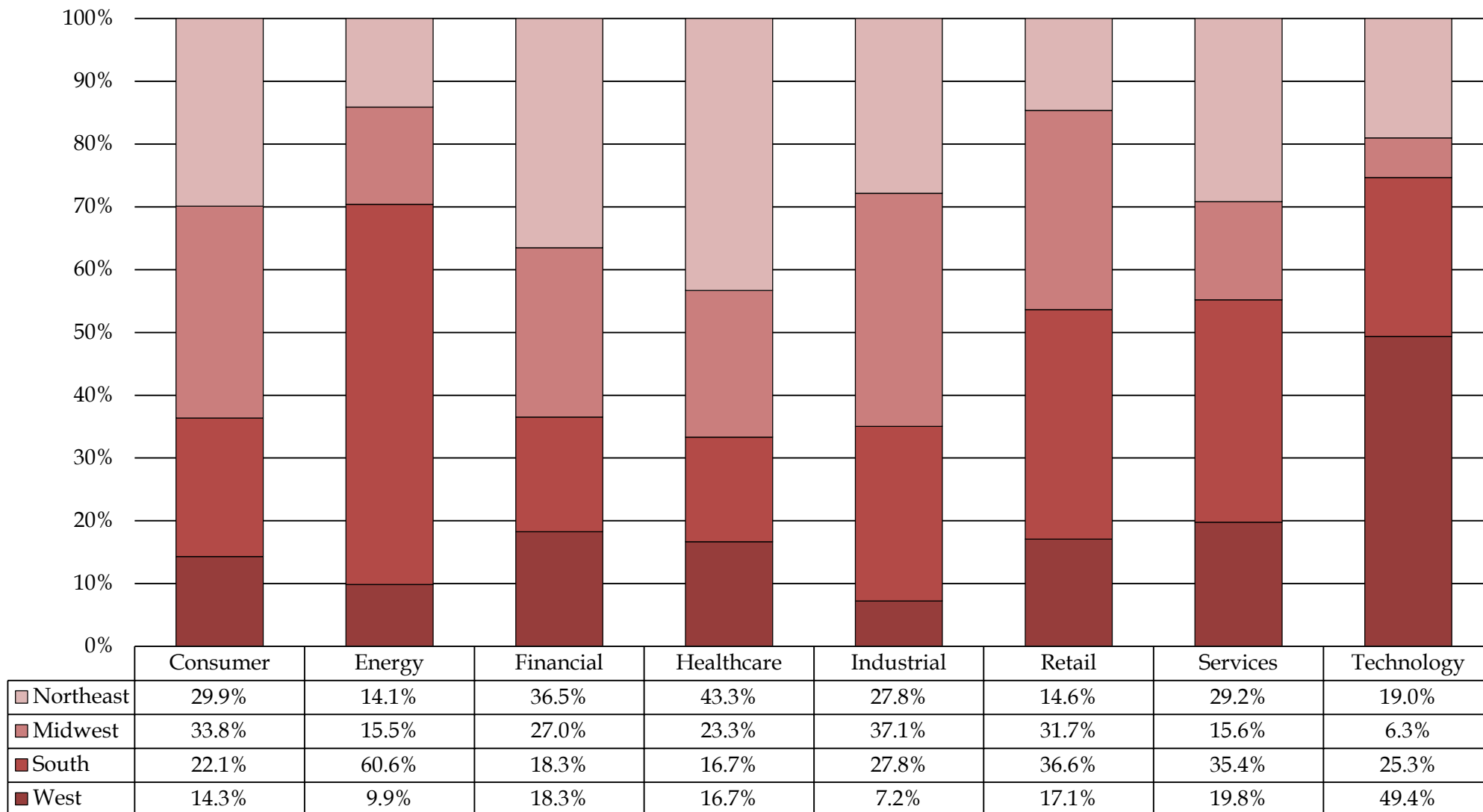
# Location





## Breakdown of companies by industry within each geographical region

2017 Fortune 500 and S&P 500 (673 Companies)



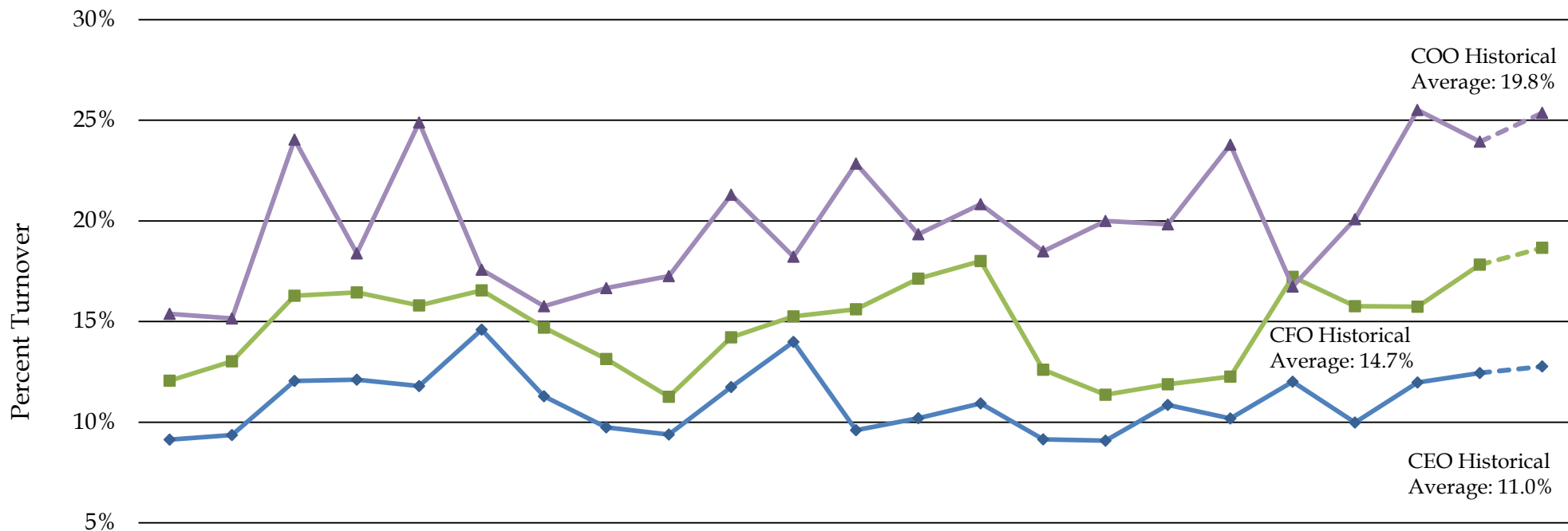
Regions: Northeast, Midwest, South, and West as determined by the United States Census Bureau

# Executive Turnover

## Annual C-Suite turnover is projected to increase in 2017

CEO/CFO/COO Volatility (1995-2017)

2017 Fortune 500 and S&P 500 Companies (673 Companies; 678 Sitting CEOs; 663 Sitting CFOs; 195 Sitting COOs)

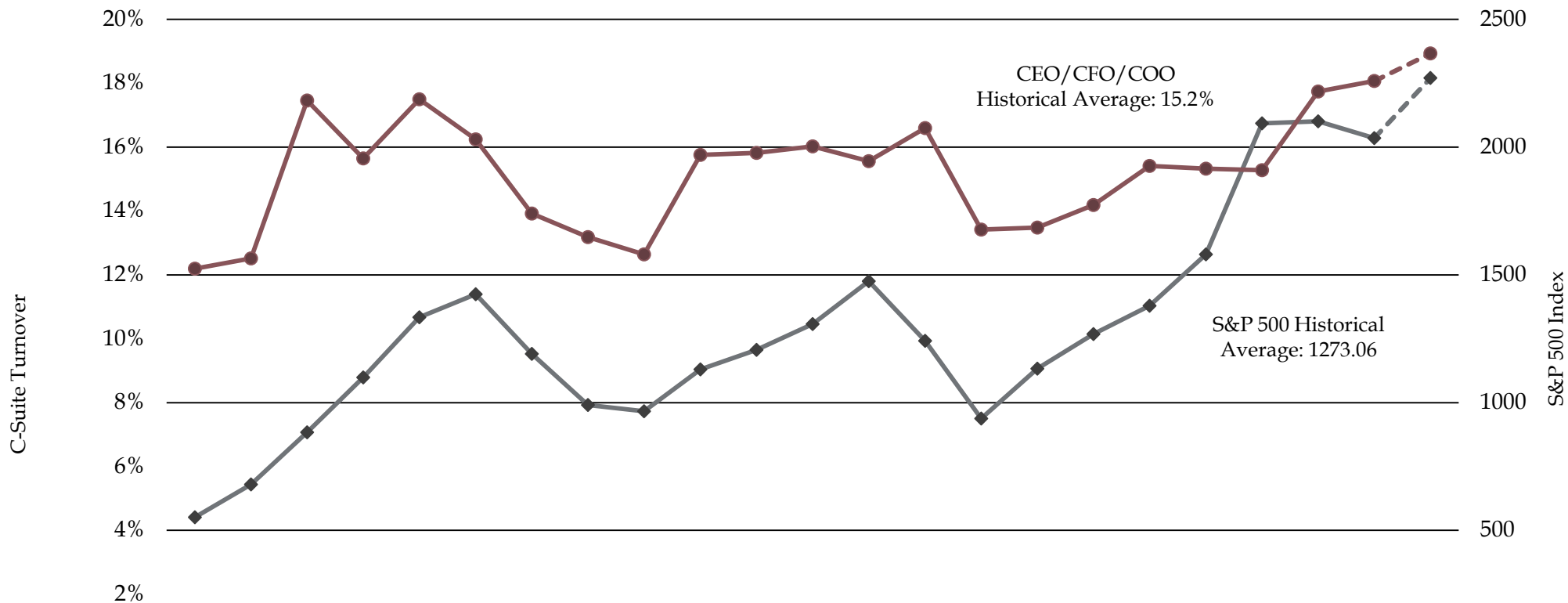


	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017*
CEO	9.1%	9.4%	12.1%	12.1%	11.8%	14.6%	11.3%	9.7%	9.4%	11.7%	14.0%	9.6%	10.2%	10.9%	9.1%	9.1%	10.9%	10.2%	12.0%	10.0%	12.0%	12.4%	12.8%
CFO	12.1%	13.0%	16.3%	16.4%	15.8%	16.5%	14.7%	13.1%	11.3%	14.2%	15.3%	15.6%	17.1%	18.0%	12.6%	11.4%	11.9%	12.3%	17.2%	15.8%	15.7%	17.8%	18.7%
COO	15.4%	15.2%	24.0%	18.4%	24.9%	17.6%	15.8%	16.7%	17.3%	21.3%	18.2%	22.8%	19.3%	20.8%	18.5%	20.0%	19.8%	23.8%	16.7%	20.1%	25.5%	23.9%	25.4%

*\*Projection of 2017 year end Partial year:*  
 CEO: 7.7%  
 CFO: 11.0%  
 COO: 15.5%

## The increase in C-Suite turnover coincides with the recent peak in the S&P 500 Index

Overall Volatility and S&P 500 Index\*\* (1995-2017)  
2017 Fortune 500 and S&P 500 (673 Companies)

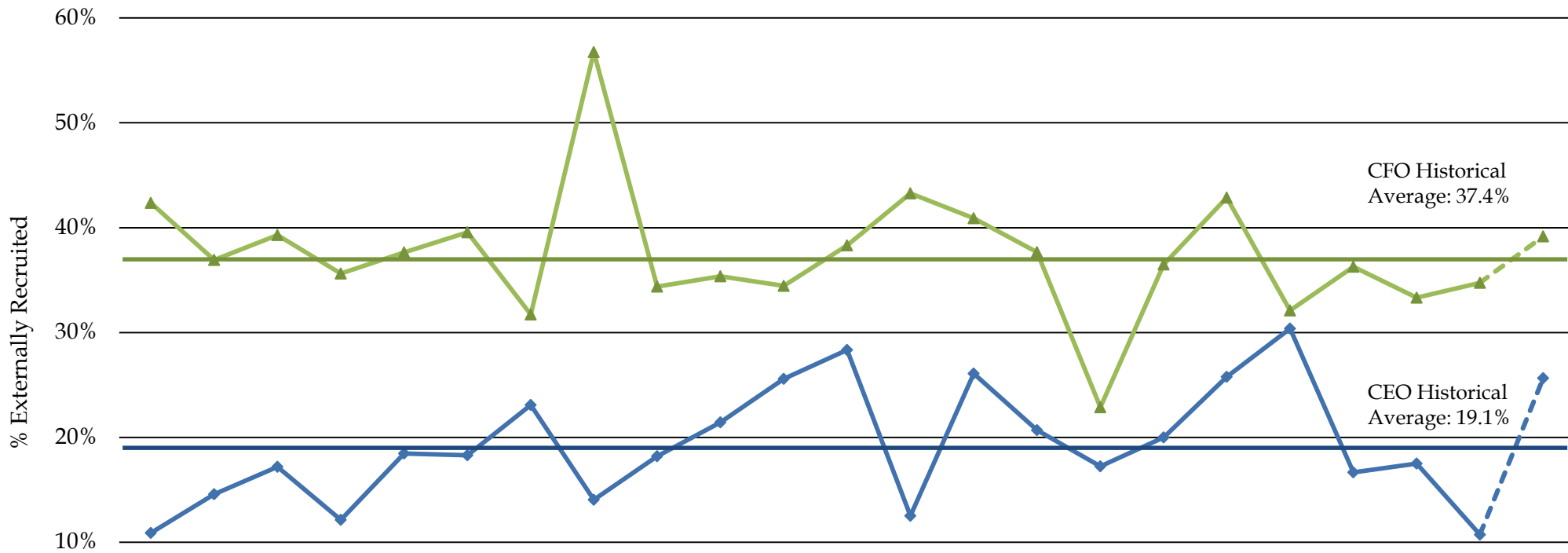


	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017*
◆ S&P 500 Index	551.62	679.47	883.75	1098.2	1333.8	1424	1191.2	990.98	966.02	1130.3	1206.8	1307.2	1475.5	1241.2	937.92	1133	1268.2	1379.4	1580	2092.9	2100.9	2035	2269.5
● CEO/CFO/COO	12.2%	12.5%	17.5%	15.6%	17.5%	16.2%	13.9%	13.2%	12.6%	15.8%	15.8%	16.0%	15.6%	16.6%	13.4%	13.5%	14.2%	15.4%	15.3%	15.3%	17.7%	18.1%	18.9%

\*Projection of 2017 year end  
\*\*Average Daily Close  
Partial year:  
S&P 500 (8/1/17): 2476.4  
C-Suite: 11.4%

## Based on historical averages, CFO volatility is nearly double that of CEOs

Percentage of CEOs/CFOs Recruited from Outside the Company (1995-2017)  
 2017 Fortune 500 and S&P 500 Companies (673 Companies; 678 Sitting CEOs; 663 Sitting CFOs)

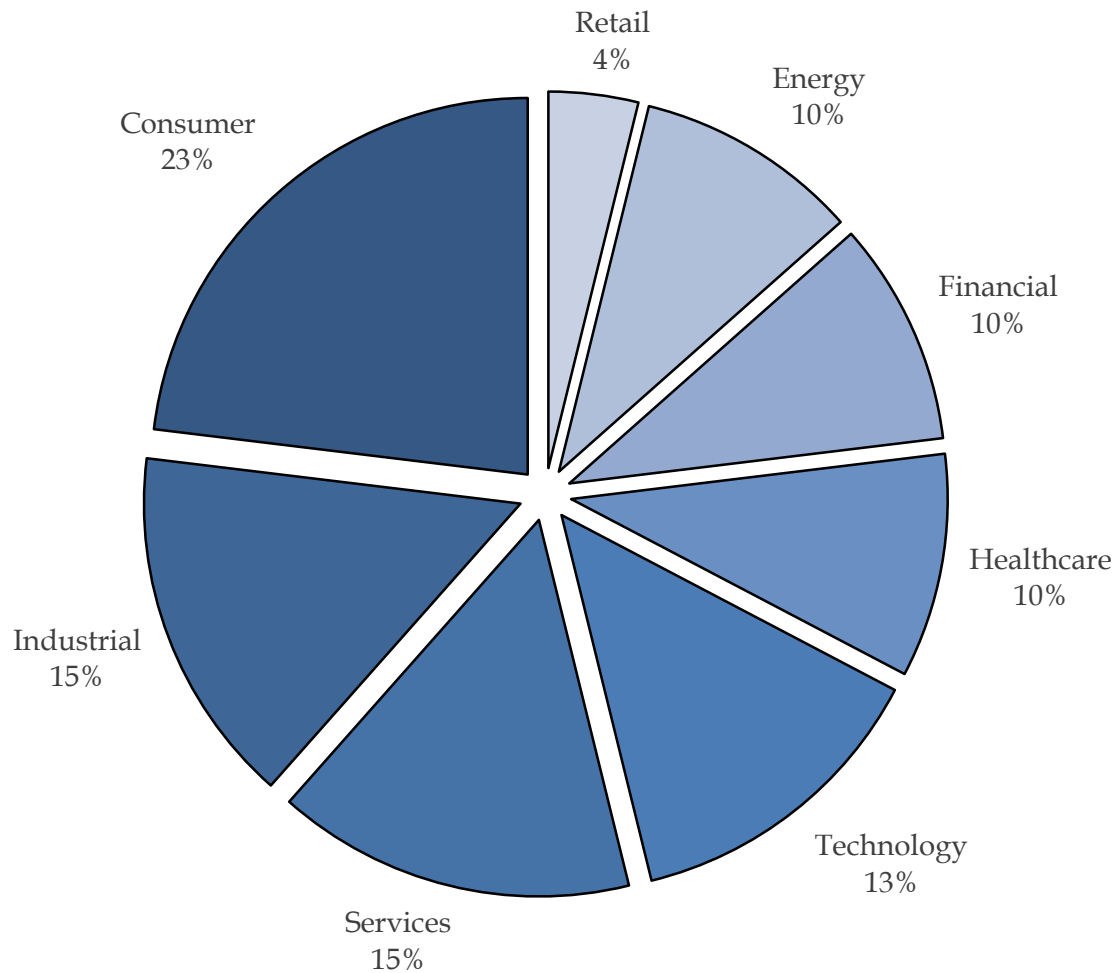


	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017*
CEO	10.9%	14.6%	17.2%	12.1%	18.5%	18.3%	23.1%	14.0%	18.2%	21.4%	25.6%	28.3%	12.5%	26.1%	20.7%	17.2%	20.0%	25.8%	30.4%	16.7%	17.5%	10.7%	25.6%
CFO	42.4%	36.9%	39.3%	35.6%	37.6%	39.6%	31.7%	56.8%	34.4%	35.4%	34.4%	38.3%	43.3%	40.9%	37.7%	22.9%	36.5%	42.9%	32.1%	36.3%	33.3%	34.7%	39.2%

*\*Projection of 2017 year end  
 Partial year:  
 CEO: 23.1%  
 CFO: 35.6%*

## Year to date, the Retail sector has the lowest CEO turnover

CEO Volatility by Industry  
2017 Fortune 500 and S&P 500 (673 Companies)

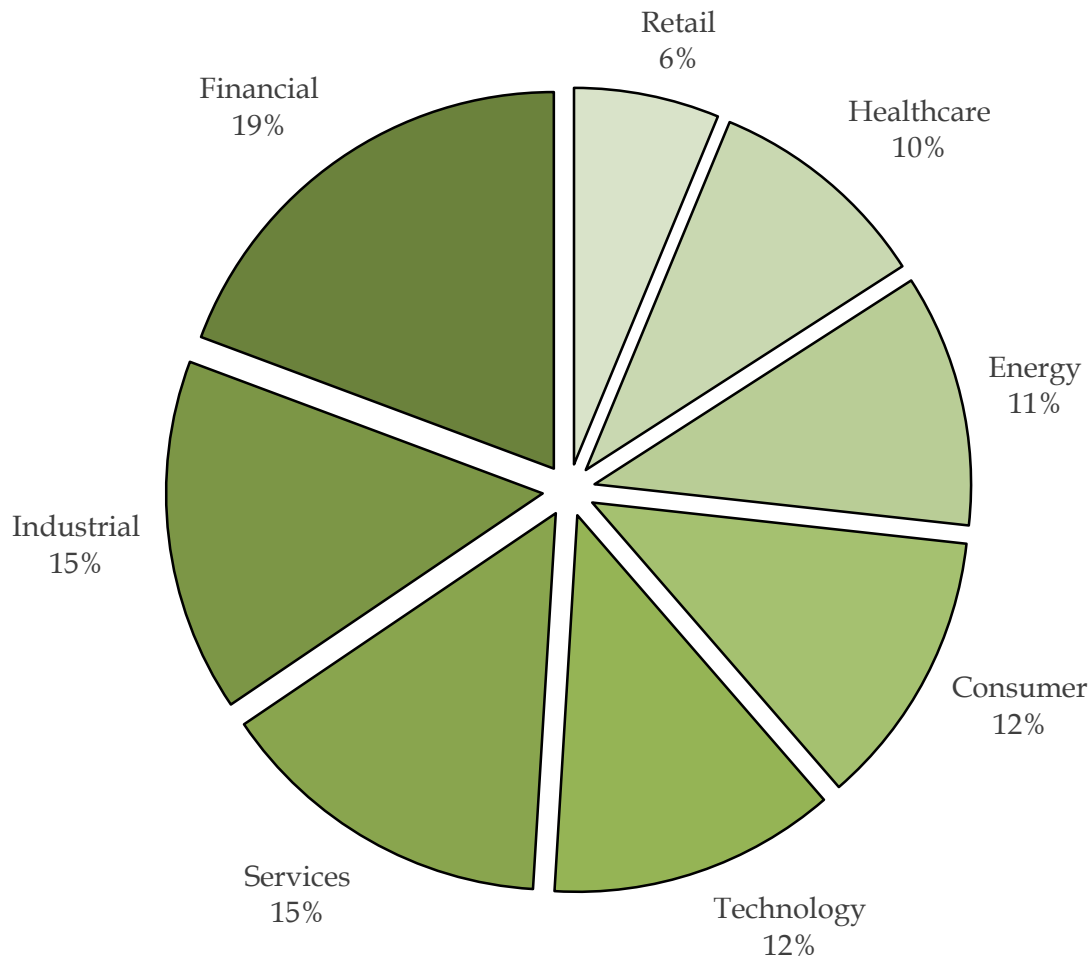


### Notable CEO Consumer, Industrial, and Service Sector Changes in 2017

- The Coca-Cola Company
- Honeywell International, Inc.
- Reynolds American, Inc.
- Caterpillar, Inc.
- Ford Motor Company
- General Mills, Inc.
- United States Steel Corporation
- Ralph Lauren Corporation
- Starbucks Corp.
- CSX Corp.

## Year to date, the Retail sector has the lowest CFO turnover

CFO Volatility by Industry  
2017 Fortune 500 and S&P 500 (673 Companies)

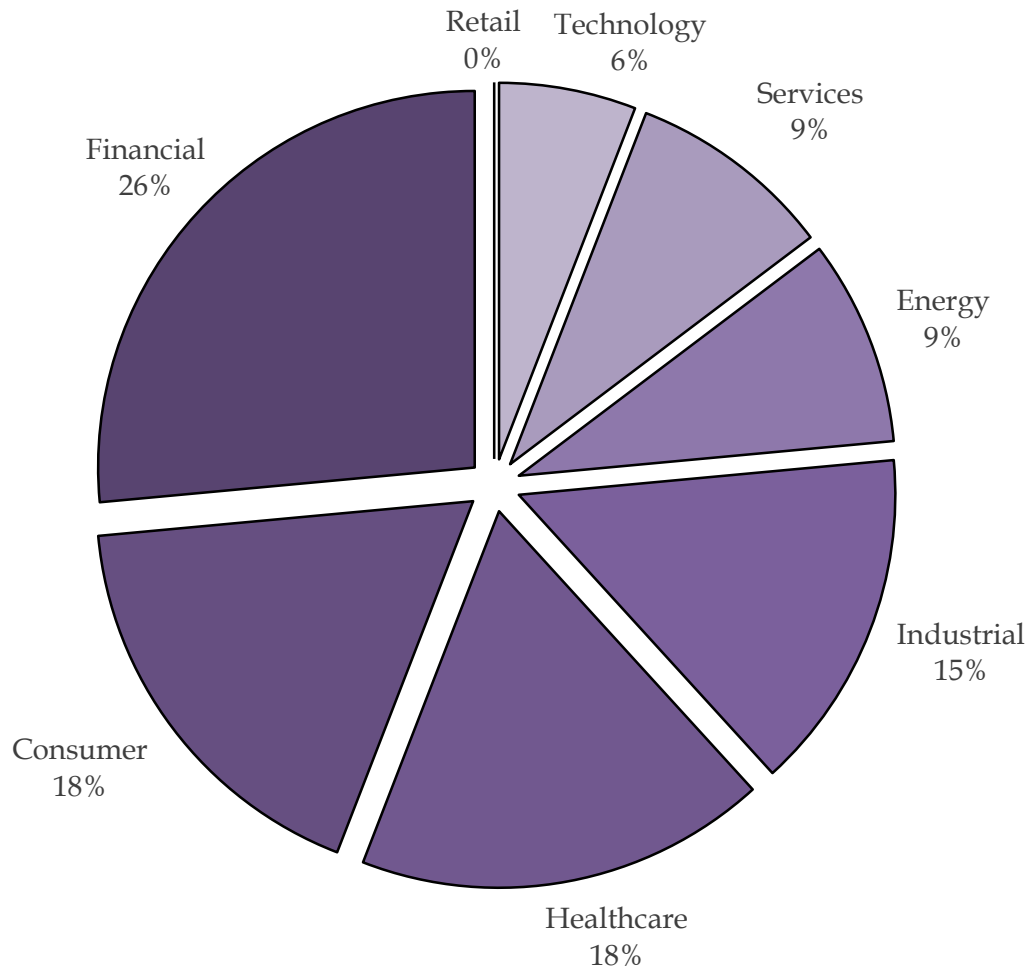


### Notable CFO Financial, Industrial, and Services Sector Changes in 2017

- The Goldman Sachs Group, Inc.
- Tesla, Inc.
- The Charles Schwab Corporation
- State Street Corp.
- PPG Industries, Inc.
- Roper Technologies, Inc.
- Rockwell Automation, Inc.
- Citizens Financial Group, Inc.
- News Corp.
- Discovery Communications, Inc.

**Over 60% of COO turnover has come from the Financial, Consumer, and Healthcare sectors\***

COO Volatility by Industry  
2017 Fortune 500 and S&P 500 (673 Companies)



**Notable COO Financial, Consumer, and Healthcare Sector Changes in 2017**

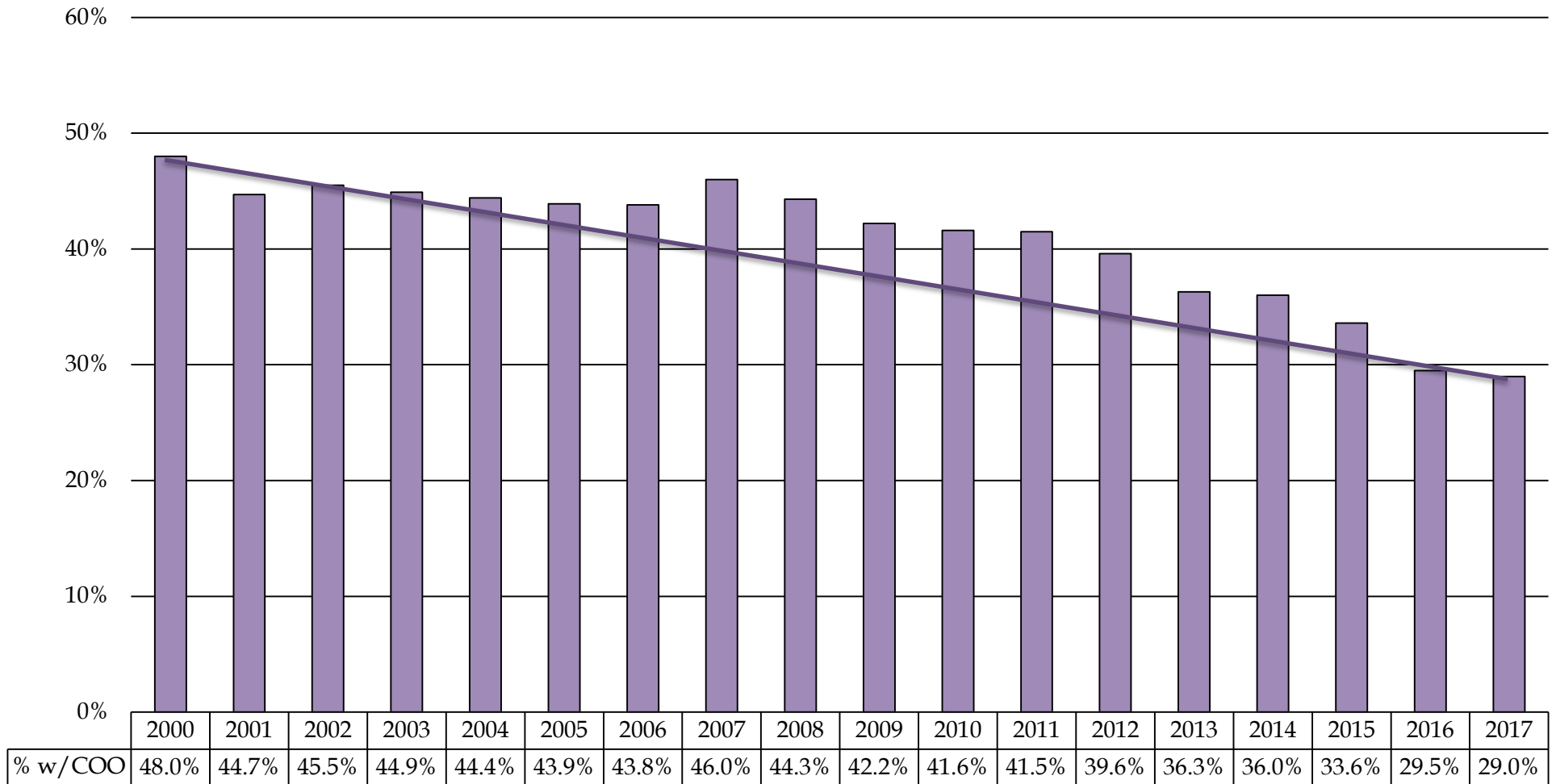
- Aon plc
- CBOE Holdings, Inc.
- The Goldman Sachs Group, Inc.
- HRG Group, Inc.
- Kimberly-Clark Corp.
- Pacific Life Insurance Co.
- Reinsurance Group of America, Inc.
- Synchrony Financial
- Tyson Foods, Inc.
- Wells Fargo & Company

\*Year to date



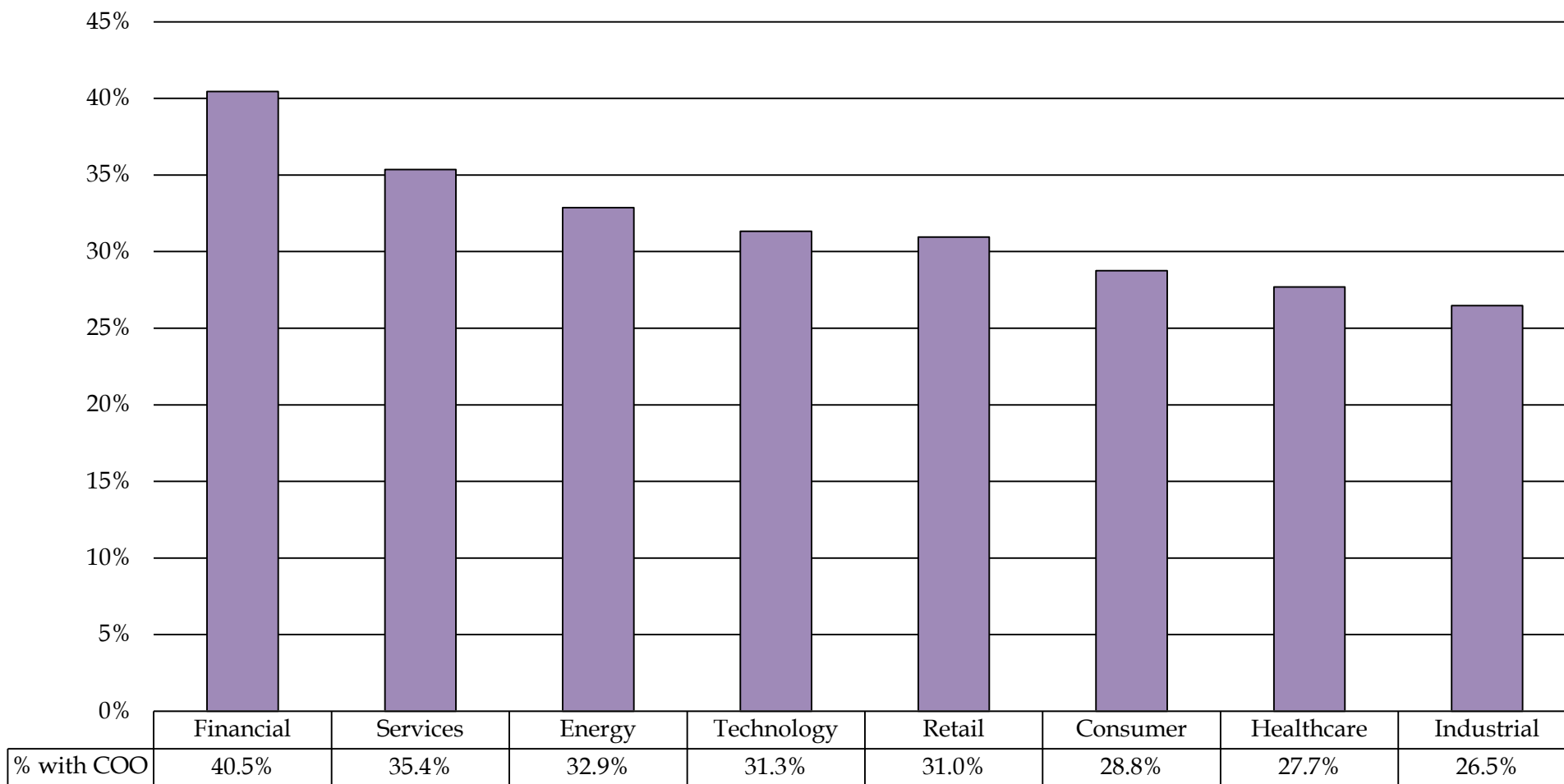
## The number of COOs continues to decline

Percentage of Companies with a COO (2000-2017)  
 2017 Fortune 500 and S&P 500 (673 Companies; 195 Sitting COOs)



## The COO role is most common within the Financial sector

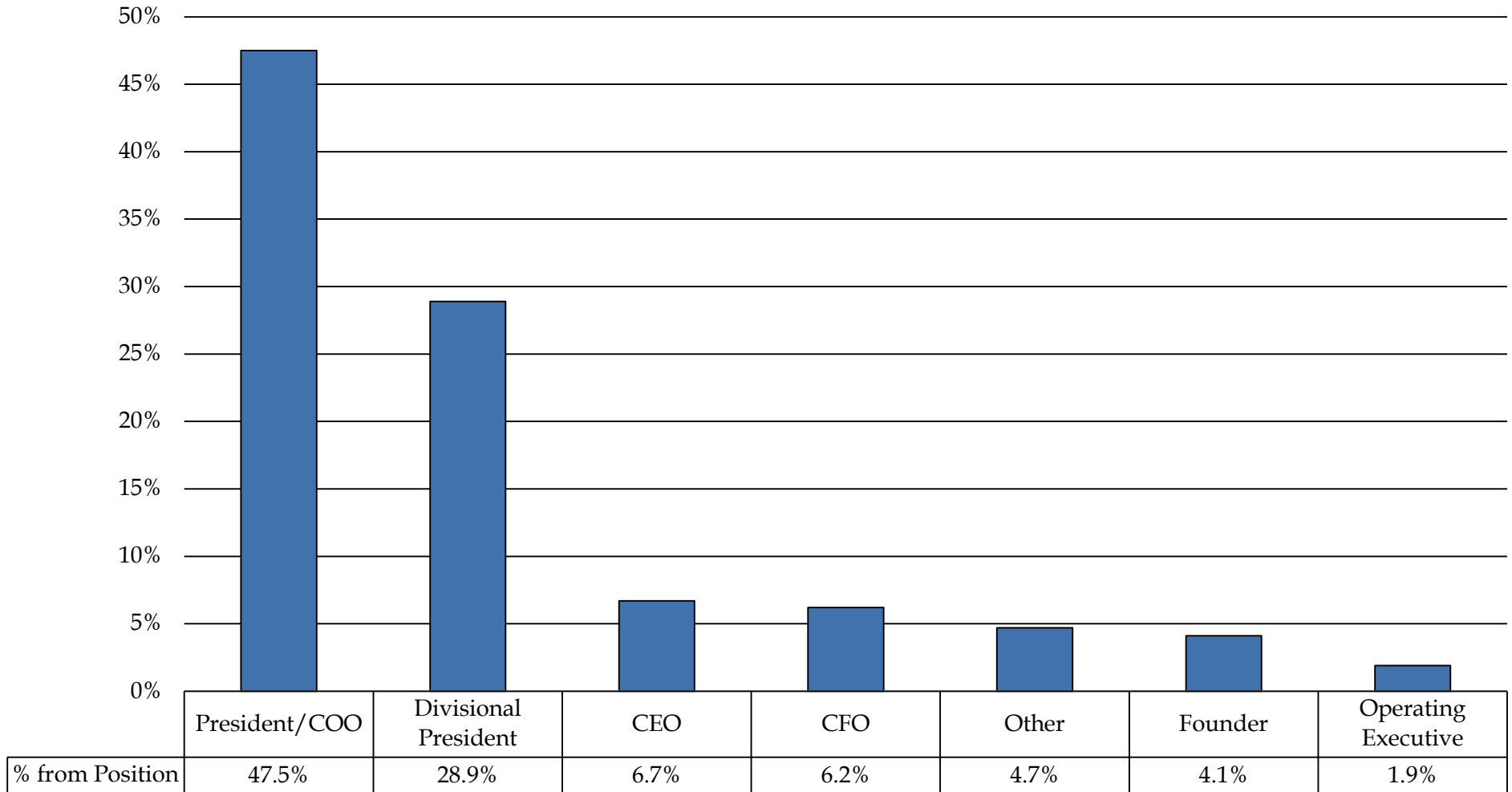
Percentage of Companies with a COO by Industry  
 2017 Fortune 500 and S&P 500 Companies (673 Companies; 195 Sitting COOs)



# C-Suite Career Paths

## Only 6% of sitting CEOs are promoted from the CFO role

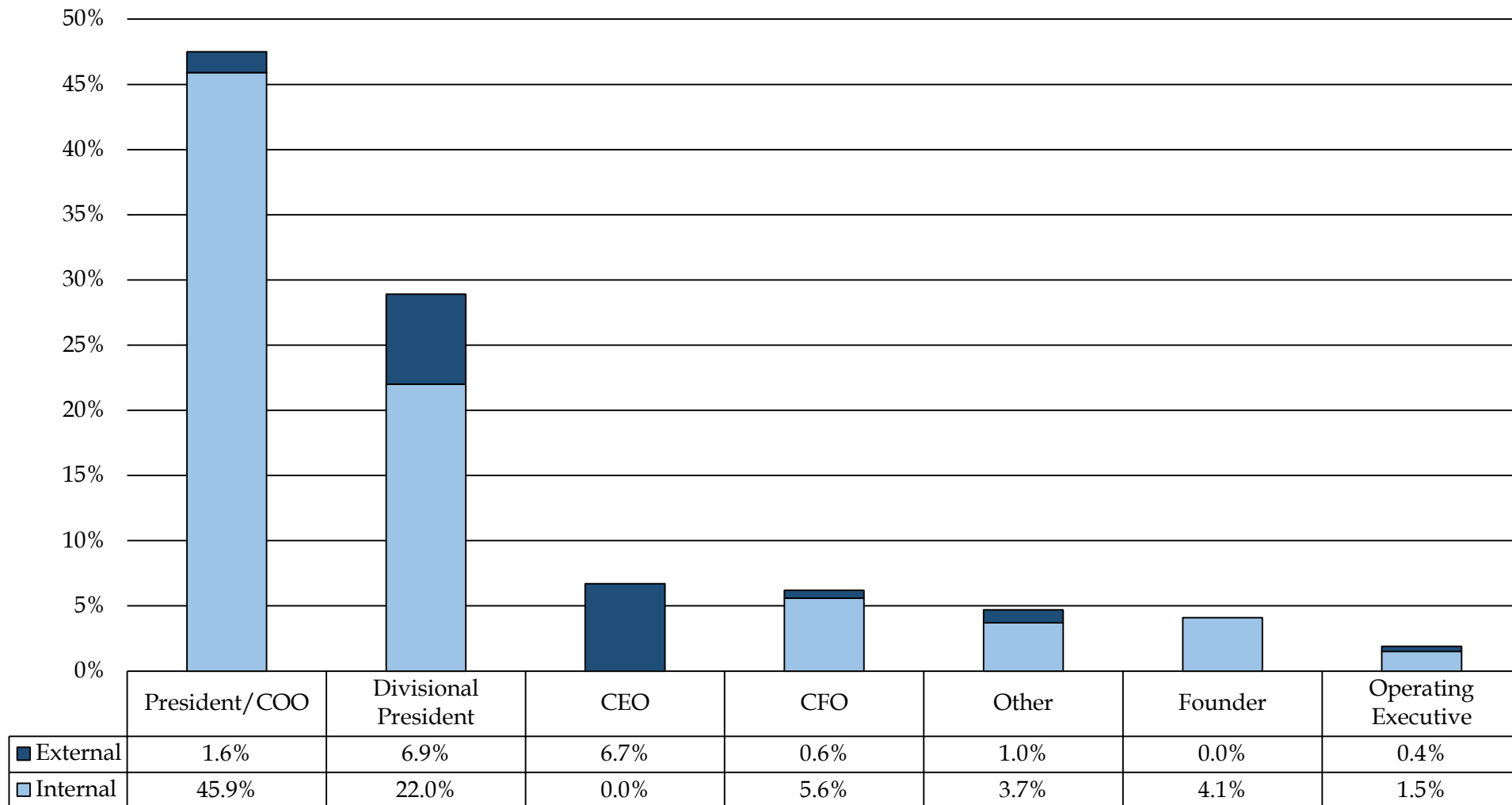
Percentage of Sitting CEOs by Immediate Previous Position  
2017 Fortune 500 and S&P 500 (673 Companies; 678 Sitting CEOs)



- *Other*: i.e. government role, private equity, management consulting, chairman
- *Operating Executive*: VP/SVP/EVP of Operations

## Most current CEOs are promoted from the President/COO role

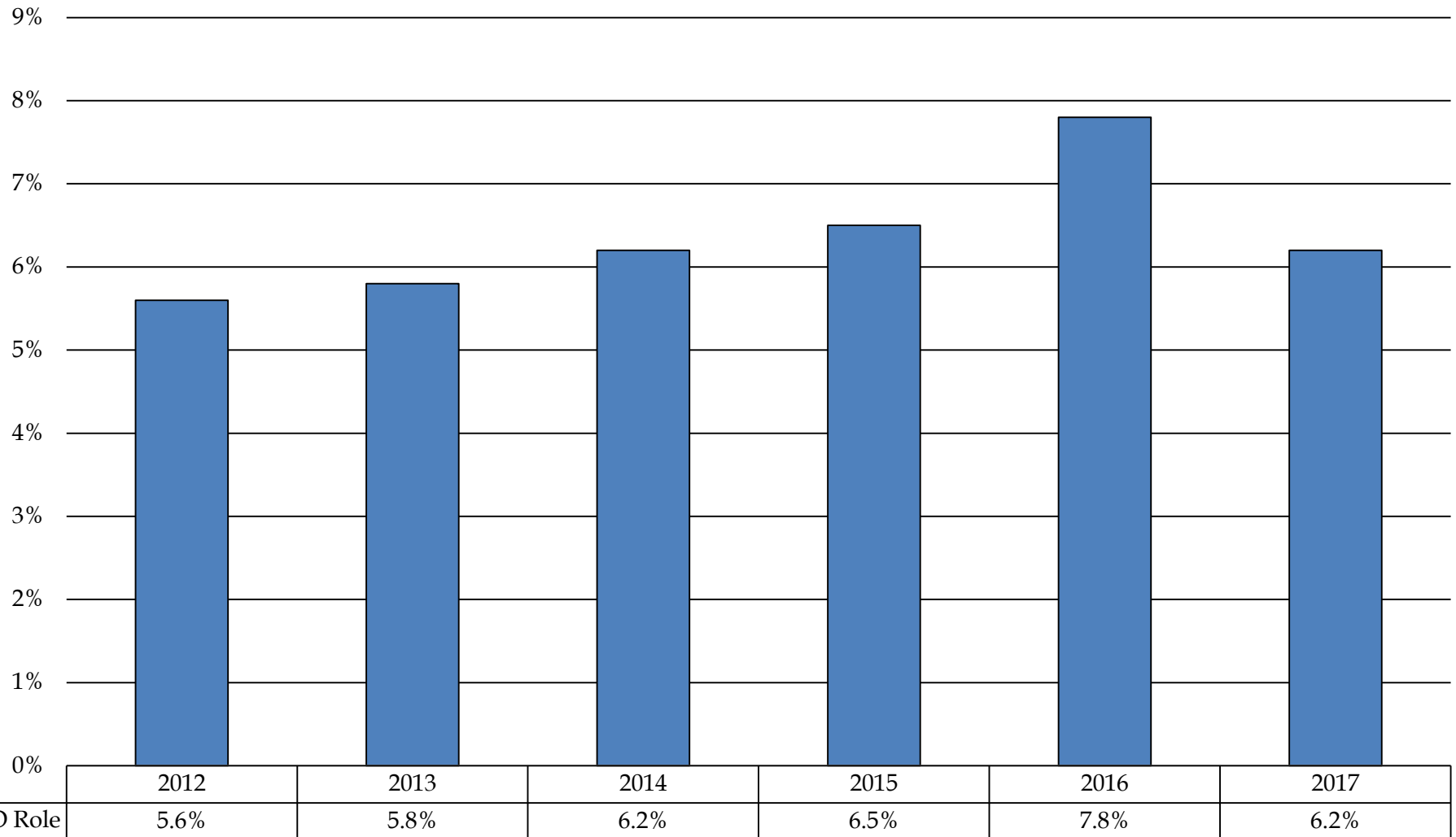
Immediate Prior Position of Sitting CEOs, Internal vs. External  
2017 Fortune 500 and S&P 500 (673 Companies; 678 Sitting CEOs)



- Internal Divisional President role includes CEOs of subsidiary companies
- *Other*: i.e. government role, private equity, management consulting, chairman
- *Operating Executive*: VP/SVP/EVP of Operations

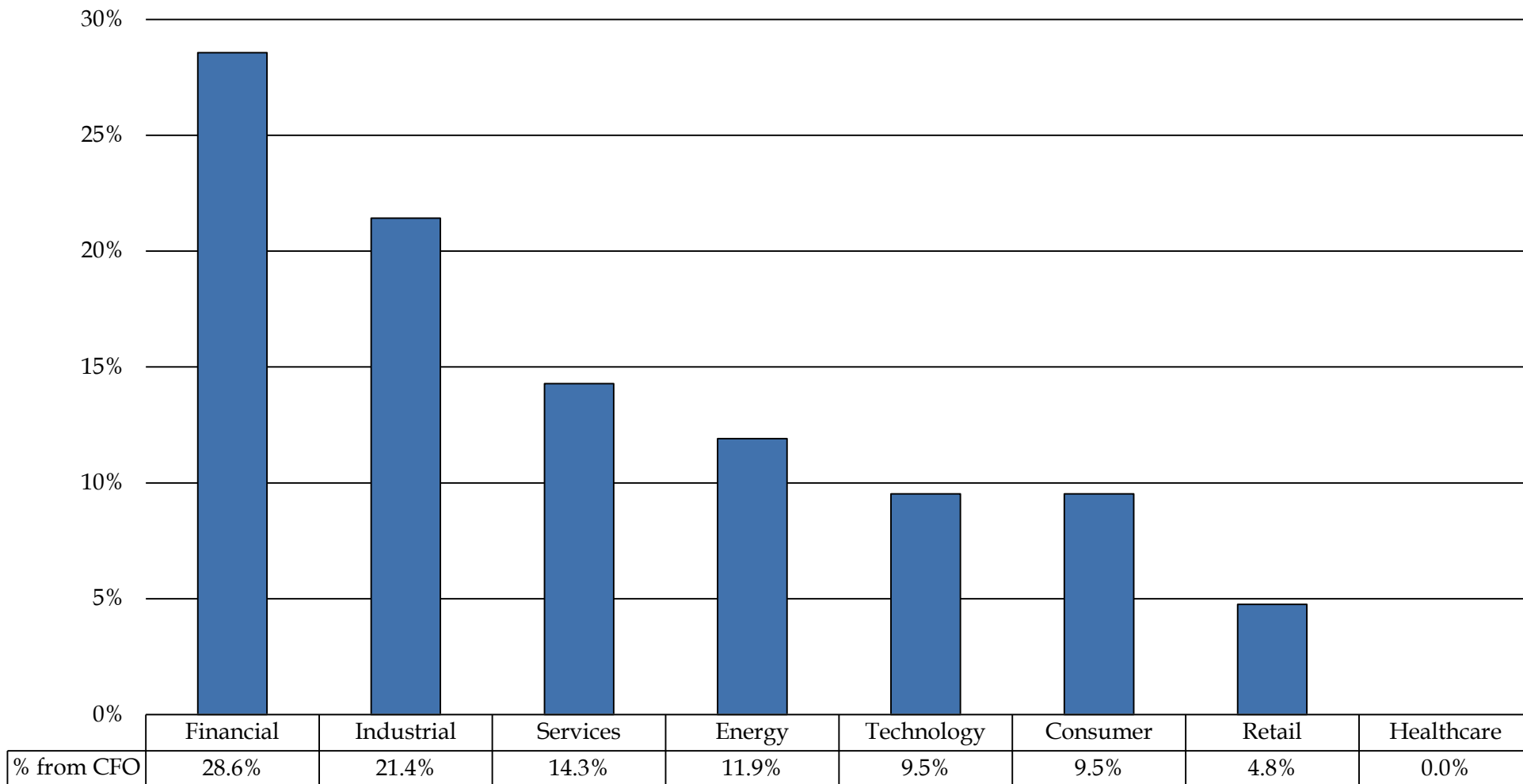
## CFO to CEO promotion has dropped in 2017

Percentage of Sitting CEOs Coming From a CFO chair (2012-2017)  
2017 Fortune 500 and S&P 500 (673 Companies; 678 Sitting CEOs)



## Promotion from CFO to CEO occurs most often in the Financial sector

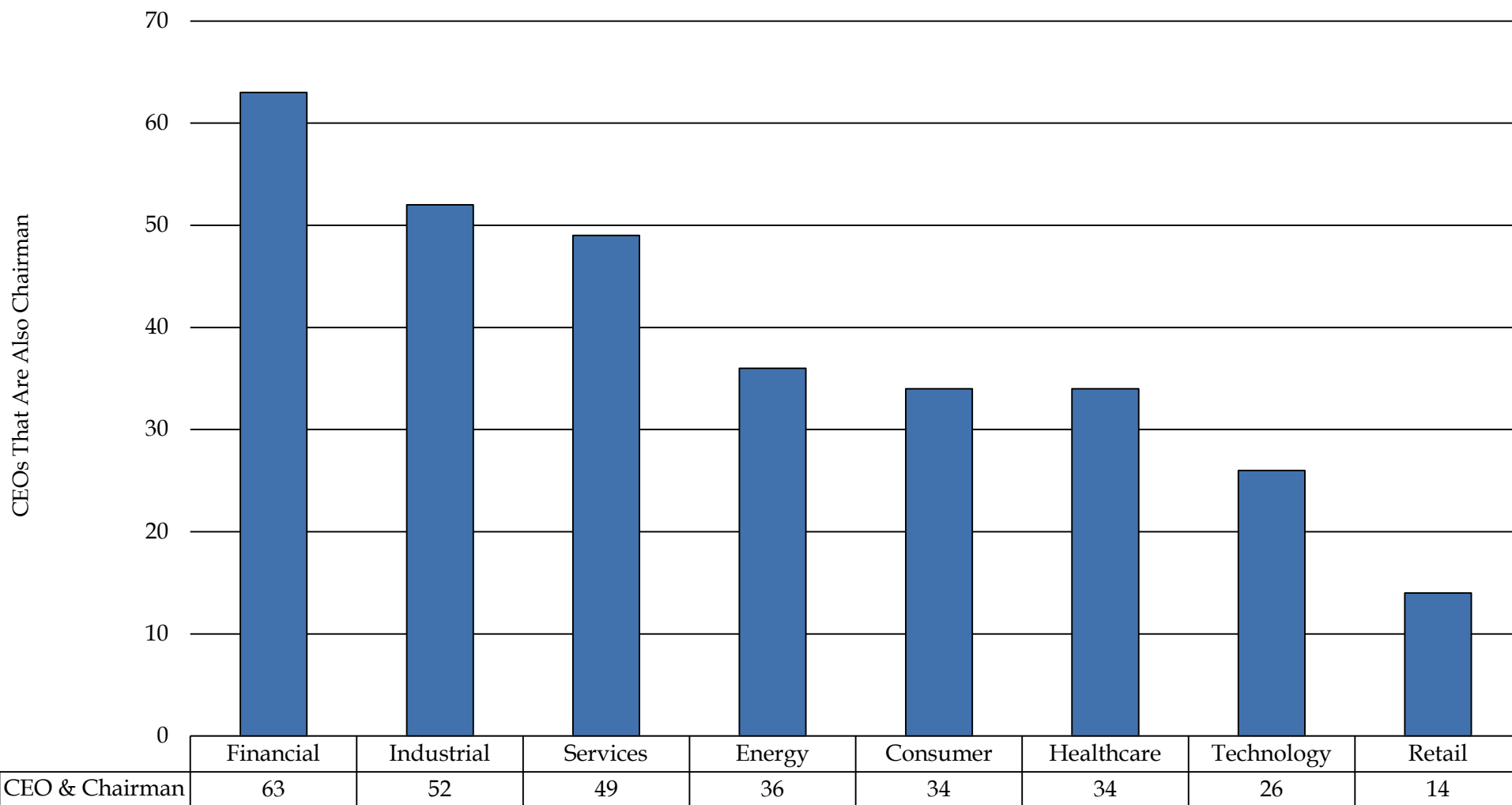
Percentage of Sitting CEOs Coming From a CFO Chair by Industry  
 2017 Fortune 500 and S&P 500 (673 Companies; 678 Sitting CEOs; 42 Total CEOs from a CFO chair)



## CEOs in the Financial sector are more likely to hold the Chairman title than in other sectors

Sitting CEOs That Are Also Chairman\*

2017 Fortune 500 and S&P 500 (673 Companies; 678 Sitting CEOs; 308 Sitting CEO & Chairman)

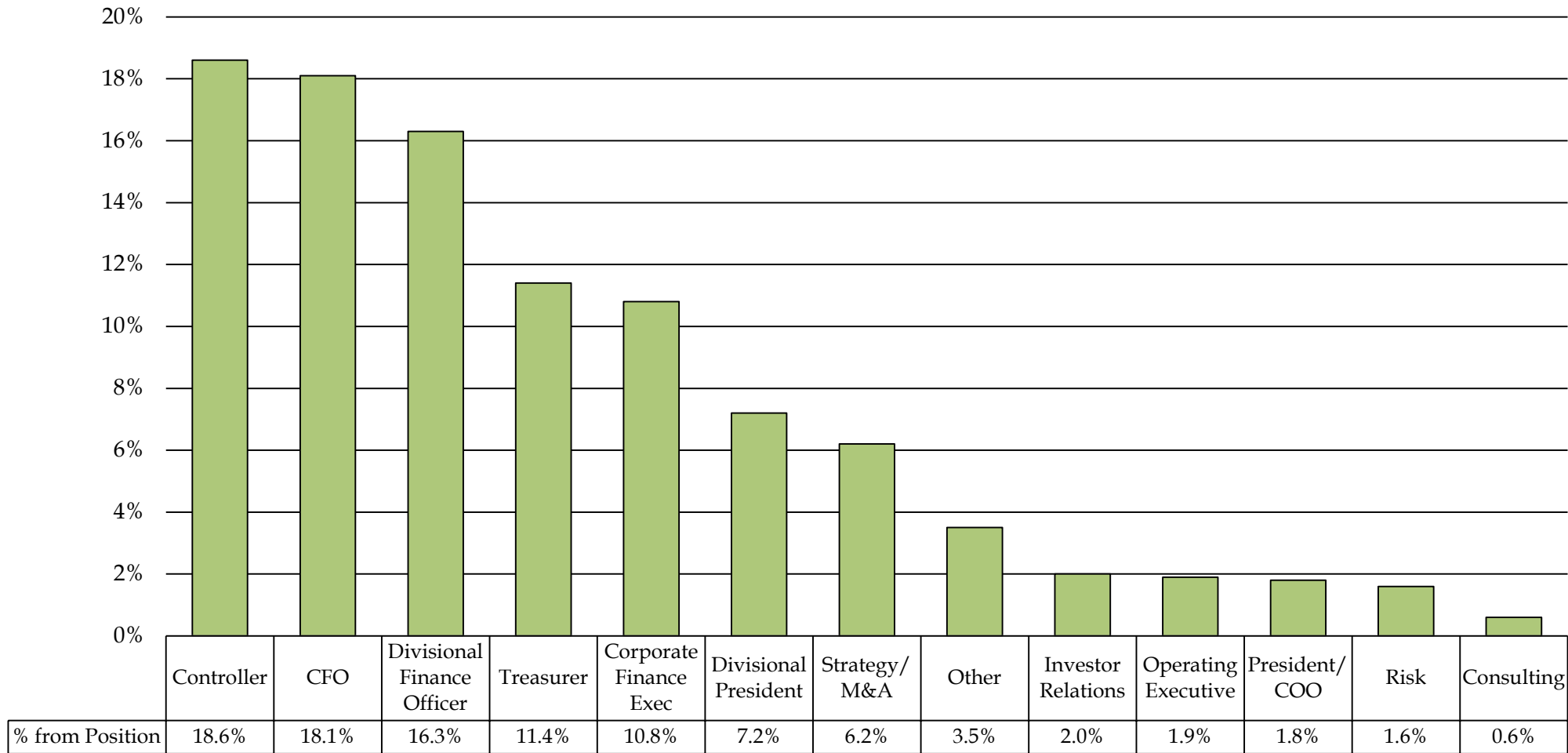


\* Sitting Chairman of their current company



## Over 80% of sitting CFOs do not have previous CFO experience

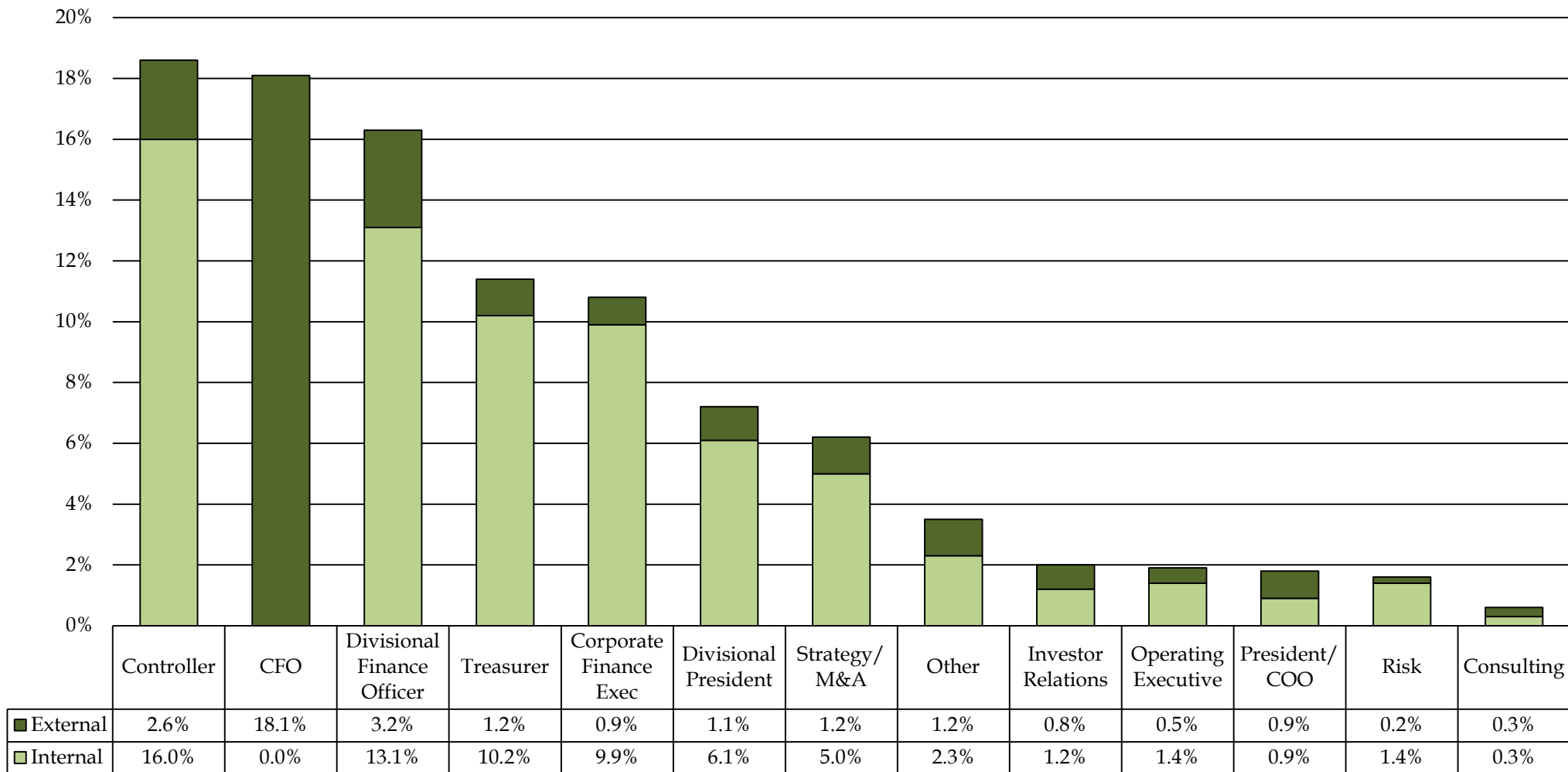
Percentage of Sitting CFOs by Immediate Previous Position  
2017 Fortune 500 and S&P 500 (673 Companies; 663 Sitting CFOs)



- CFO: CFO of another company
- Corporate Finance Executive: VP, SVP, EVP of Finance
- Strategy/M&A: Investment Banking, Development, Planning or Strategy
- Other: Tax, Law, IT, etc.
- Operating Executive: President, VP/SVP/EVP Operations

## Sitting CFOs are most often hired from a Controller position

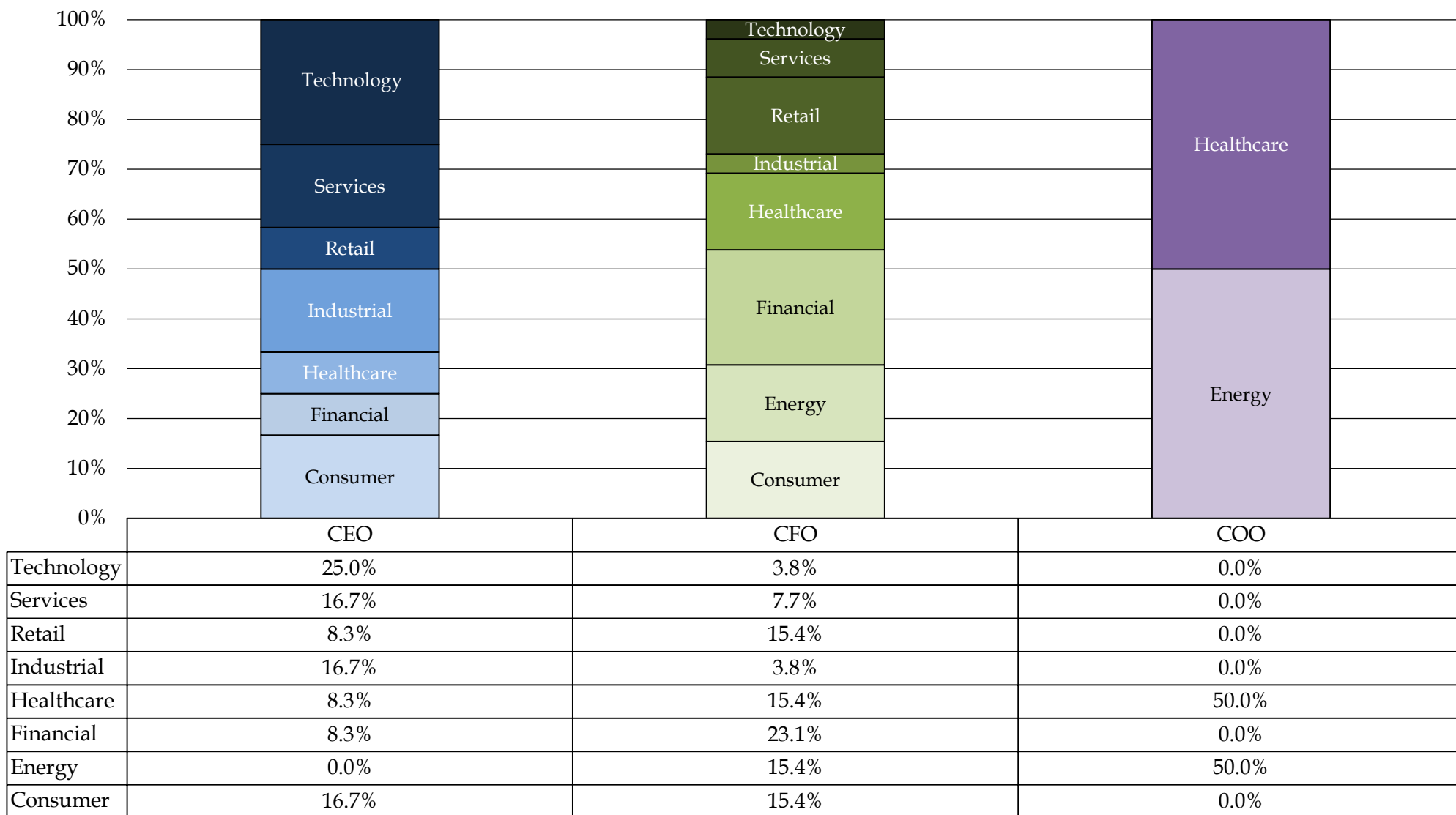
Percentage of Sitting CFOs by Immediate Previous Position  
2017 Fortune 500 and S&P 500 (673 Companies; 663 Sitting CFOs)



- Internal Divisional Finance Officer includes CFOs of subsidiary companies
- Corporate Finance Executive: VP, SVP, EVP of Finance
- Strategy/M&A: Investment Banking, Development, Planning or Strategy
- Other: Tax, Law, IT, etc.
- Operating Executive: President, VP/SVP/EVP Operations

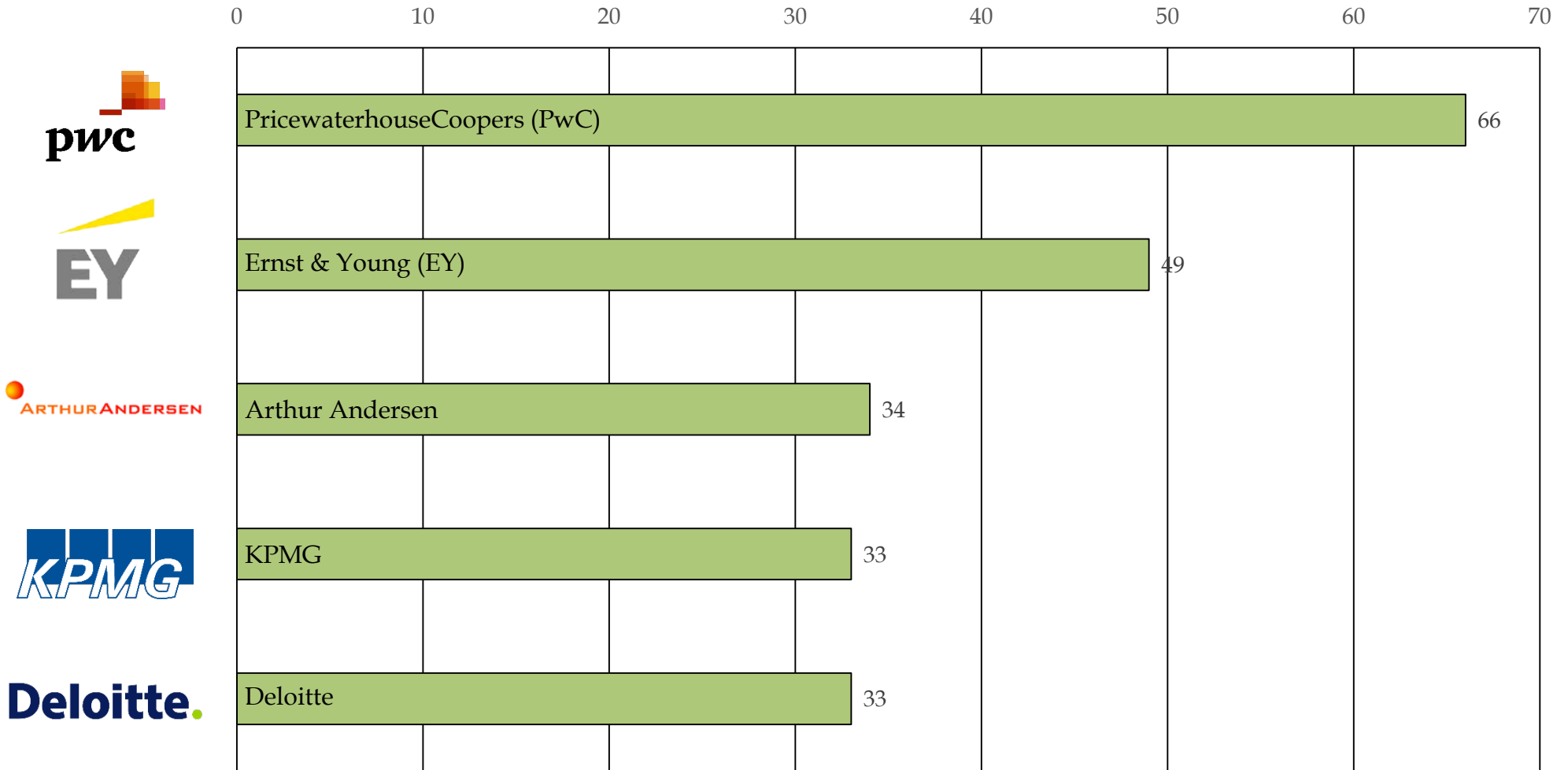
## The CFO position is the only C-Suite position with external hires in each sector

Percentage of External Hires by Industry  
2017 Fortune 500 and S&P 500 Companies (673 Companies; 678 CEOs; 663 CFOs; 195 COOs)



## Only 32% of sitting CFOs have a Big Five public accounting background

2017 CFOs with Public Accounting Backgrounds  
 2017 Fortune 500 and S&P 500 (673 Companies; 254 CFOs Represented\*\*)

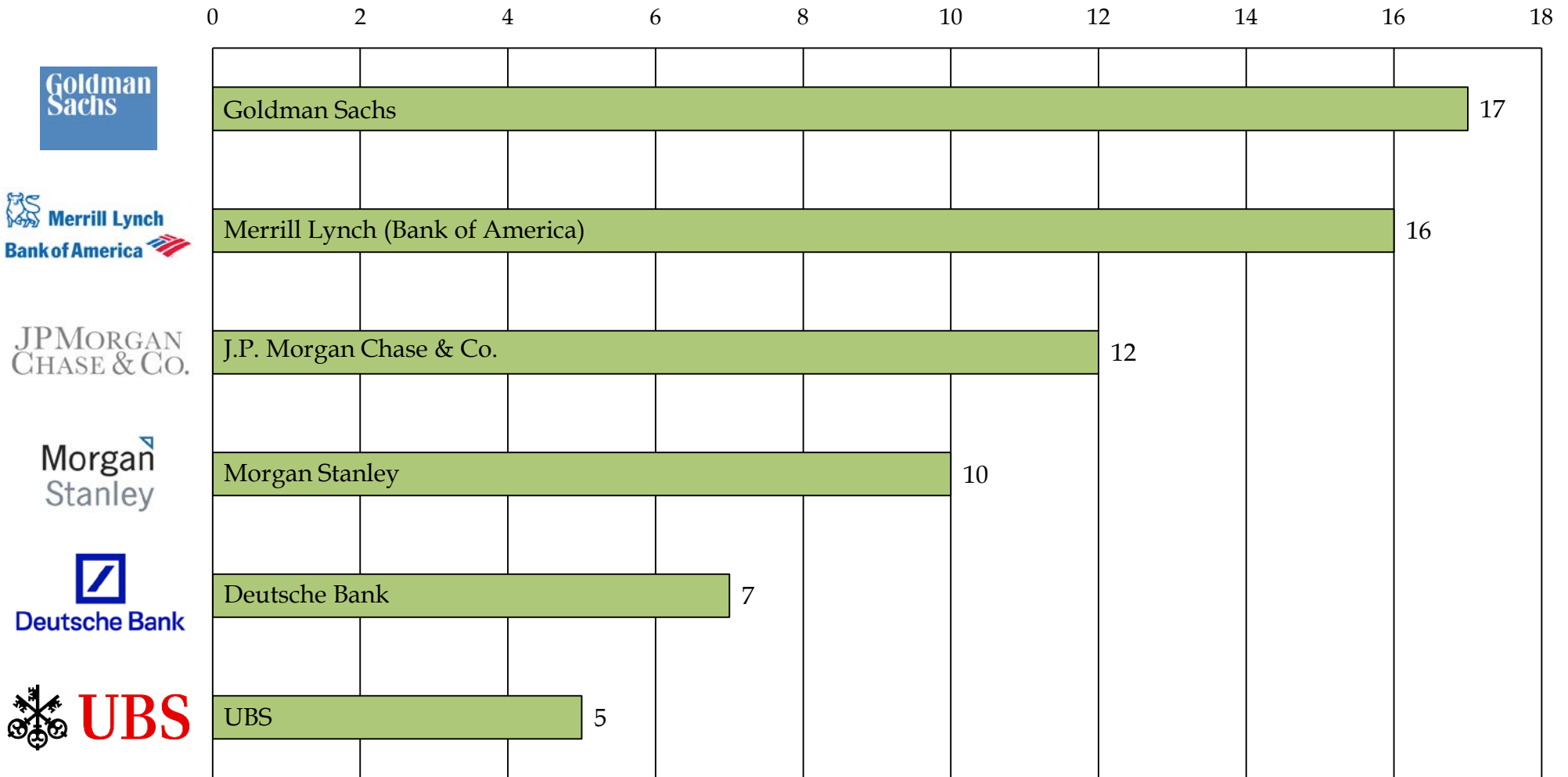


\*Multiple CFOs have worked at multiple public accounting firms

\*\*There are CFOs in this study that have worked at other public accounting firms that are not displayed

## 12% of CFOs have an investment banking background

2017 CFOs with Investment Banking Backgrounds  
 2017 Fortune 500 and S&P 500 (673 Companies; 79 CFOs Represented\*)

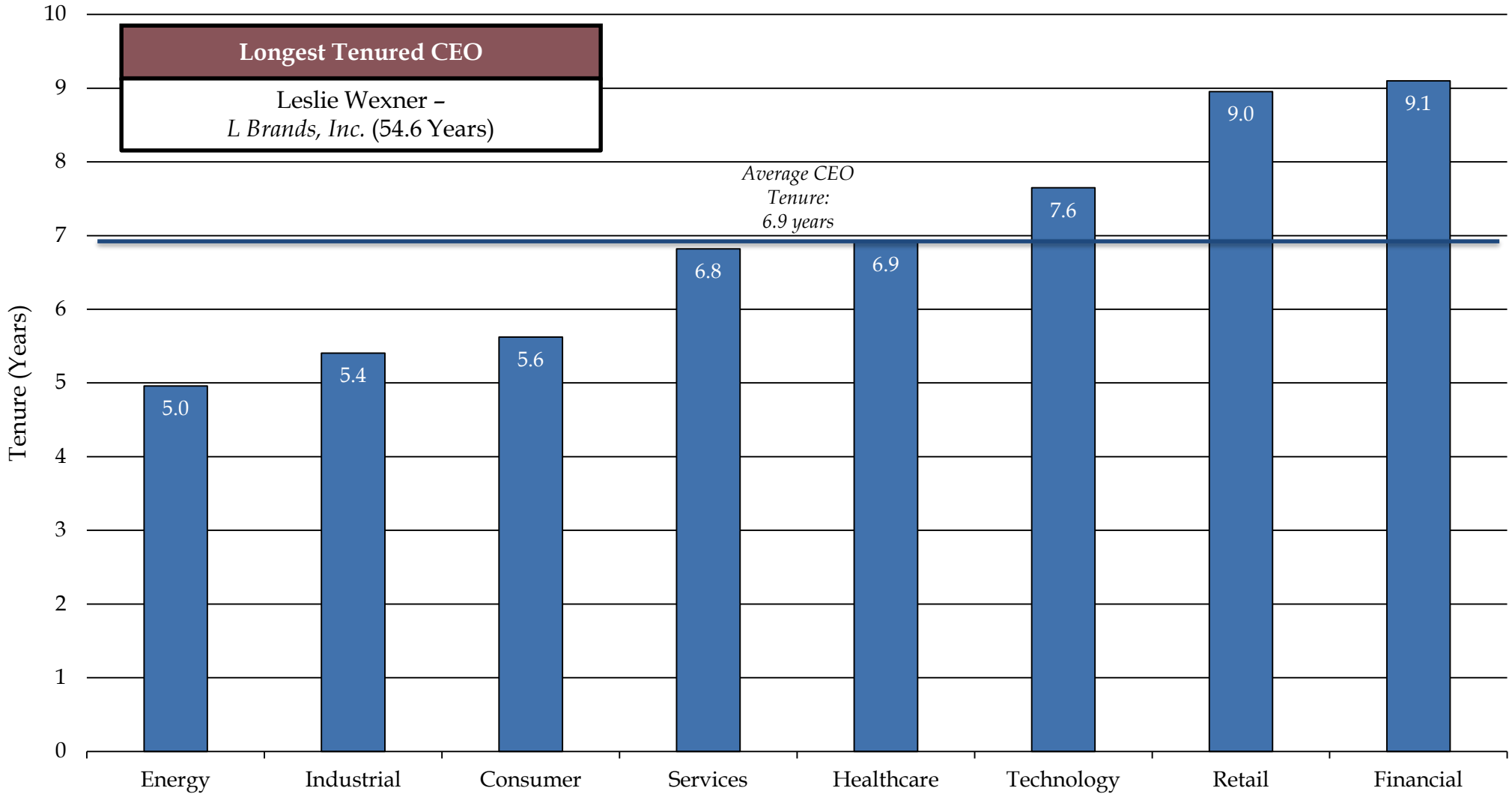


\*Multiple CFOs have worked for more than one investment bank

\*\*There are CFOs in this study that have worked at other investment banks that are not displayed

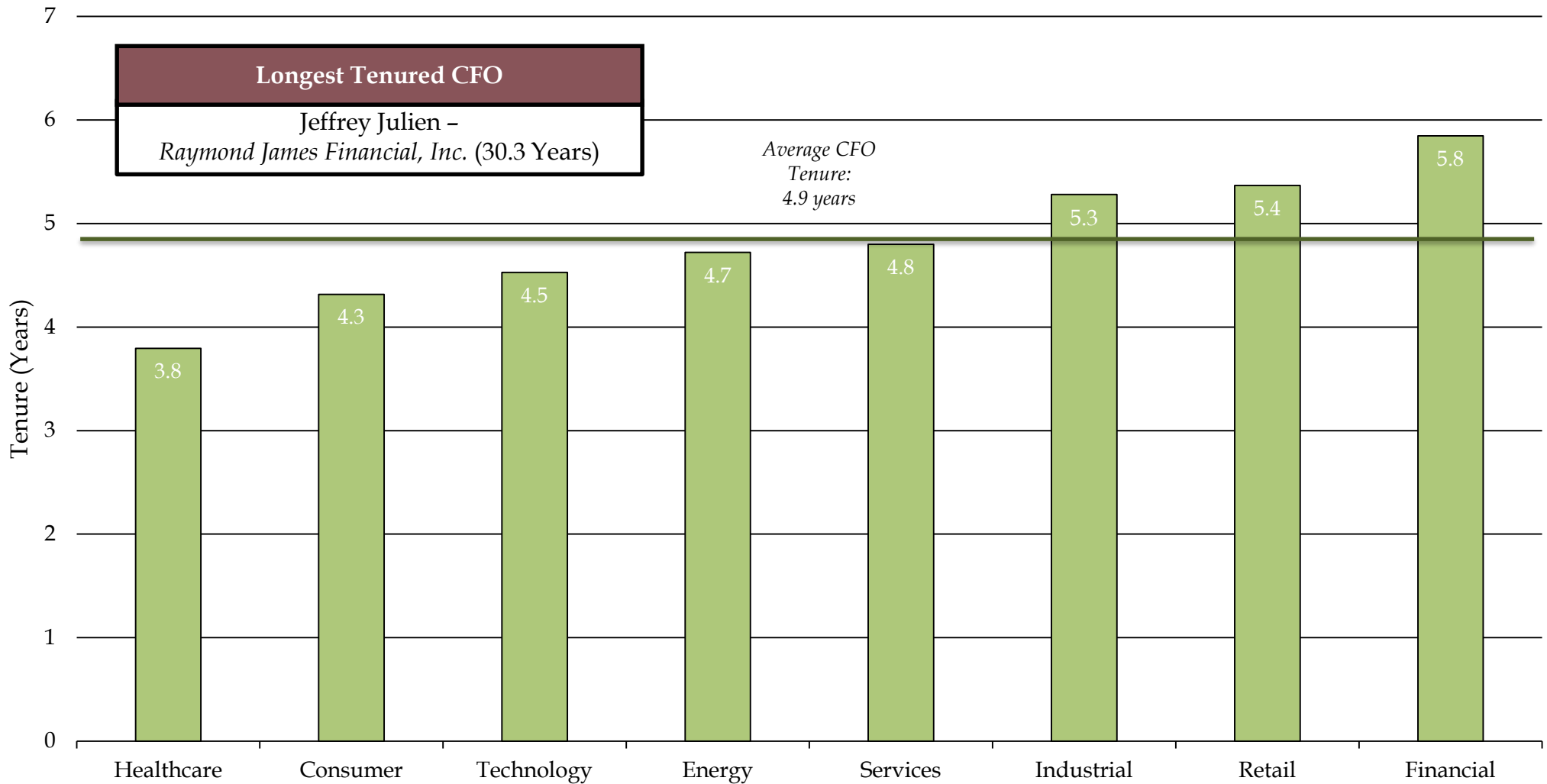
## Financial sector CEOs have the most job security

Average Tenure in Years of Sitting CEOs by Industry  
 2017 Fortune 500 and S&P 500 (673 Companies; 678 Sitting CEOs)



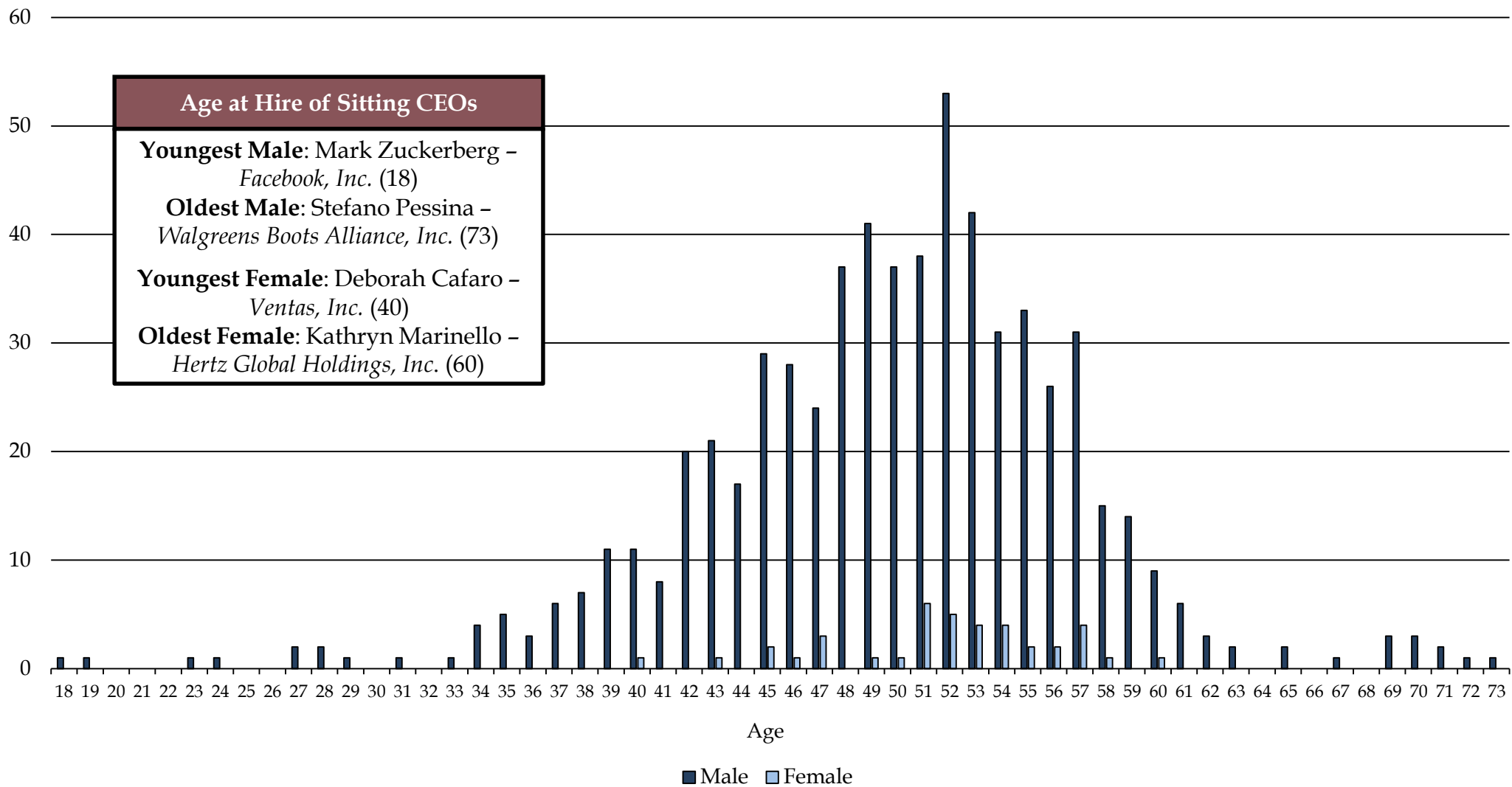
## The average tenure of a CFO is under five years

Average Tenure in Years of Sitting CFOs by Industry  
 2017 Fortune 500 and S&P 500 (673 Companies; 663 Sitting CFOs)



## 50% of current CEOs were age 50 or younger when appointed to the chair

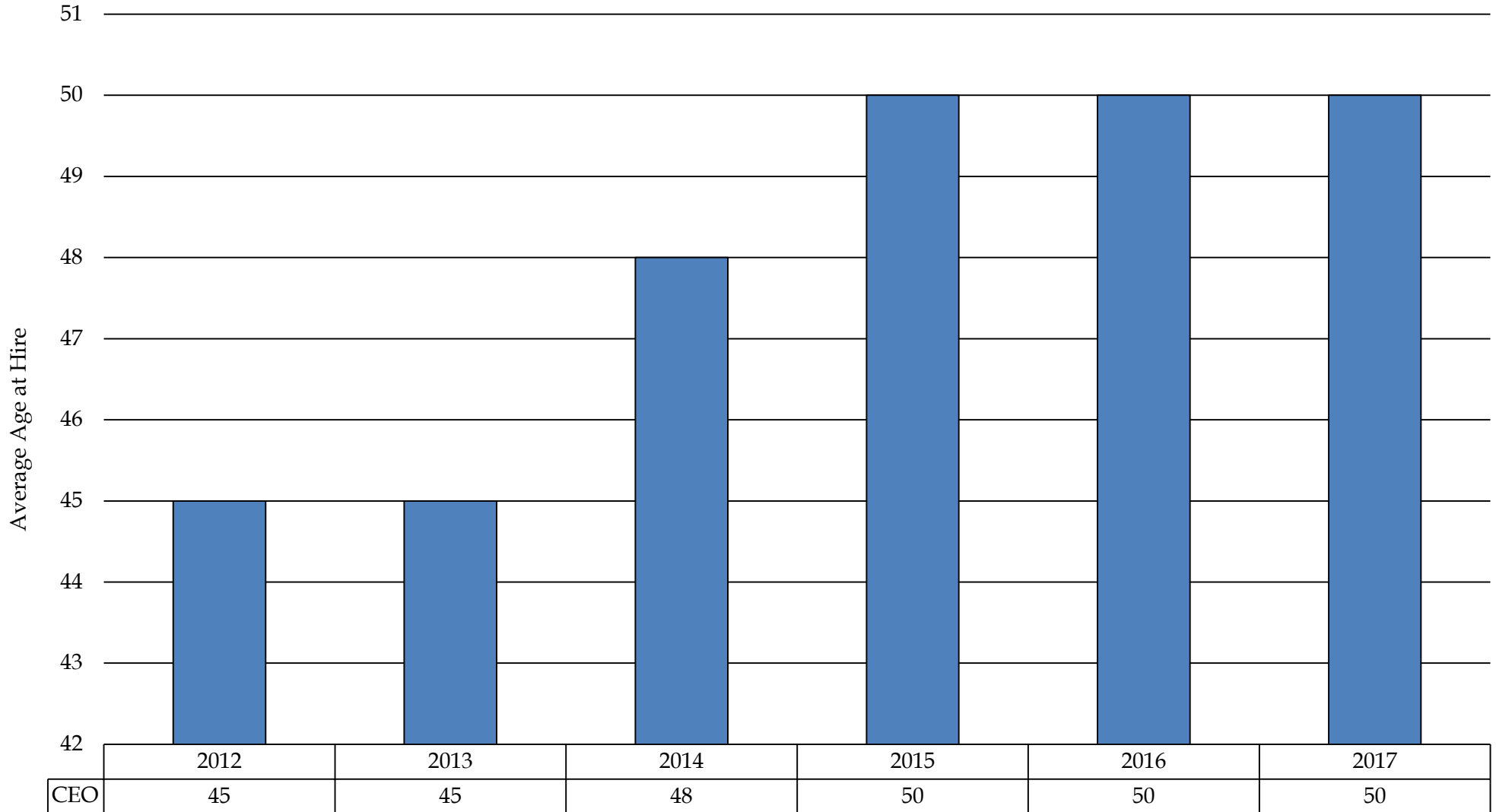
Age at Hire of Sitting CEOs  
2017 Fortune 500 and S&P 500 Companies (673 Companies; 670 Known CEO Ages at Hire)





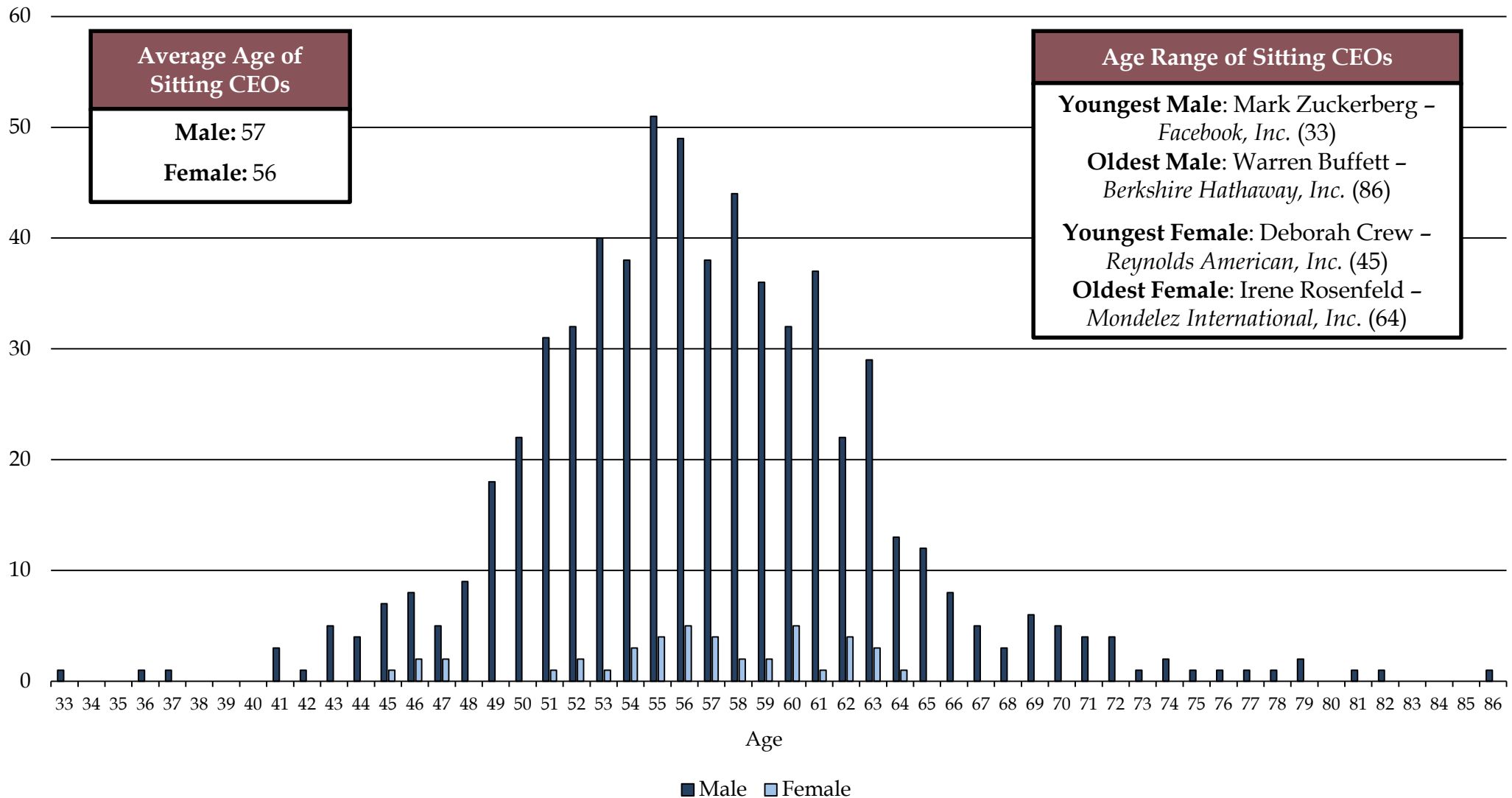
## The average age at hire of CEOs has increased

Average CEO Age at Hire (2012-2017)  
2017 Fortune 500 and S&P 500 (673 Companies; 678 sitting CEOs)



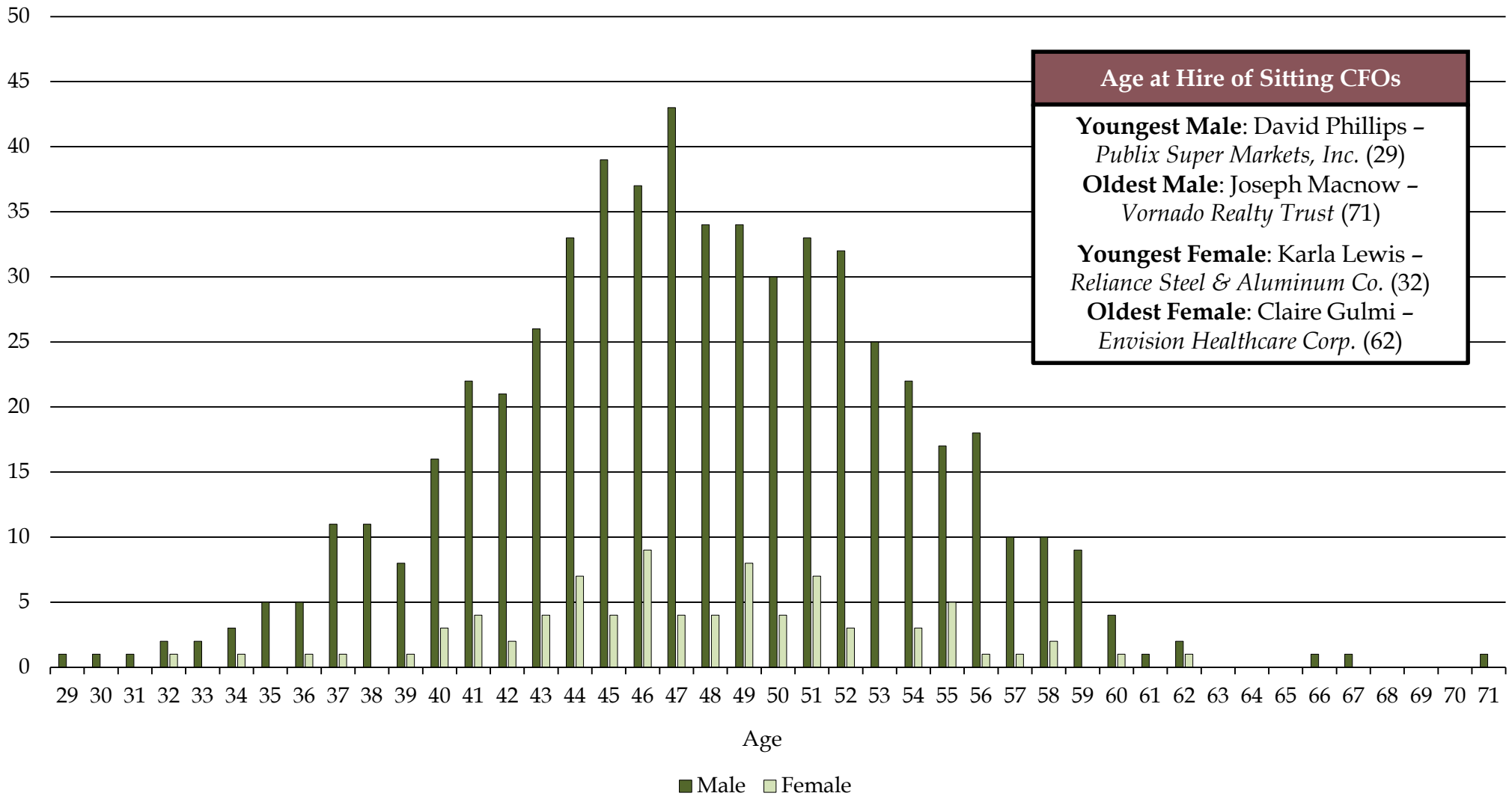
## 30% of CEOs are 60 or older

Age Distribution of Sitting CEOs  
 2017 Fortune 500 and S&P 500 Companies (673 Companies; 669 Known CEO Ages)



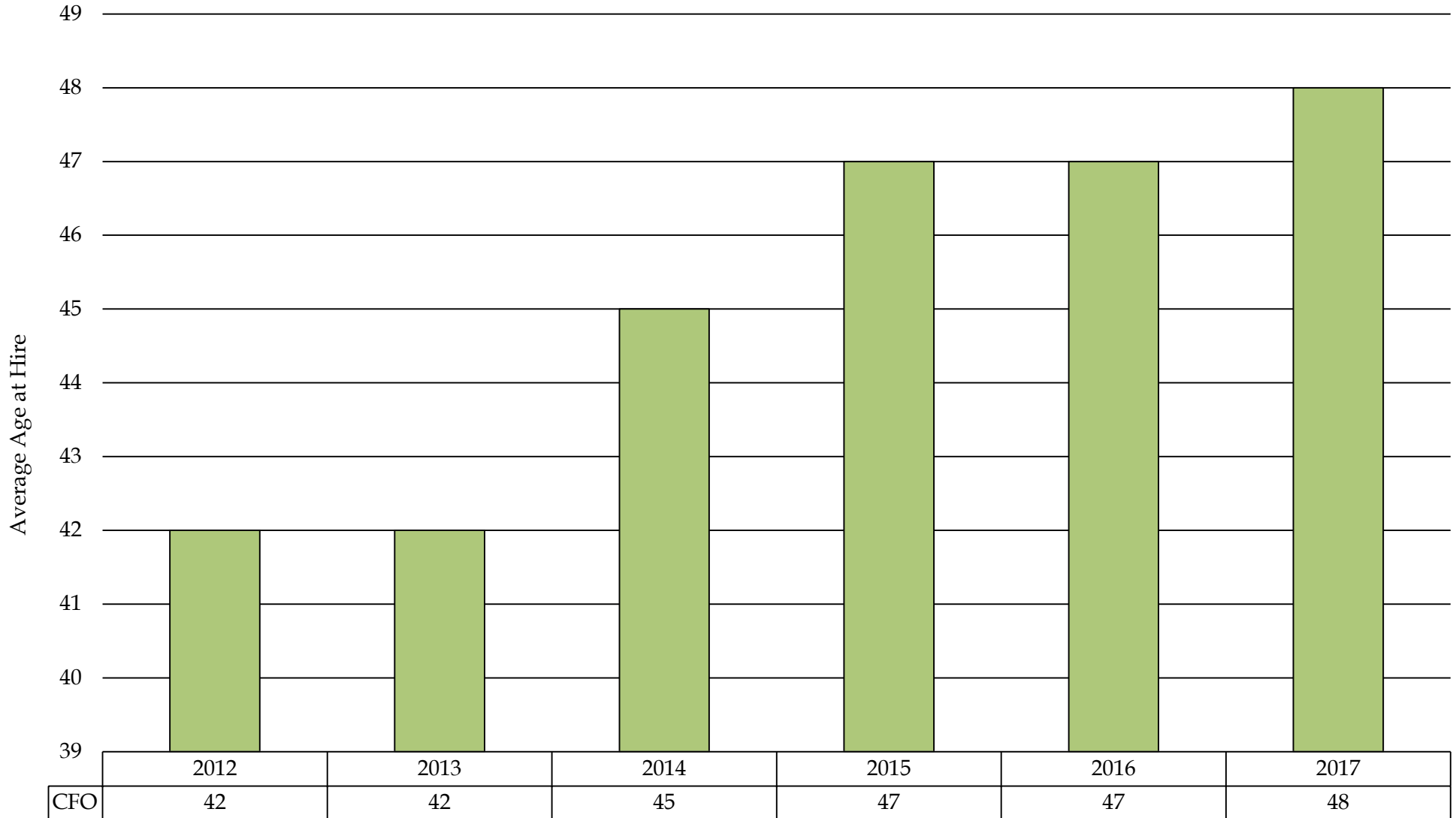
## Over 90% of current CFOs were 55 or younger when named CFO

Age at Hire of Sitting CFOs  
2017 Fortune 500 and S&P 500 Companies (673 Companies; 653 Known CFO Ages at Hire)



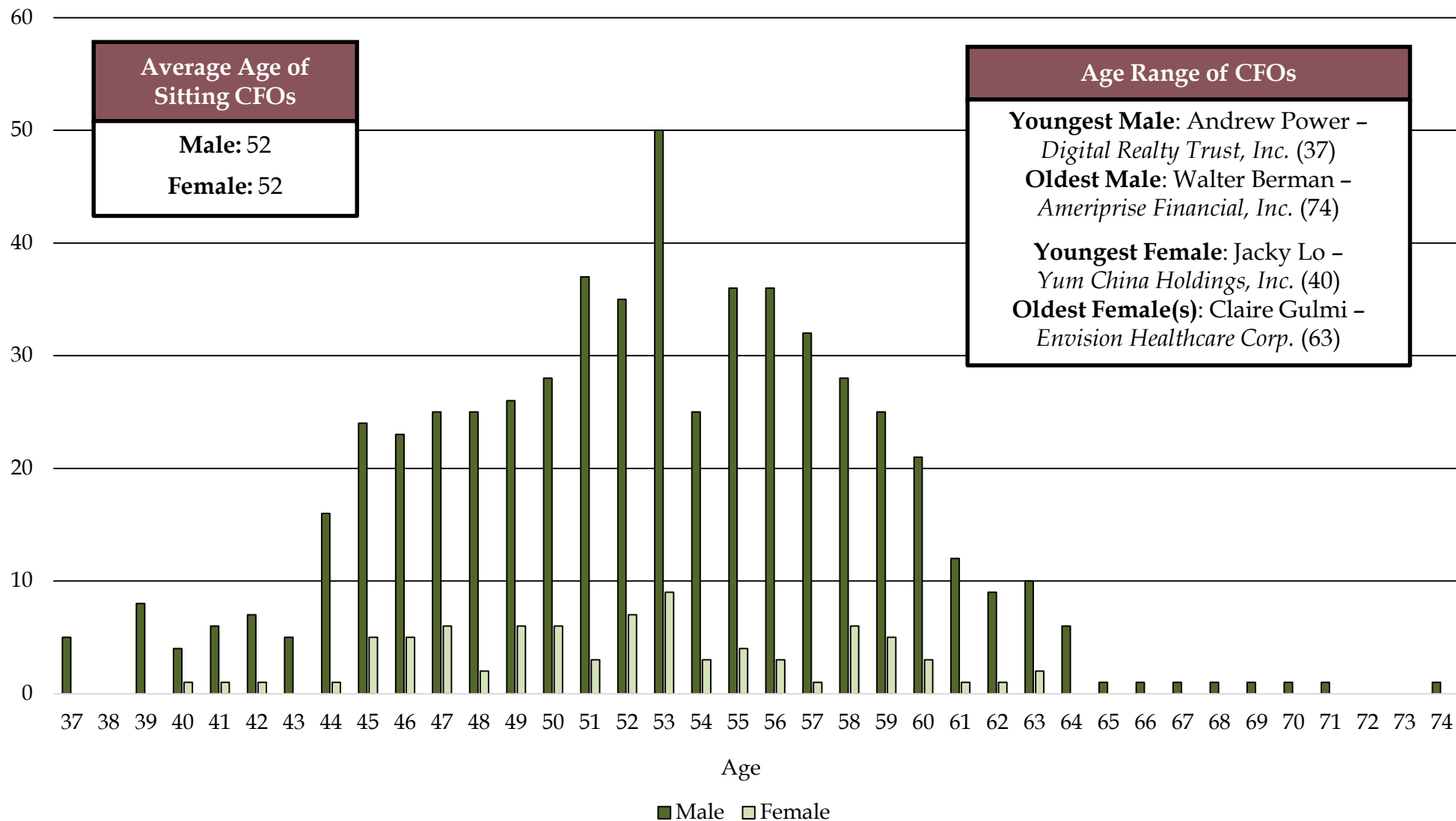
## The average age at hire of CFOs has increased

Average CFO Age at Hire (2012-2017)  
2017 Fortune 500 and S&P 500 (673 Companies; 663 sitting CFOs)



## Less than 10% of CFOs are over 60 years of age

Age Distribution of Sitting CFOs  
2017 Fortune 500 and S&P 500 Companies (675 Companies; 653 Known CFO Ages)



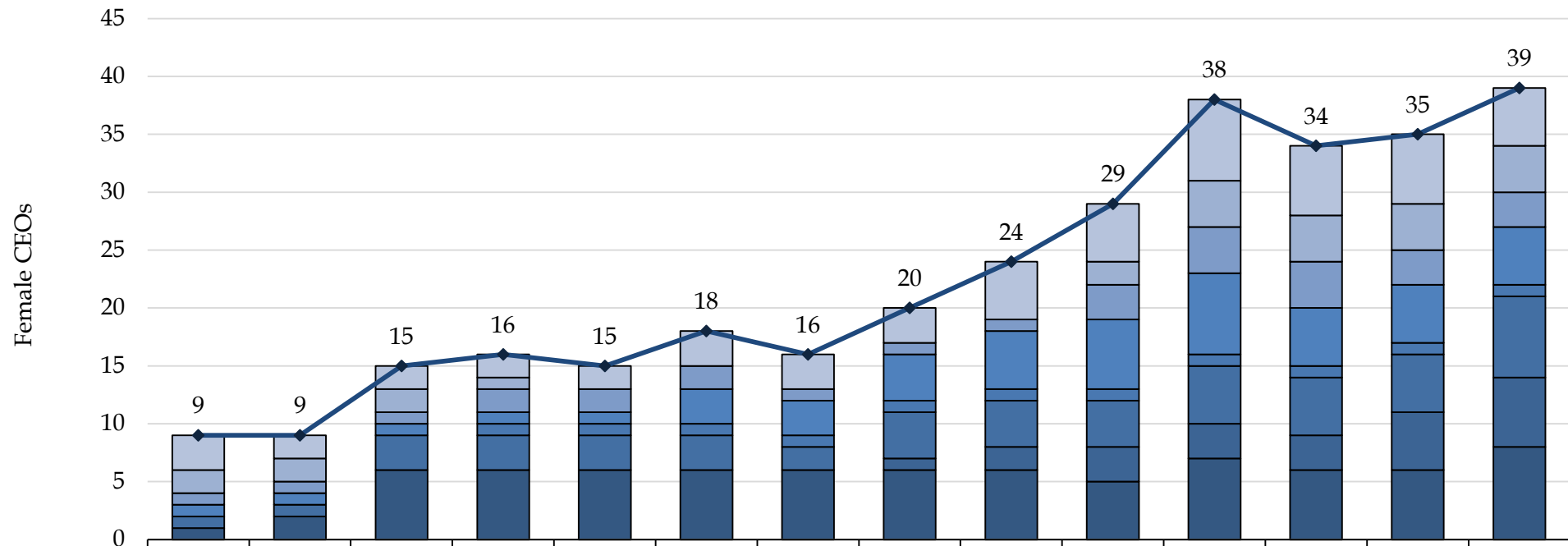
**Average Age of Sitting CFOs**  
Male: 52  
Female: 52

**Age Range of CFOs**  
**Youngest Male:** Andrew Power - Digital Realty Trust, Inc. (37)  
**Oldest Male:** Walter Berman - Ameriprise Financial, Inc. (74)  
**Youngest Female:** Jacky Lo - Yum China Holdings, Inc. (40)  
**Oldest Female(s):** Claire Gulmi - Envision Healthcare Corp. (63)

# Diversity Landscape

## The number of female CEOs is at an all time high

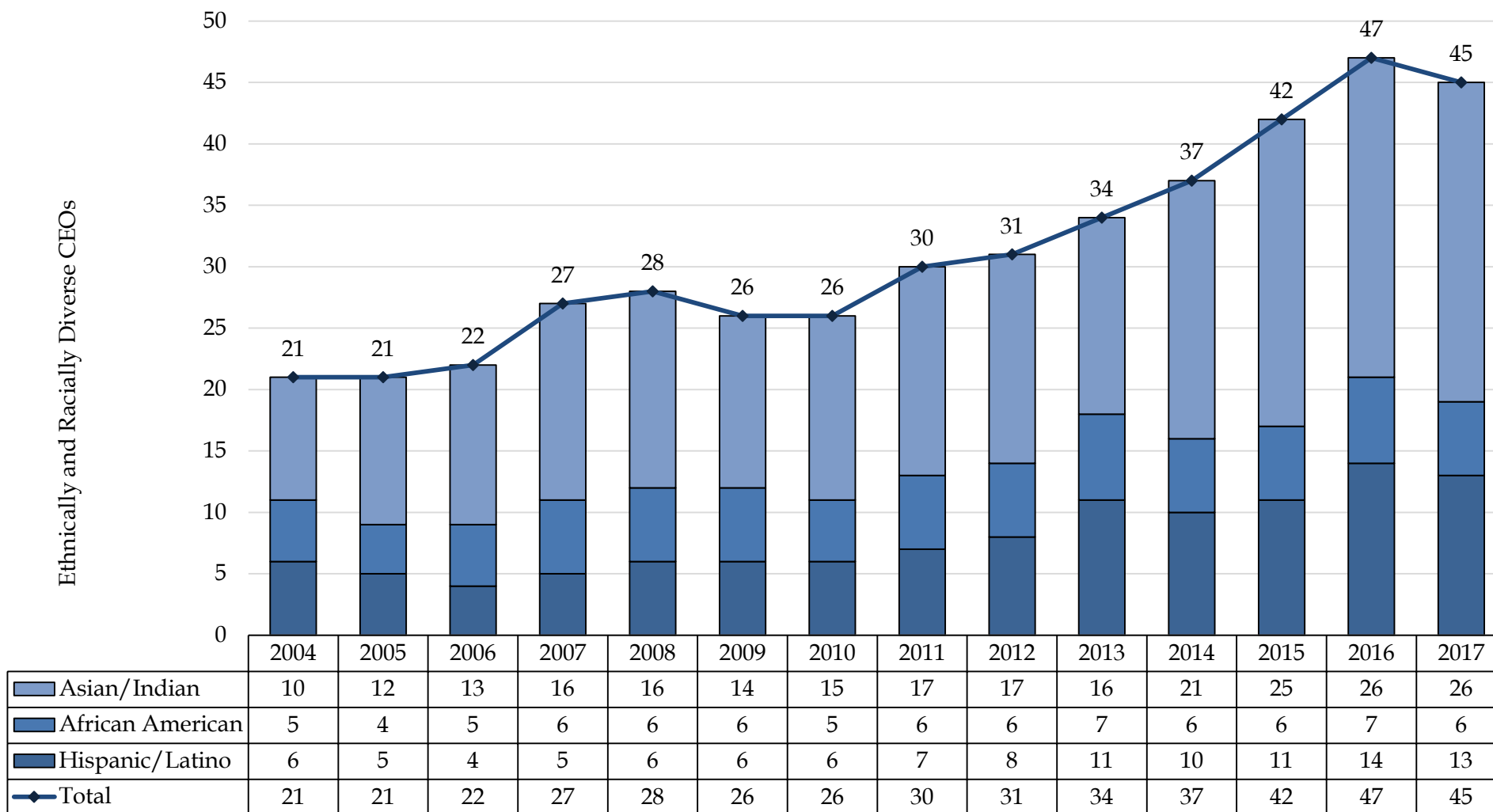
Number of Companies with a Female CEO by Industry (2004-2017)  
 2017 Fortune 500 and S&P 500 Companies (673 Companies; 678 Sitting CEOs)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Technology	3	2	2	2	2	3	3	3	5	5	7	6	6	5
Services	2	2	2	1	0	0	0	0	0	2	4	4	4	4
Retail	1	1	1	2	2	2	1	1	1	3	4	4	3	3
Industrial	1	1	1	1	1	3	3	4	5	6	7	5	5	5
Healthcare	0	0	0	1	1	1	1	1	1	1	1	1	1	1
Financial	1	1	3	3	3	3	2	4	4	4	5	5	5	7
Energy	0	0	0	0	0	0	0	1	2	3	3	3	5	6
Consumer	1	2	6	6	6	6	6	6	6	5	7	6	6	8
<b>Total</b>	<b>9</b>	<b>9</b>	<b>15</b>	<b>16</b>	<b>15</b>	<b>18</b>	<b>16</b>	<b>20</b>	<b>24</b>	<b>29</b>	<b>38</b>	<b>34</b>	<b>35</b>	<b>39</b>

## For the first time in eight years, diversity in the CEO role has decreased

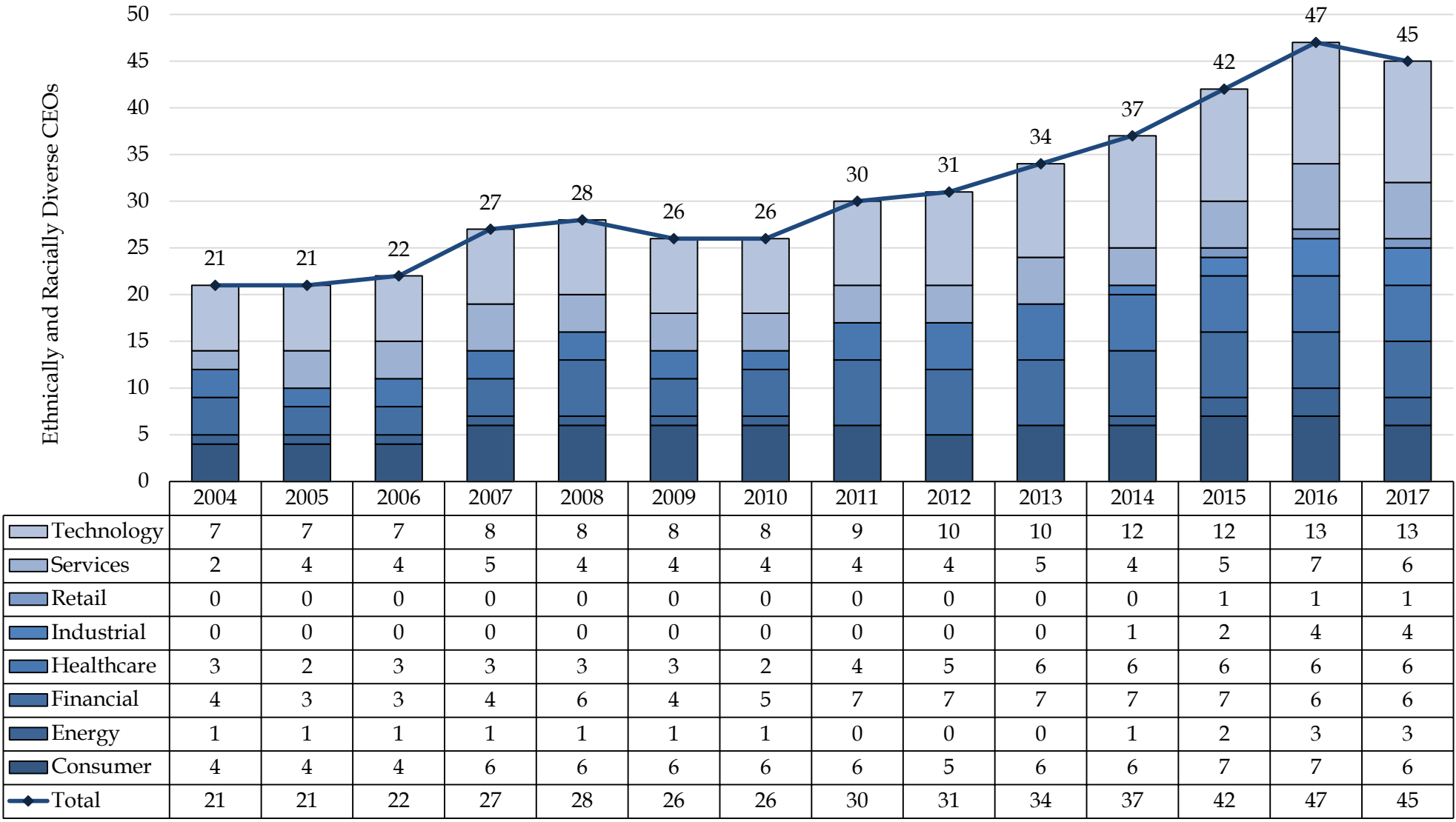
Number of Companies with Ethnically and Racially Diverse CEOs (2004-2017)  
2017 Fortune 500 and S&P 500 (673 Companies; 678 Sitting CEOs)





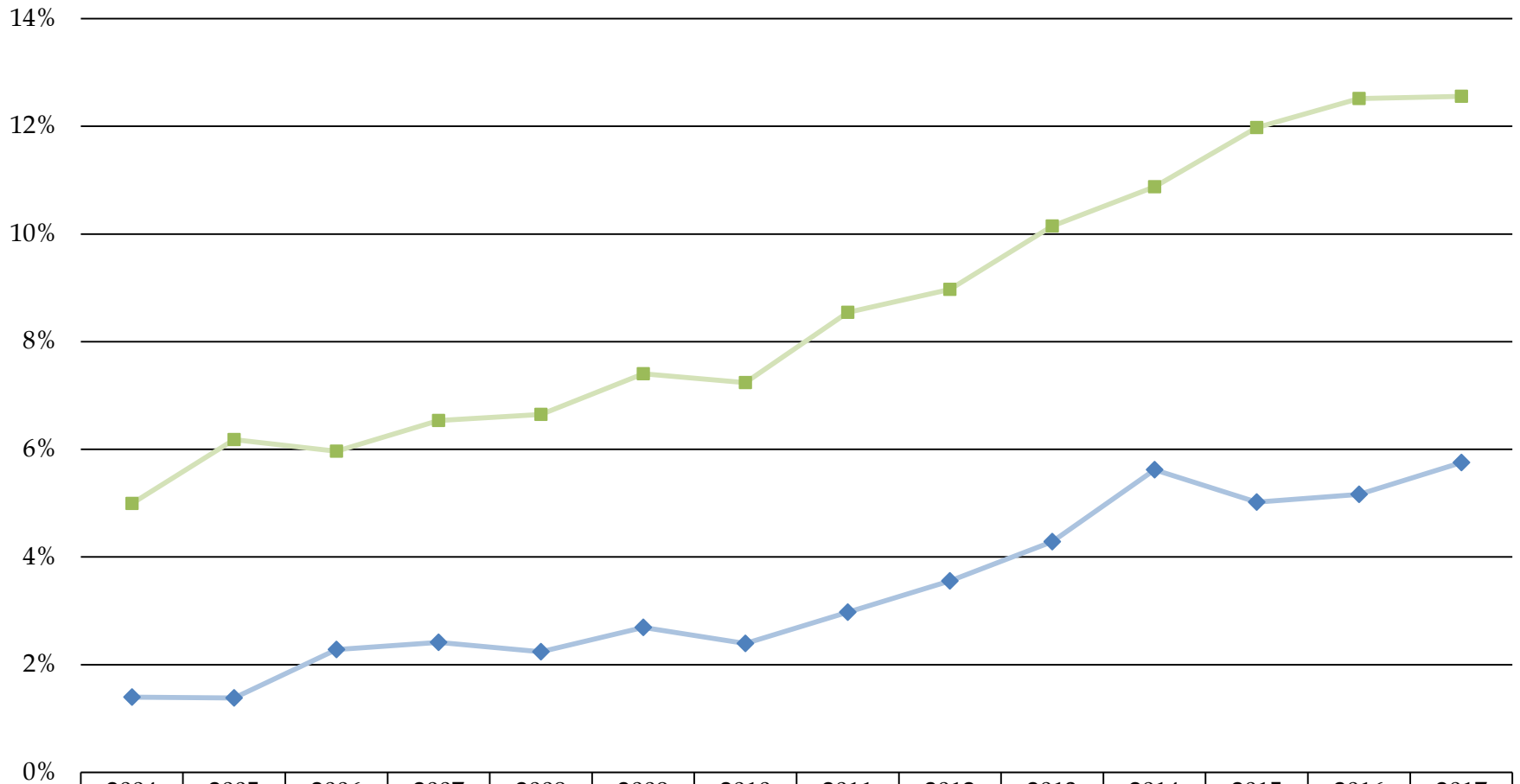
# For over 10 years, the Technology sector has had the most ethnically and racially diverse CEOs

Number of Companies with Ethnically and Racially Diverse CEOs by Industry (2004-2017)  
2017 Fortune 500 and S&P 500 (673 Companies; 678 Sitting CEOs)



## Female presence in the C-Suite continues to steadily climb

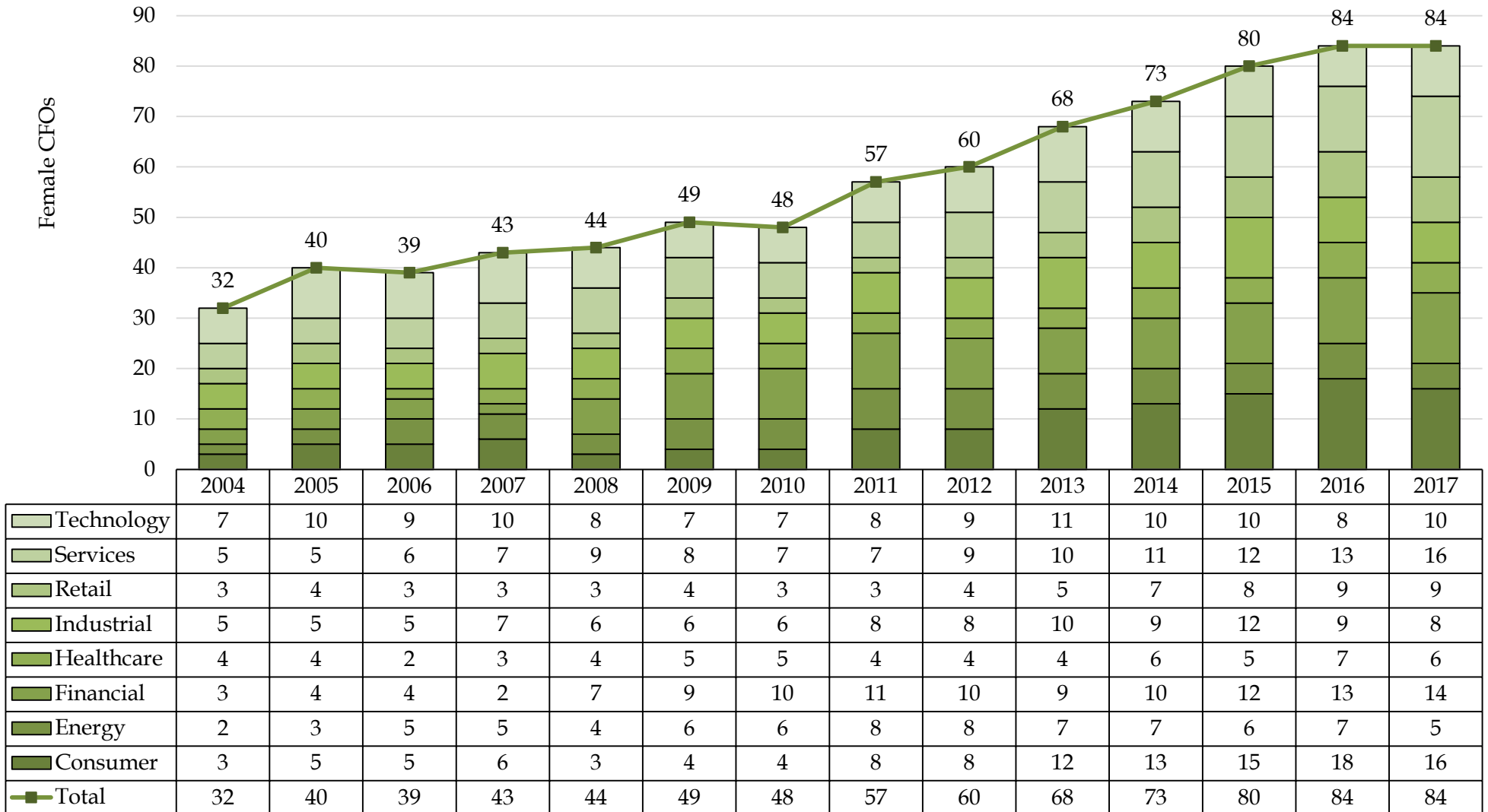
Percentages of Companies with Female CEOs or CFOs (2004-2017)  
 2017 Fortune 500 and S&P 500 (673 Companies; 678 Sitting CEOs; 663 Sitting CFOs)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Female CEOs	1.4%	1.4%	2.3%	2.4%	2.2%	2.7%	2.4%	3.0%	3.6%	4.3%	5.6%	5.0%	5.2%	5.8%
Female CFOs	5.0%	6.2%	6.0%	6.5%	6.6%	7.4%	7.2%	8.5%	9.0%	10.1%	10.9%	12.0%	12.5%	12.6%

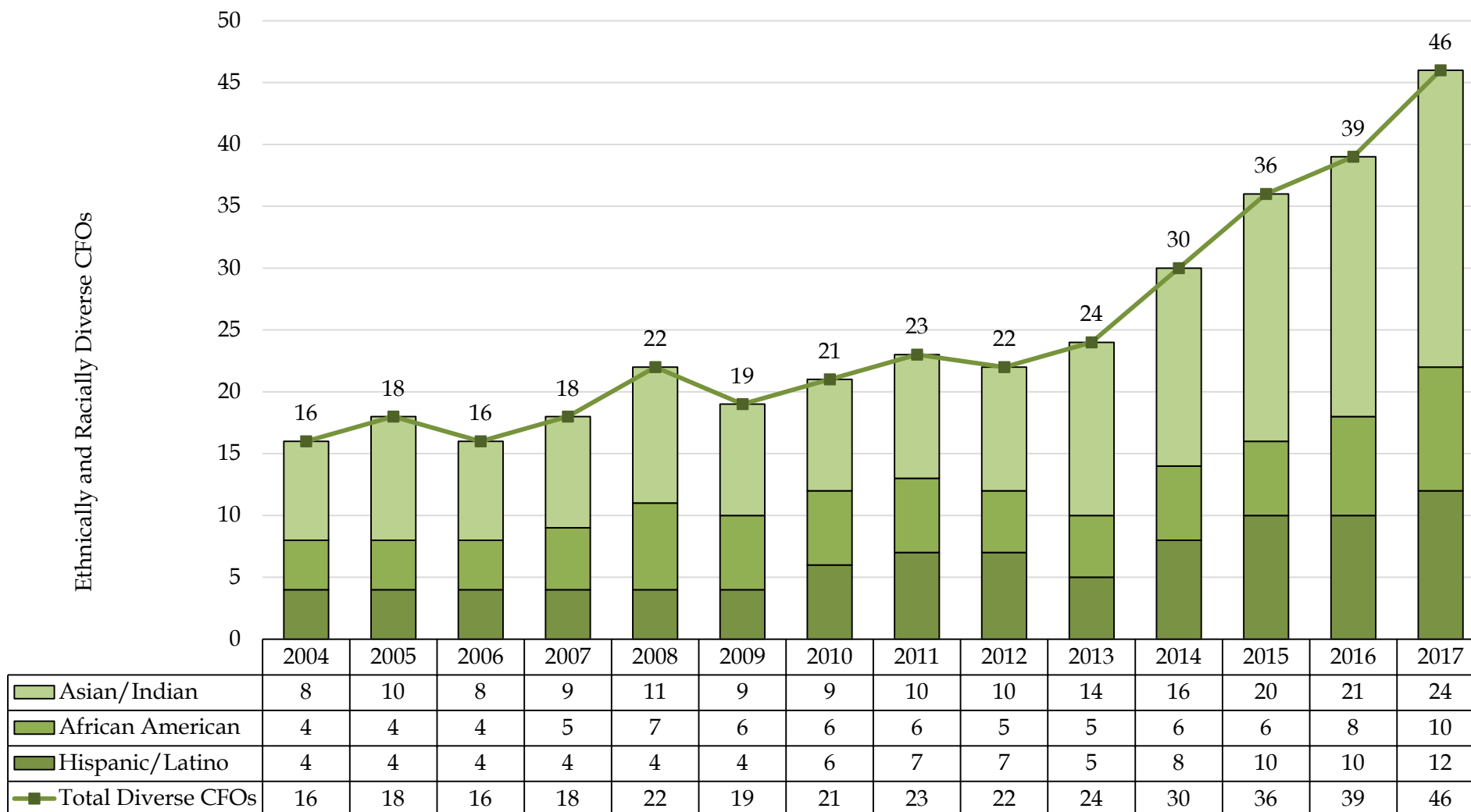
## The number of female CFOs has doubled over the last 10 years

Number of Companies with a Female CFO by Industry (2004-2017)  
2017 Fortune 500 and S&P 500 Companies (673 Companies; 663 Sitting CFOs)



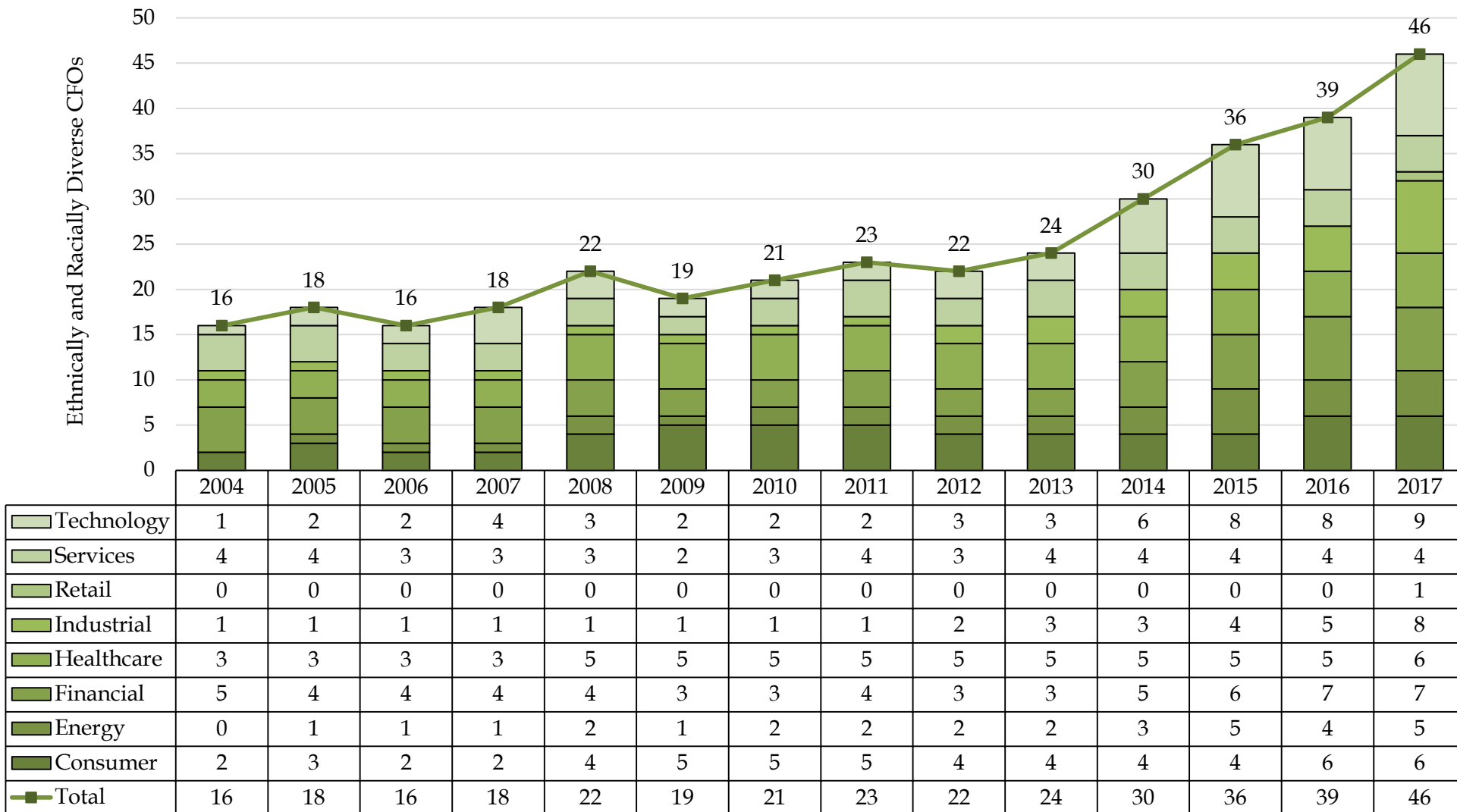
## The number of ethnically and racially diverse CFOs has more than doubled over the last five years

Number of Companies with Ethnically and Racially Diverse CFOs (2004-2017)  
2017 Fortune 500 and S&P 500 (673 Companies; 663 Sitting CFOs)



## Ethnic and racial diversity in the CFO role has doubled over the last five years

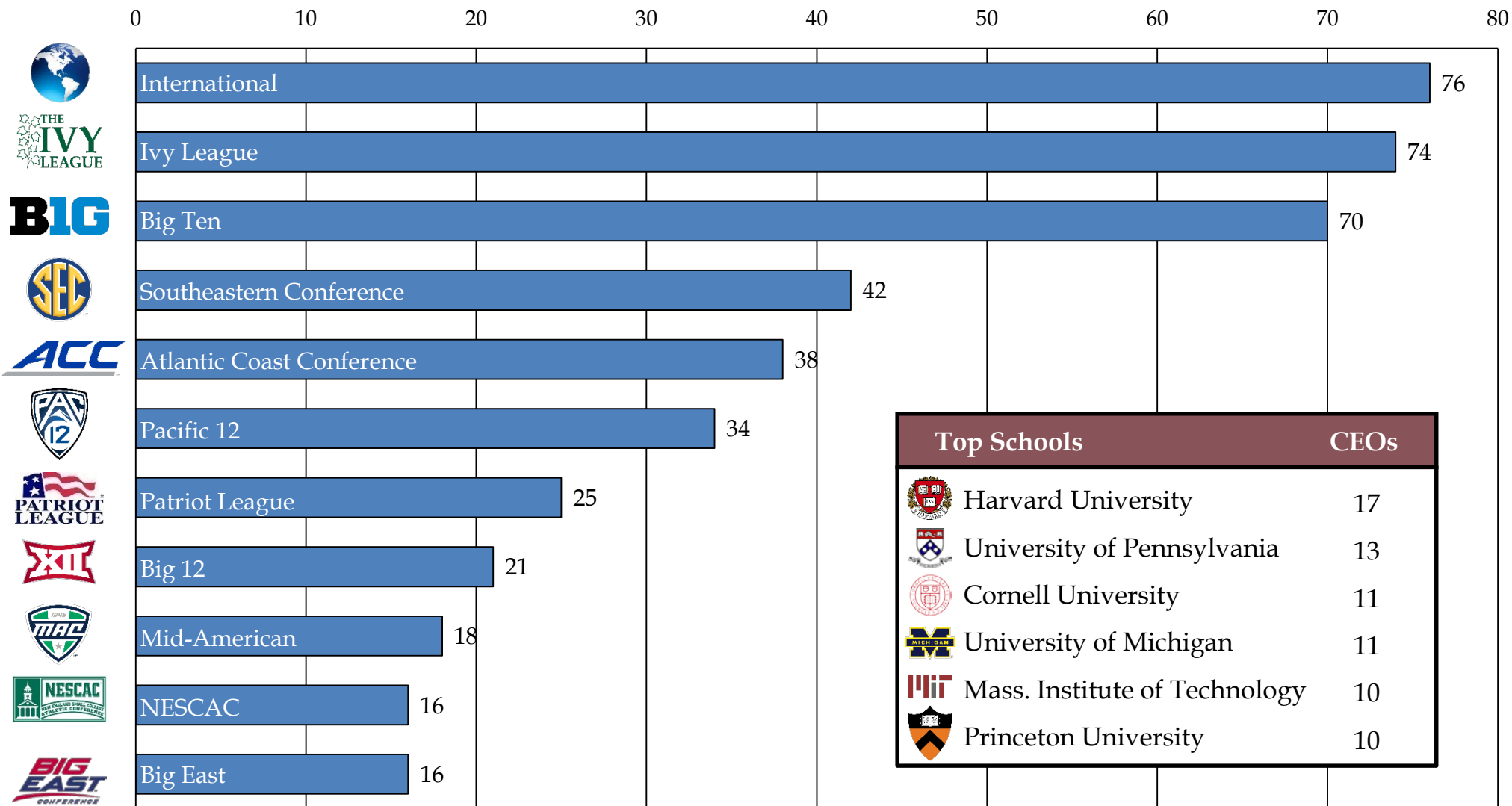
Number of Companies with Ethnically and Racially Diverse CFOs by Industry  
2017 Fortune 500 and S&P 500 (675 Companies; 663 Sitting CFOs)



# Education Background

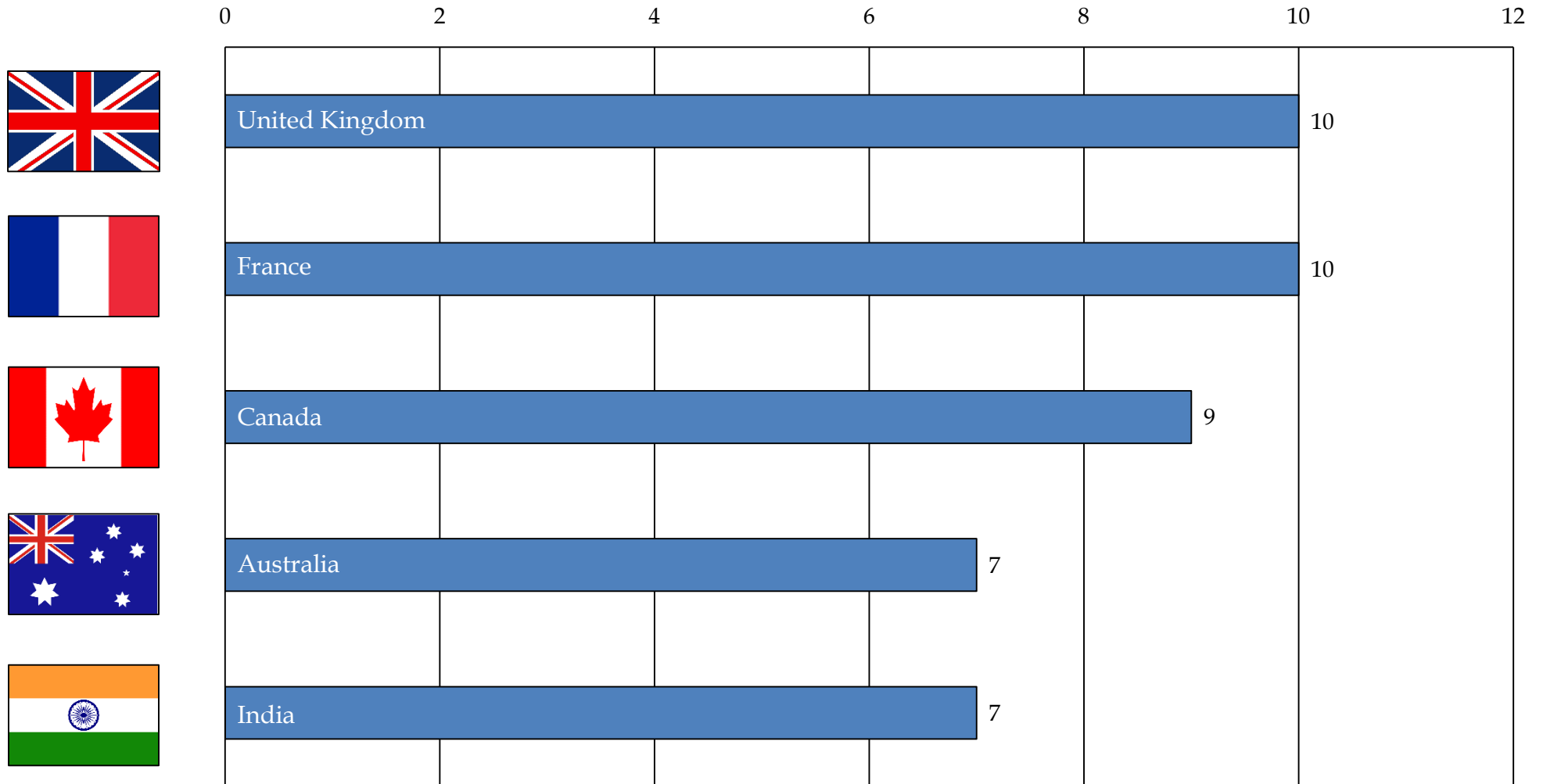
## International universities currently produce the most sitting CEOs

Sitting CEO Undergraduate University Conference Affiliation  
 2017 Fortune 500 and S&P 500 Companies (678 Sitting CEOs; 646 Known Education Backgrounds)



## The United Kingdom and France currently produce the most sitting CEOs out of all international countries in this study

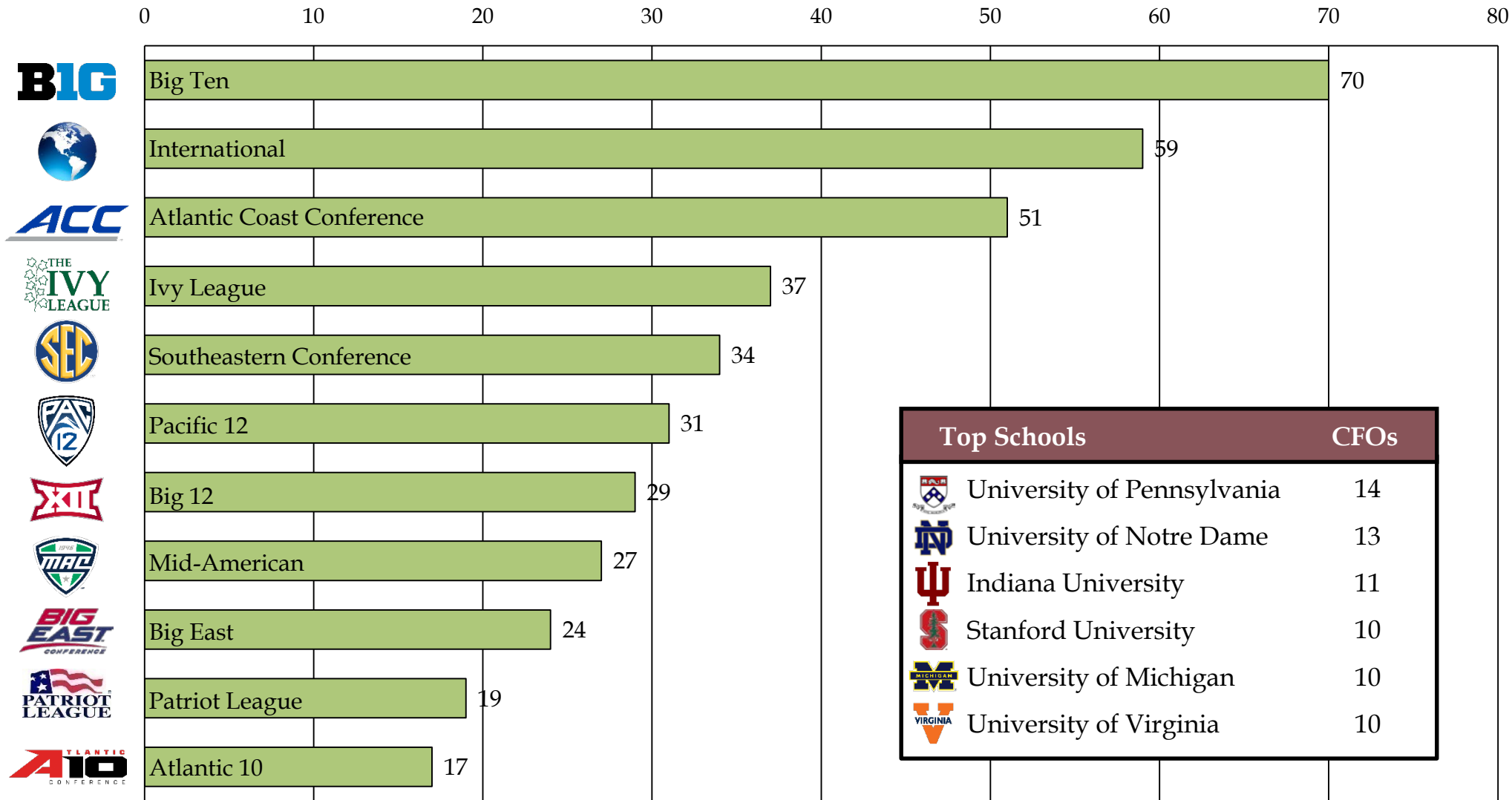
Top Five International Undergraduate Degree Producing Countries for Sitting CEOs  
2017 Fortune 500 and S&P 500 Companies (678 Sitting CEOs; 76 International Degrees)





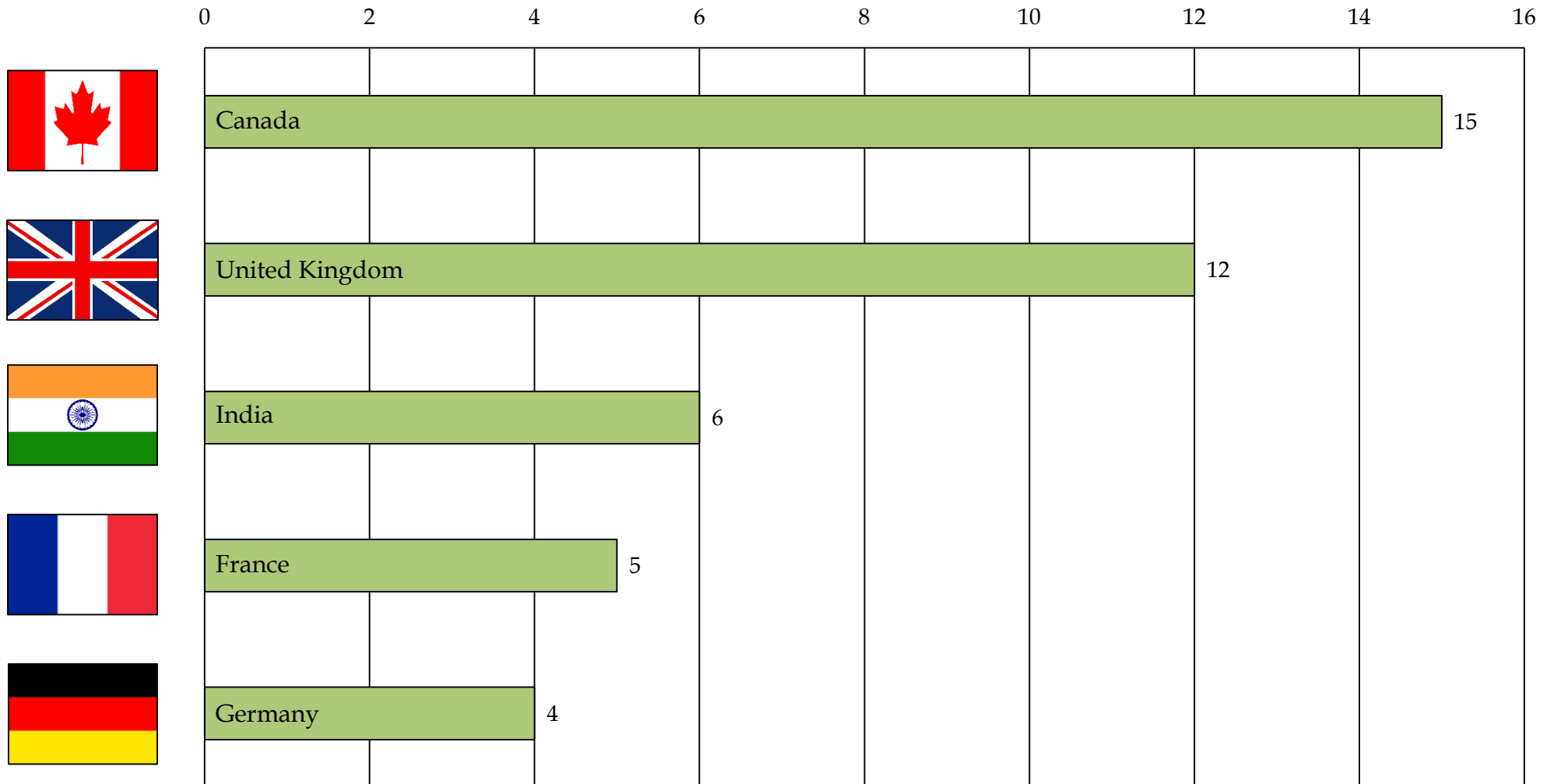
## The Big Ten currently produces the most sitting CFOs

Sitting CFO Undergraduate University Conference Affiliation  
 2017 Fortune 500 and S&P 500 Companies (663 Sitting CFOs; 617 Known Education Backgrounds)



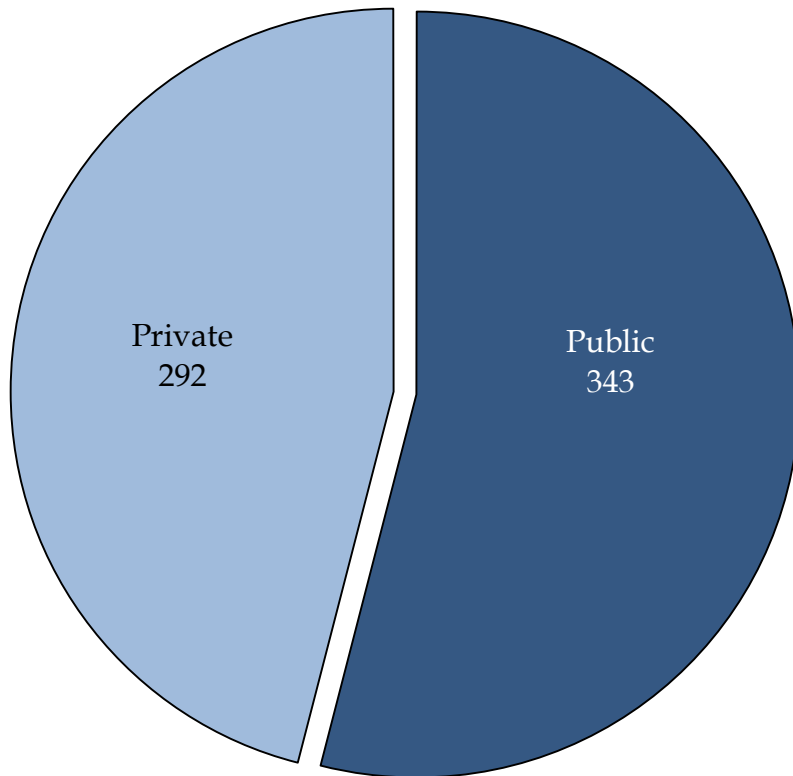
## Canada currently produces the most sitting CFOs out of all international countries in this study

Top Five International Undergraduate Degree Producing Countries for Sitting CFOs  
2017 Fortune 500 and S&P 500 Companies (663 Sitting CEOs; 59 International Degrees)





## Public universities currently produce the most sitting CEOs

Sitting CEO Undergraduate University  
 2017 Fortune 500 and S&P 500 Companies (678 Sitting CEOs; 646 Known Education Backgrounds)

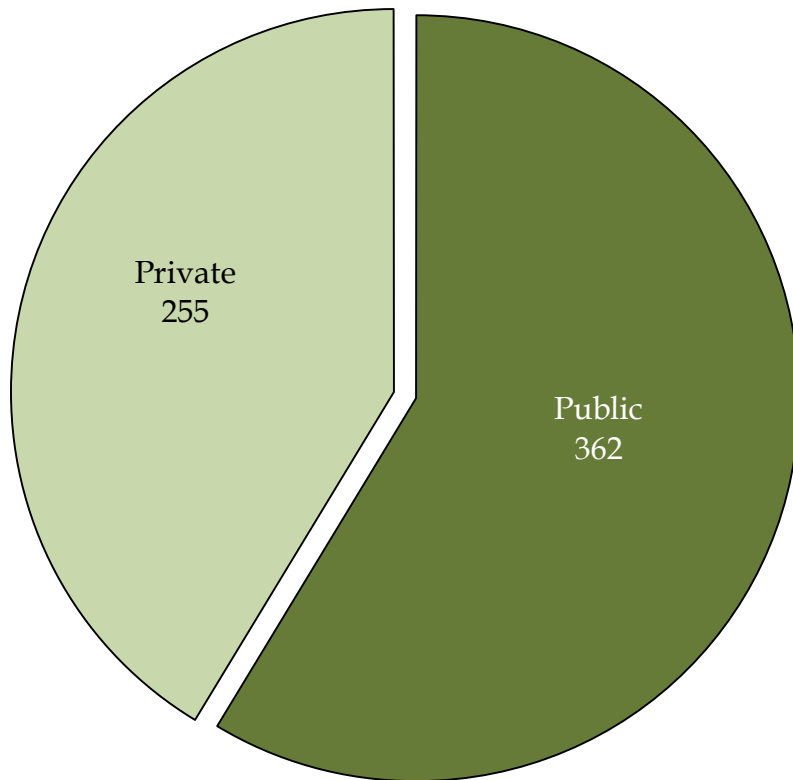


Top Public Schools		CEOs
 University of Michigan		11
 Michigan State University		8
 Texas A&M University		8
 University of Virginia		6
 Indiana University		6






Top Private Schools		CEOs
 Harvard University		17
 University of Pennsylvania		12
 Cornell University		11
 Mass. Institute of Technology		10
 Princeton University		10

## Public universities currently produce the most sitting CFOs

Sitting CFO Undergraduate University  
 2017 Fortune 500 and S&P 500 Companies (663 Sitting CFOs; 617 Known Education Backgrounds)

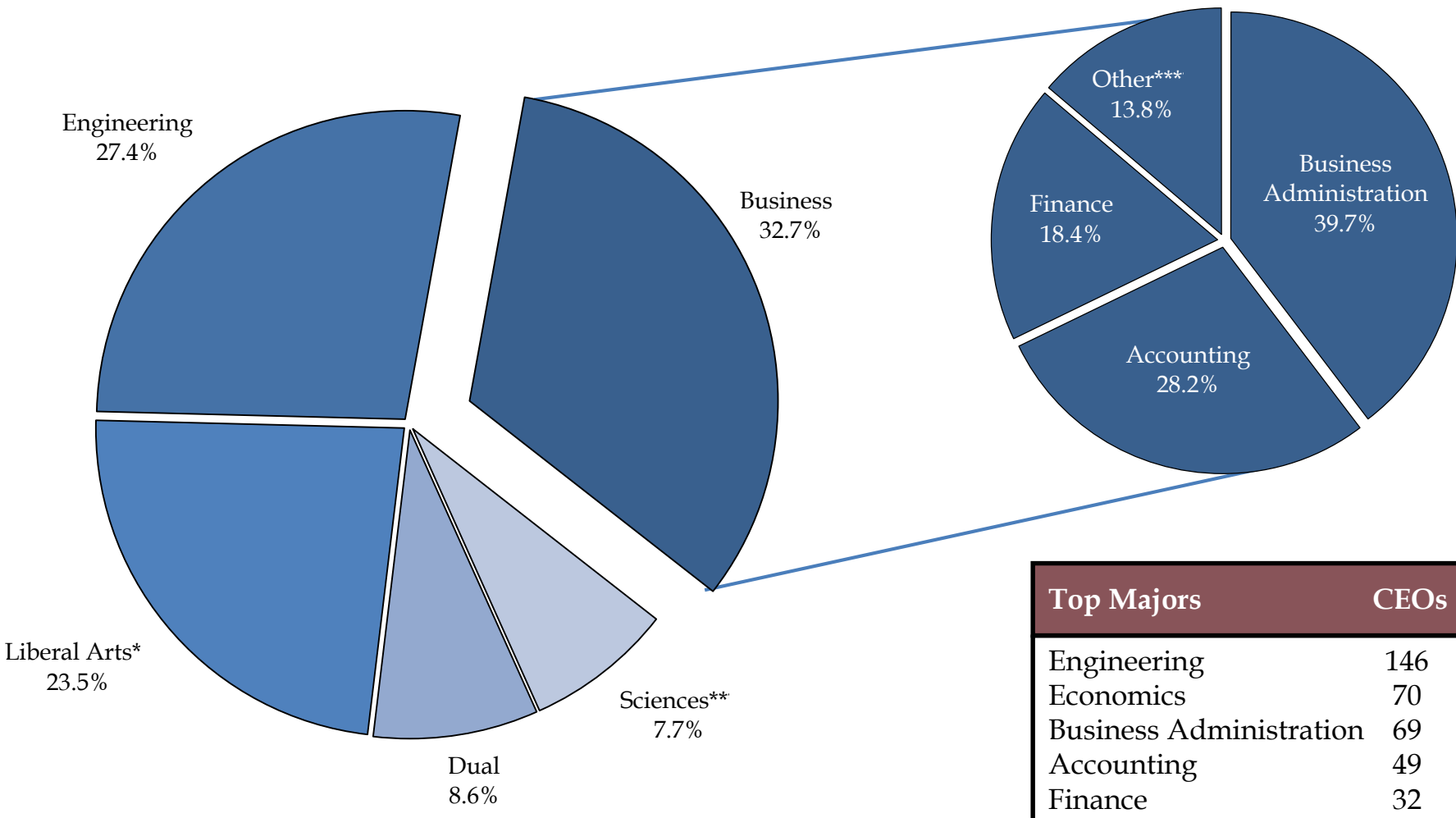


Top Public Schools		CFOs
	Indiana University	11
	University of Michigan	10
	University of Virginia	10
	Miami University	9
	Michigan State University	8

Top Private Schools		CFOs
	University of Pennsylvania	14
	University of Notre Dame	13
	Stanford University	10
	Duke University	7
	Georgetown University	7

## 60% of CEOs have a Business or Engineering degree

Percentages of CEOs from Each Educational Background  
2017 Fortune 500 and S&P 500 (673 Companies; 678 Sitting CEOs)

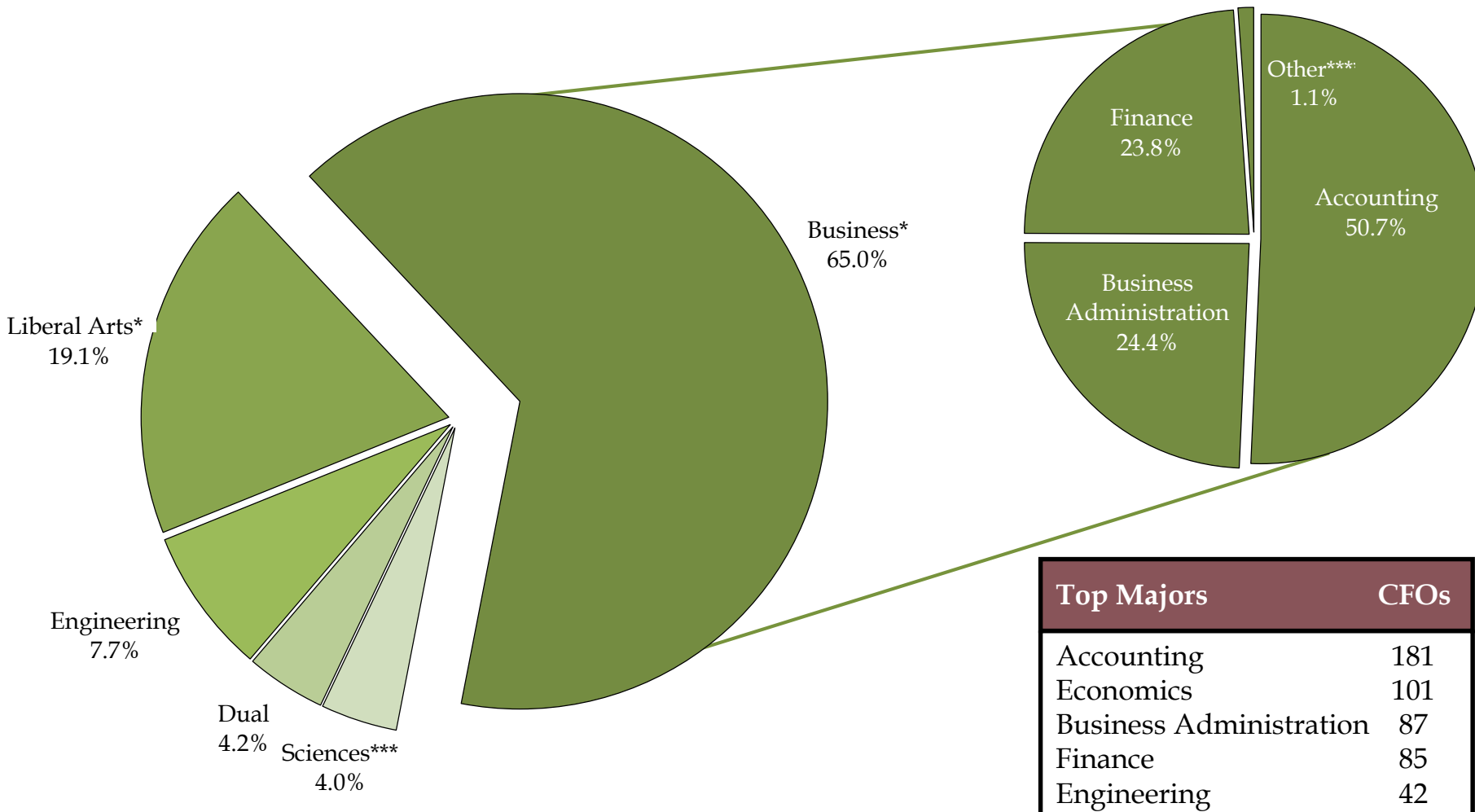


Top Majors	CEOs
Engineering	146
Economics	70
Business Administration	69
Accounting	49
Finance	32

\*Economics is included in Liberal Arts  
 \*\*Mathematics is included in Sciences  
 \*\*\*Marketing, International Business, Commerce, Logistics

## Only 25% of sitting CFOs have an undergraduate degree in Accounting

Percentages of CFOs from Each Educational Background  
2017 Fortune 500 and S&P 500 (673 Companies; 663 Sitting CFOs)

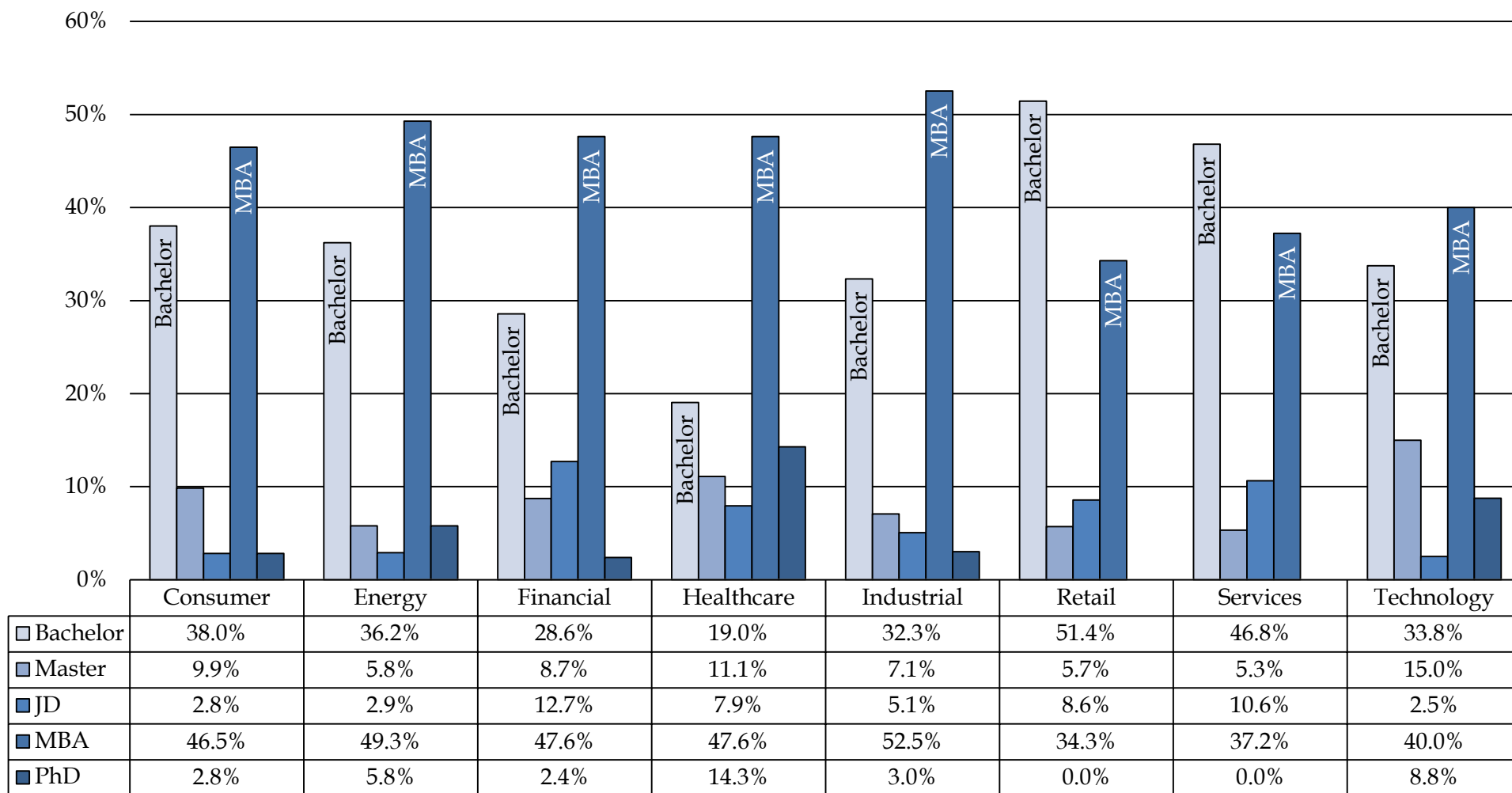


Top Majors	CFOs
Accounting	181
Economics	101
Business Administration	87
Finance	85
Engineering	42

\*Economics is included in Liberal Arts  
 \*\*Mathematics is included in Sciences  
 \*\*\*Marketing, International Business, Commerce, Logistics

## Over 65% of CEOs have an advanced degree

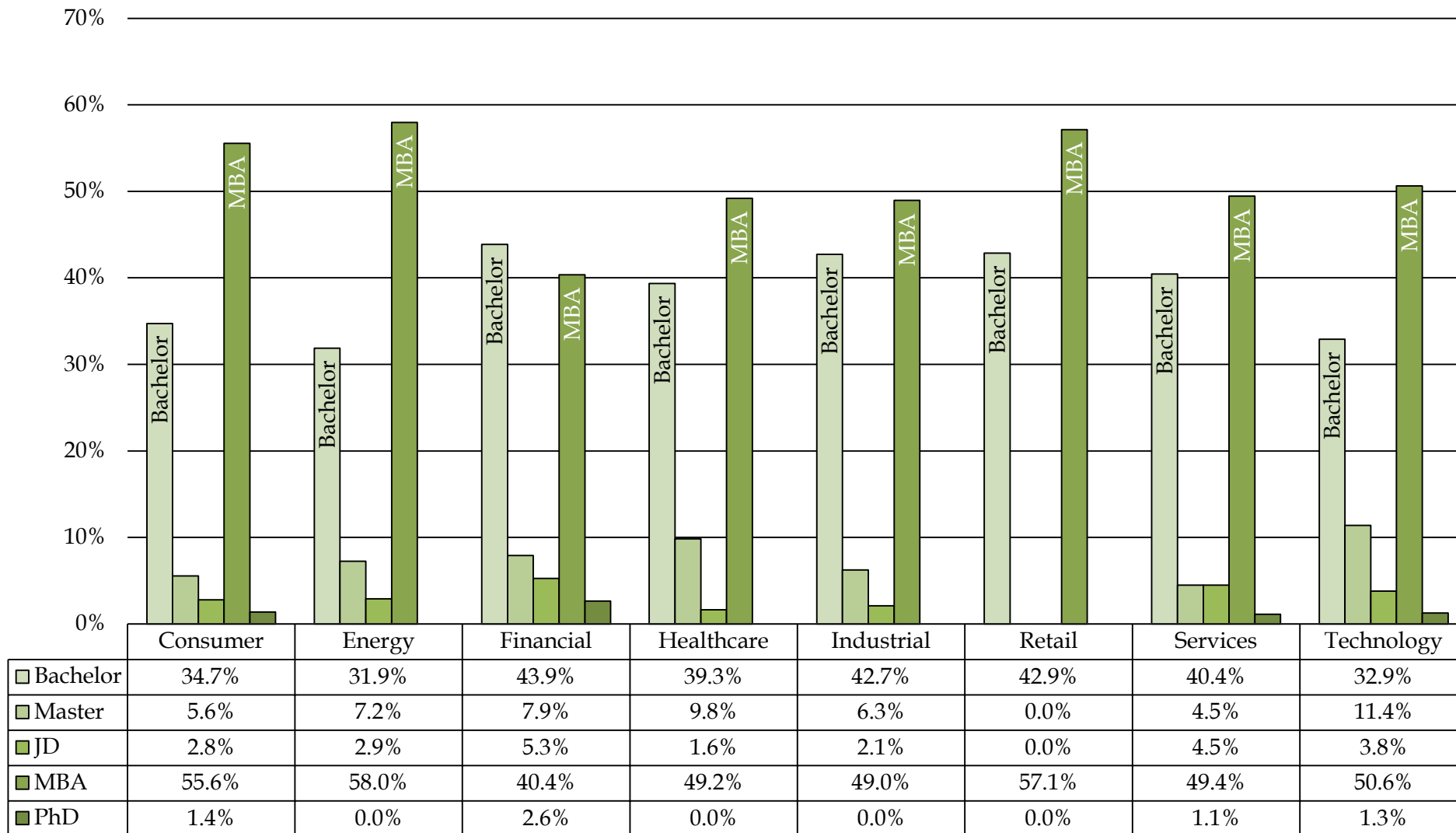
CEO Terminal Degree Educational Background  
2017 Fortune 500 and S&P 500 (673 Companies; 678 Sitting CEOs)



\*Advanced degree is any degree past a bachelor

## Over 60% of CFOs have an advanced degree

CFO Terminal Degree Educational Background  
2017 Fortune 500 and S&P 500 (673 Companies; 663 Sitting CFOs)



\*Advanced degree is any degree past a bachelor



## The path to the C-Suite runs through eight leading MBA programs

Top MBA Schools  
 2017 Fortune 500 and S&P 500 (673 Companies; 646 CEO and 617 CFO Known Education Backgrounds)

