



Are U.S. CEOs Overpaid?

Steven N. Kaplan

University of Chicago Booth School of Business

Three common perceptions of CEO pay and corporate governance in the U.S.:

- CEOs are overpaid and their pay keeps increasing;
- CEOs are not paid for performance;
- Boards do not penalize CEOs for poor performance.

Three common perceptions of CEO pay and corporate governance in the U.S.:

- Key question: To what extent is CEO pay / governance driven by
 - the power of CEOs over their boards leading CEOs to be overpaid;
 - a competitive market for managerial talent with CEOs being paid appropriately;
 - a combination of these and other forces.

What are CEOs paid?

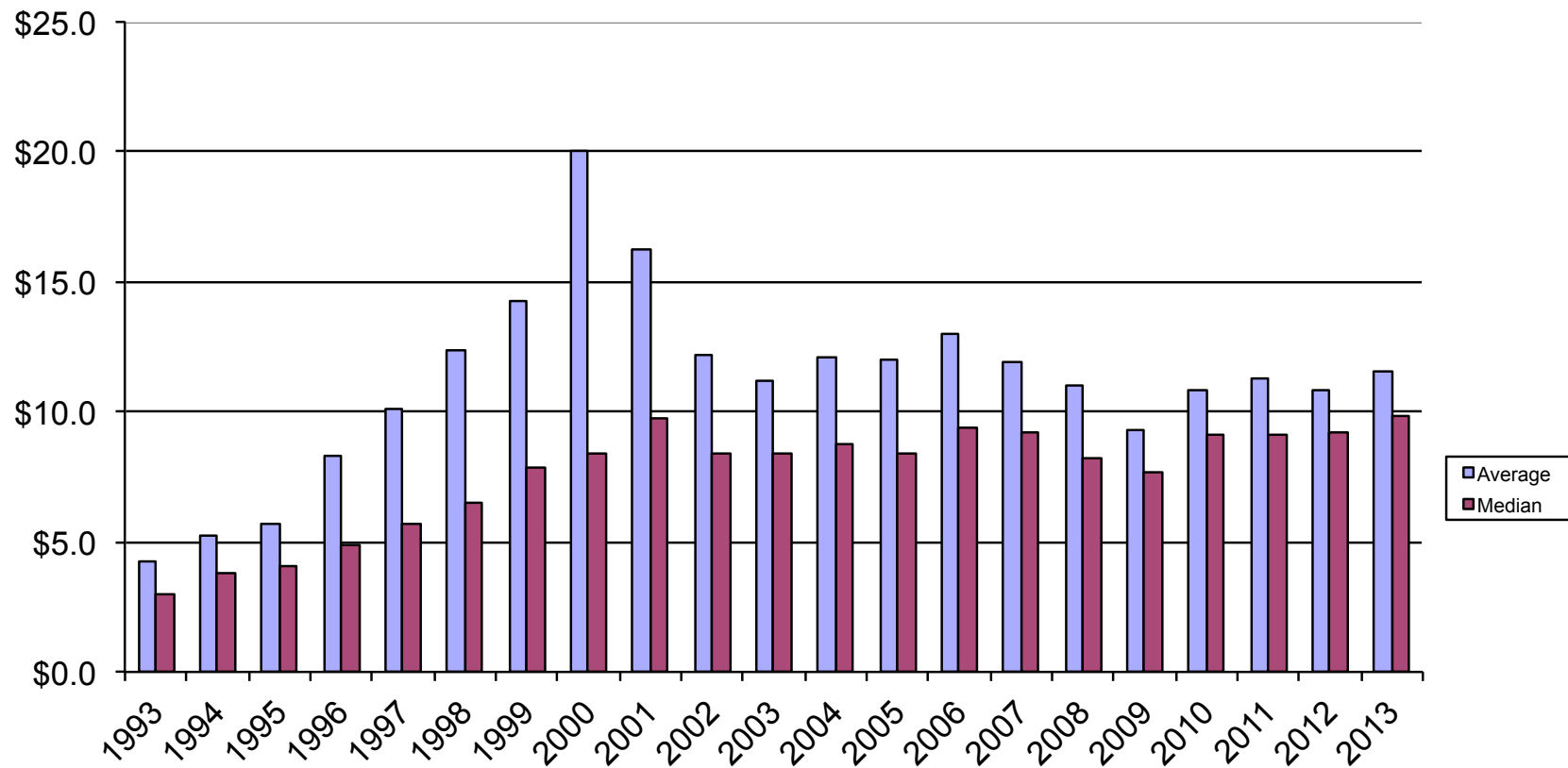
- Two ways to look at pay:
 - Grant-date or estimated. What boards give CEOs.
 - » Salary + Bonus + Restricted stock +
Expected value of options (calculated using Black-Scholes).
 - » More relevant for evaluating what boards are doing.
 - Realized. What CEOs actually get.
 - » Salary + Bonus + Restricted stock +
Value of options exercised / realized.
 - » More relevant for evaluating pay-for-performance.

U.S. S&P 500 CEOs

- What has happened to average CEO pay since 2000?
 - Up?
 - Flat?
 - Down?

Estimated CEO Pay (inflation-adjusted)

Average & Median Total Pay (estimated)
of S&P 500 CEOs from 1993 to 2013 (in millions of 2013 \$)

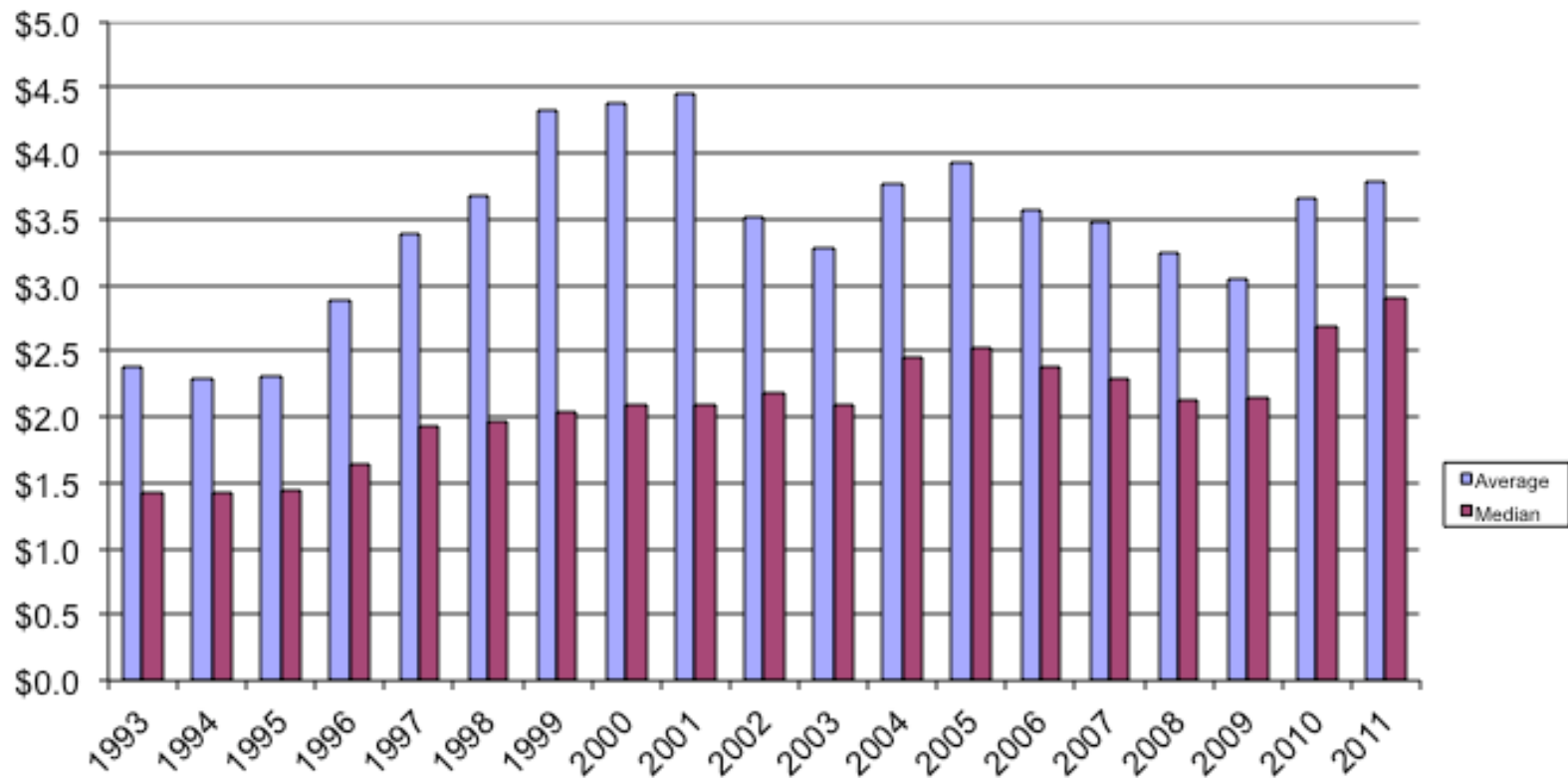


U.S. S&P 500 CEOs

- What has happened to average CEO pay since 2000?
 - ~~Up?~~
 - ~~Flat?~~
 - **Down over 40% in real terms.**
- CEO pay does not continue to increase.
 - Average CEO pay has declined since 1998.
 - Median CEO pay has been flat since 2000.
- While there are outliers that receive attention and likely drive the perception, means and medians indicate that they are not the general rule.

Similar pattern for averages non-S&P 500 CEOs.

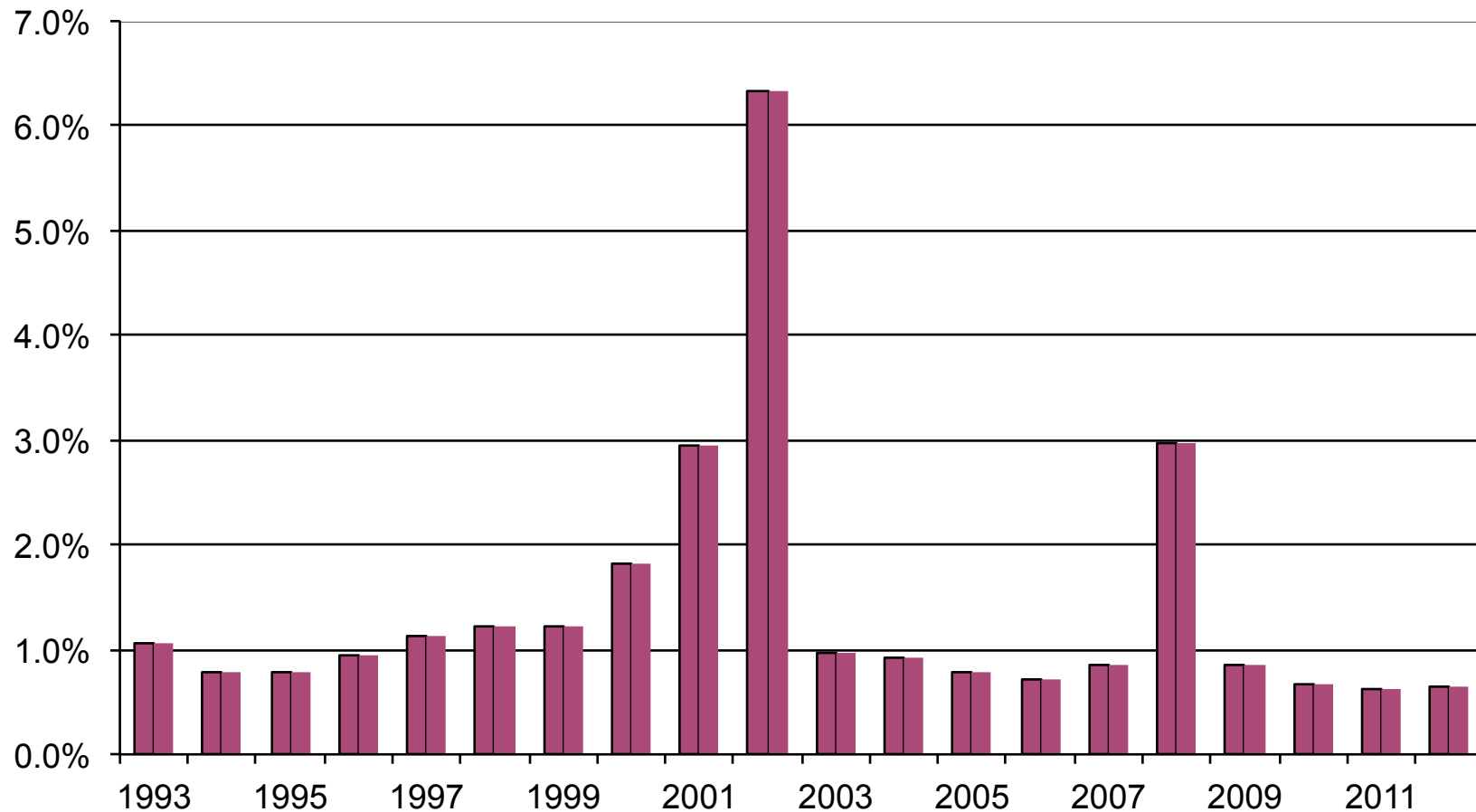
Average & Median Total Pay (estimated)
of Non-S&P 500 CEOs from 1993 to 2011 (in millions of 2010 \$)



U.S. S&P 500 CEOs

- What about relative to corporate income and profits?
 - Bebchuk and Grinstein (2005):
 - » “The aggregate compensation to top-five executives increased from 5% of aggregate earnings in 1993-1995 to about 10% of aggregate earnings in 2001-2003.”
 - Frequently cited.
 - » See Chrystia Freeland, *Plutocracy*, 2012.
 - » See Steve Pearlstein, *Washington Post*, March 2013.

Estimated CEO Pay to Net Income of S&P 500 1993 to 2012



Source: ExecuComp, CompuStat, Steven Kaplan

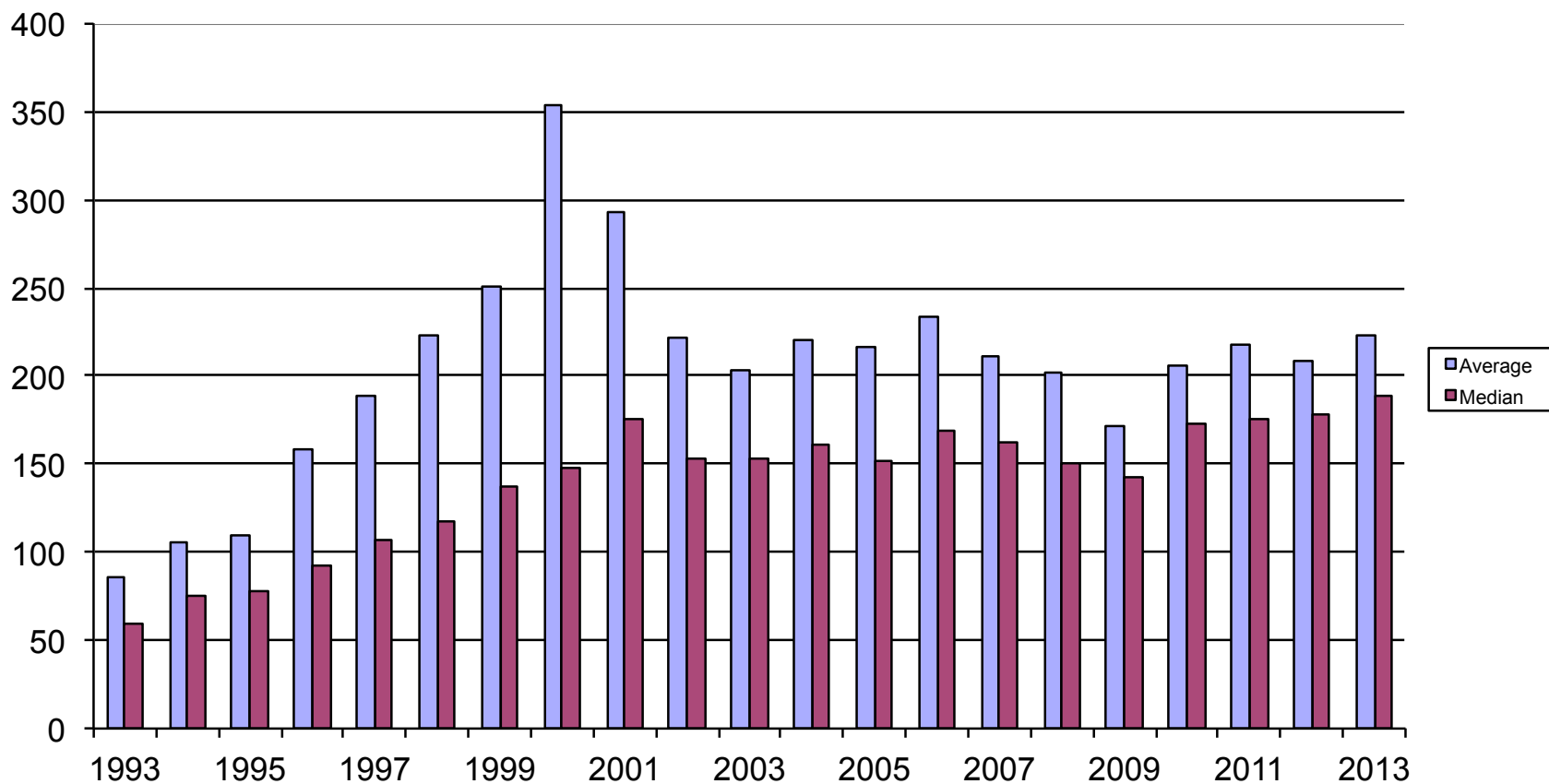
U.S. S&P 500 CEOs

- Percentage peaked in 2002 at 6% of Net Income.
- Percentages since 2010 are lowest in last 20 years!
 - Since 1993, CEO pay up 4 X, but Net Income up 6.8 X.
- With this result, Bebchuk and Grinstein would conclude that CEO pay is not high and, may be too low?

U.S. S&P 500 CEOs

- What about relative to the median household?
 - Ratios twice as high as in early 1990s.
 - Ratios about where they were in 1997 / 1998.
 - **But, at 200 X, still very high.**
 - » undoubtedly contributes to the perception that CEOs are overpaid.

Average & Median Total Pay (estimated)
of S&P 500 CEOs Relative to Median Household Income
from 1993 to 2013



Source: ExecuComp, Census Accounts, Steven Kaplan

What has happened to CEO turnover?

- Bernadette Minton and I studied CEO turnover in Fortune 500 firms from 1992 to 2010.
- Turnover has increased since 1997.
 - Turnover levels (including takeovers):
 - » 13% per year from 1992 to 1997.
 - » 16% per year from 1998 to 2010.
 - Turnover levels (not including takeovers):
 - » 10% per year from 1992 to 1997.
 - » 12% per year from 1998 to 2010.
 - » 10% per year in the 1970s and 1980s.
- CEO job appears riskier.
 - If pay adjusted for turnover, 20% lower today versus 20 years ago?

Perception versus reality of CEO pay and corporate governance in the U.S.:

- CEOs are not paid more and more.
 - Average CEO pay is roughly where it was in 1997 / 1998.
 - Same for average pay to operating income.
 - Average pay to net income lower than it was in 1993.
 - Median CEO pay is at 2000 levels.
 - CEO tenures have declined.
 - Probably even more now with rise of activists.

How Have CEOs Done Relative to Others?

- Still, CEOs are paid a lot relative to the typical household / worker.
- Are they overpaid?
- Compare them to similar groups.

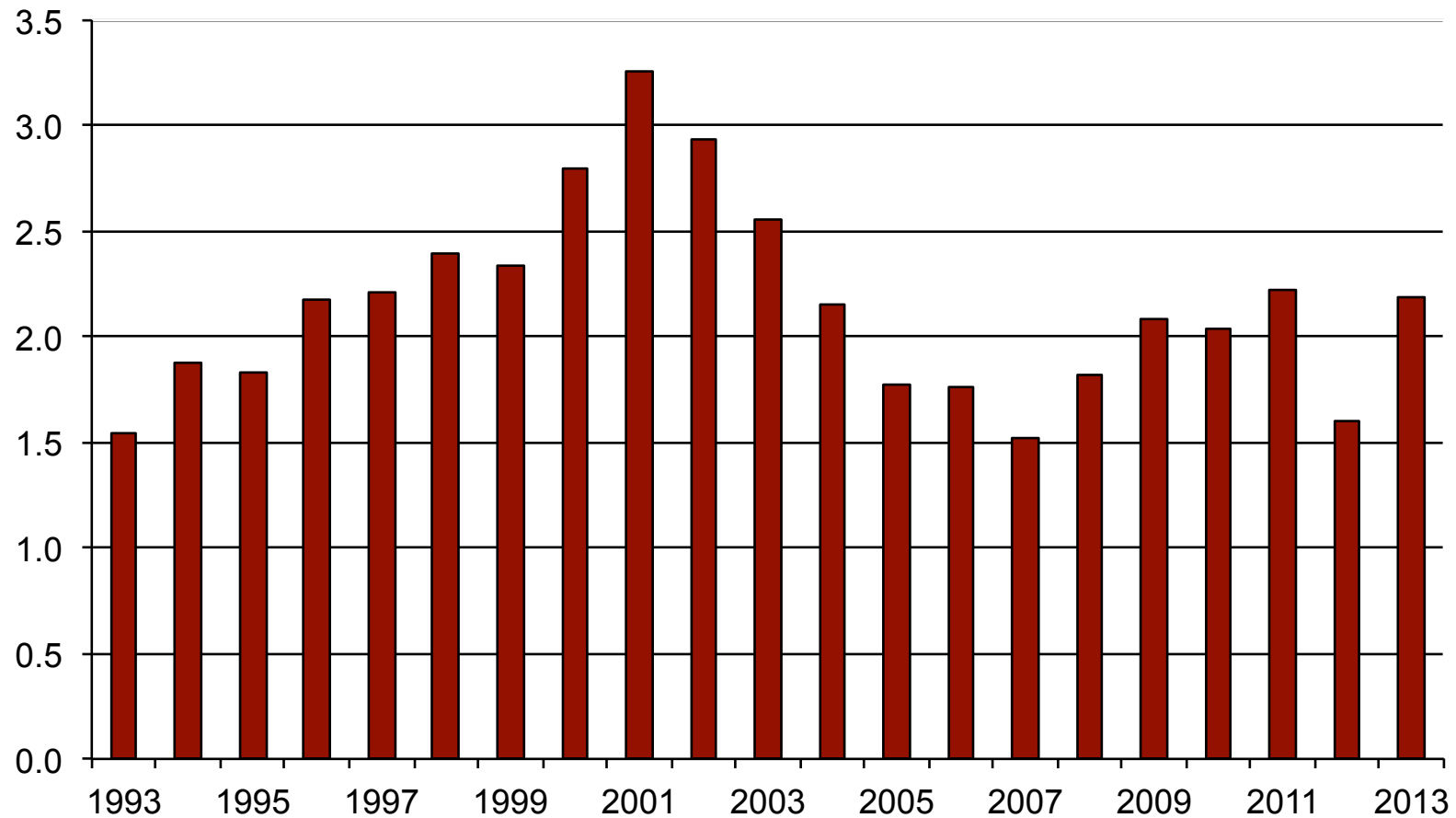
- Can measure CEO pay as a fraction of the very top brackets.
 - S&P 500 CEO (estimated) pay vs.
 - AGI of average taxpayer in top 0.1%.
 - » About 140,000 taxpayers.

- How have CEOs fared since 2000?
 - Better than others?


 - Same?

 - Worse?

Average Pay (Estimated) of S&P 500 CEOs Relative to Average AGI of Top 0.1% of Taxpayers from 1993 to 2013



Source: ExecuComp, Piketty and Saez (2013)



Over last 20 years, CEO pay relative to top 0.1% has remained relatively constant.

- Average CEO pay relative to the top 0.1% is:
 - roughly the same today as in 1994 for S&P 500 CEOs.
 - lower than in 1994 for non-S&P 500 CEOs.

What about other groups?

- Bakija, Cole, Heim (2012) access IRS tax return data.
- Look at income for executives and managers of businesses that are:
 - more likely to be public (executives earn more in salary than in business income); versus
 - those more likely to be closely held (executives earn more in business income than in salary).

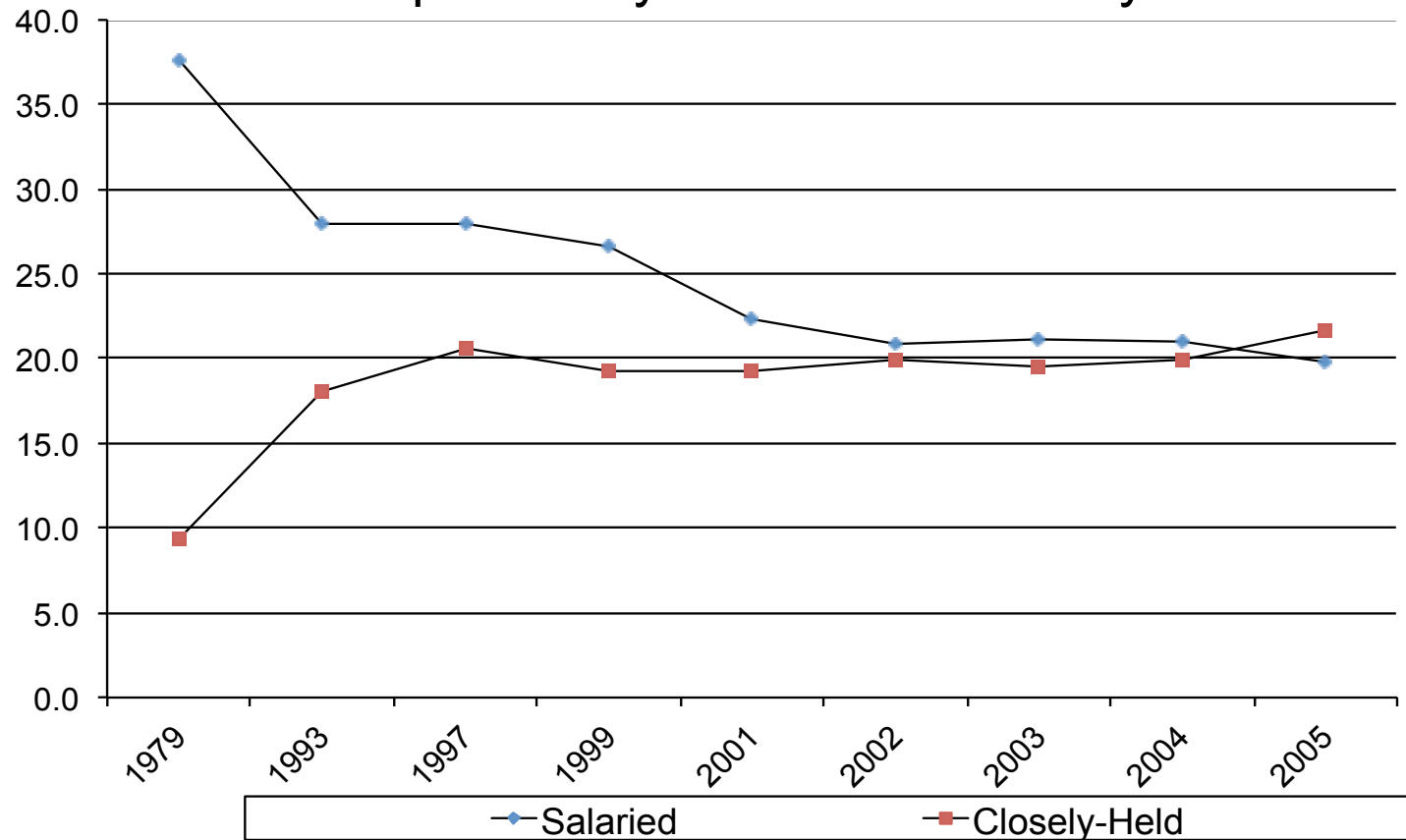
% of Total Income from Executives, Mgrs., and Supervisors in top 0.1% by Salaried or Closely-held



Source: Bakija Cole Heim

— Salaried (Public?) — Closely-Held (Private?)

% of Executives, Managers, and Supervisors in top 0.1% by Salaried or Closely-Held



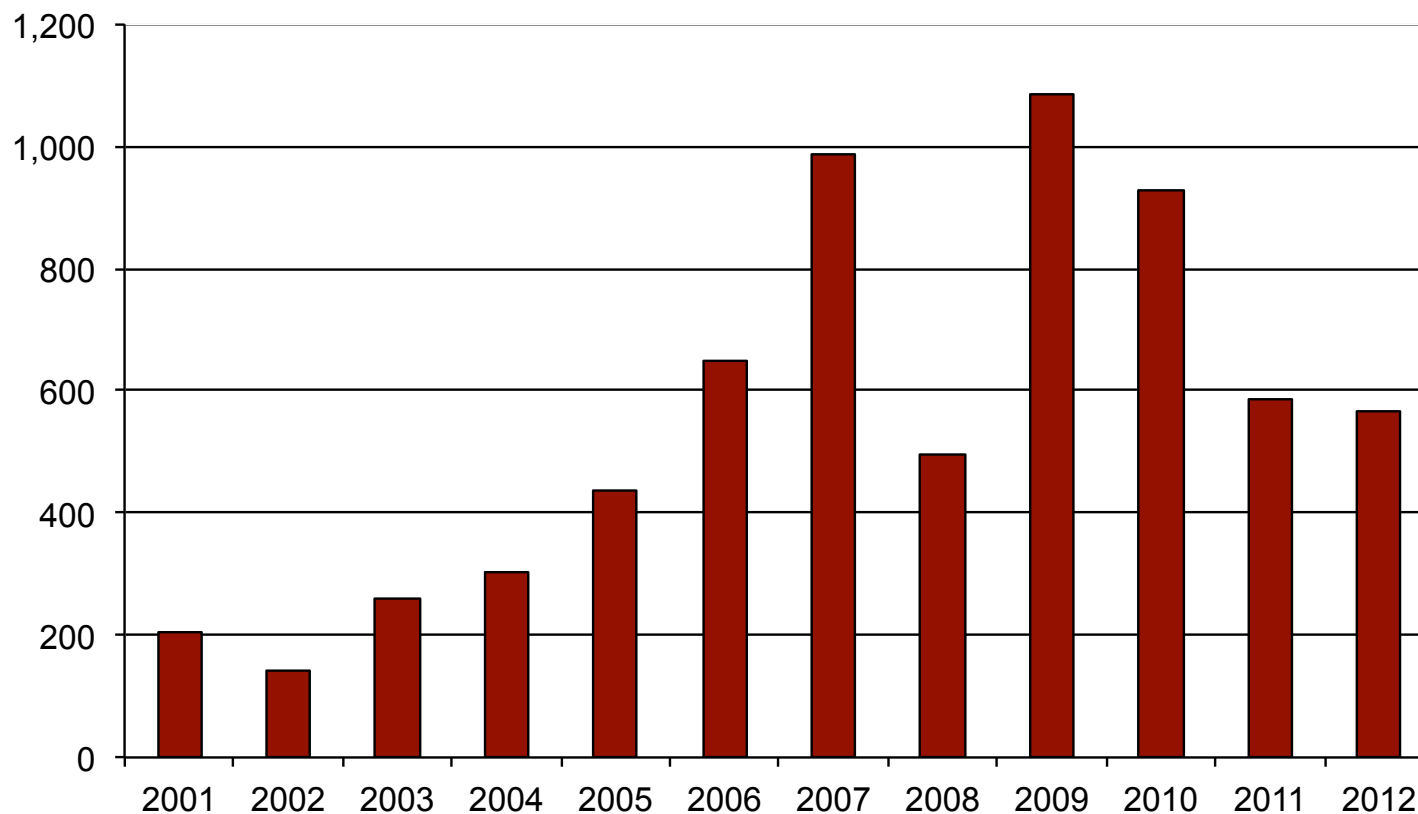
Source: Bakija Cole Heim (2012)

What about other groups?

- Larger pay increases for executives of private, closely-held businesses than executives of publicly-held businesses.
- Fewer agency problems / managerial power issues at the private, closely-held businesses.

CEOs are not the only ones who earn more / earn a lot

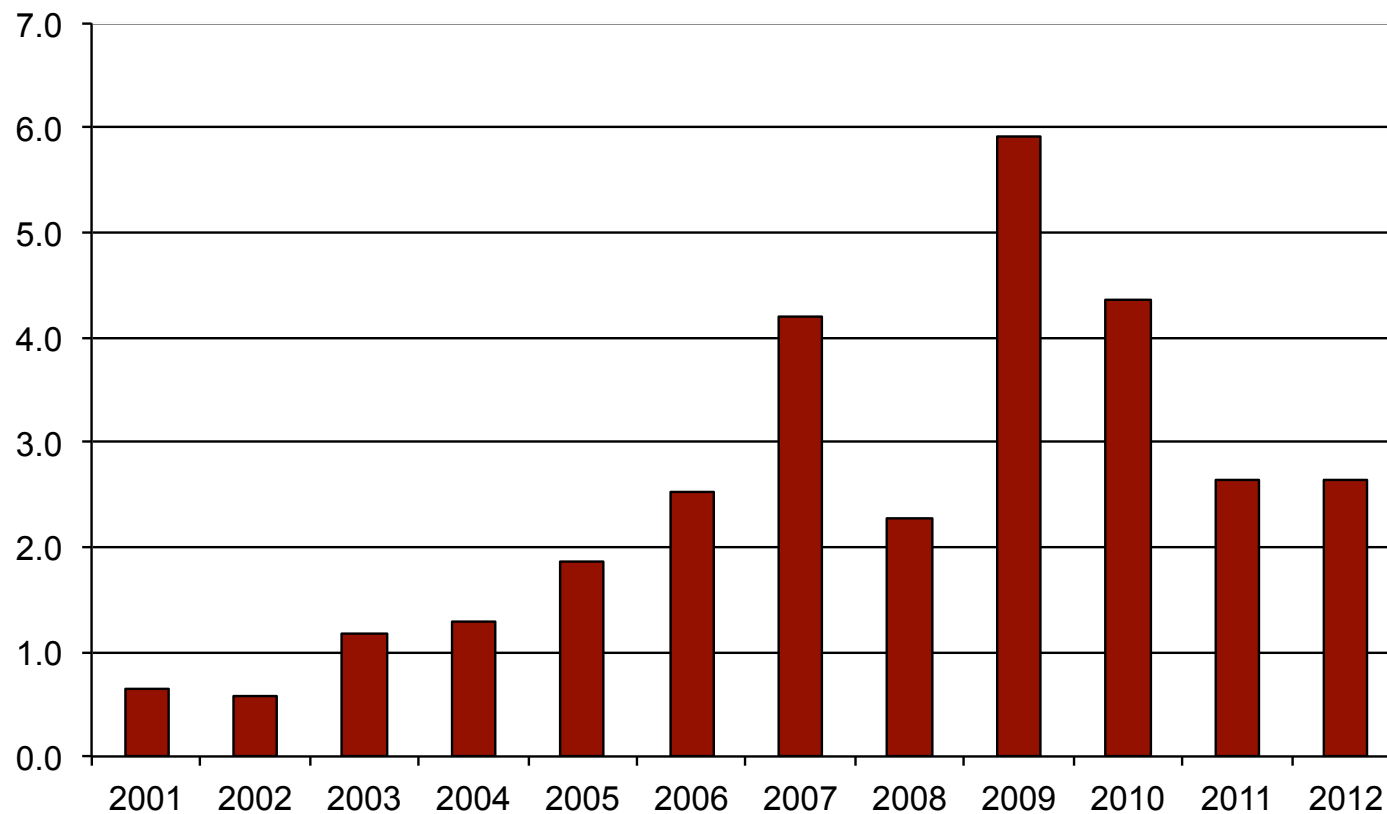
Average Pay of Top 25 Hedge Fund Managers
AR Magazine "Rich List" from 2001 to 2012 (in millions of \$2012)



Source: AR Magazine Rich Lists

CEOs are not the only ones who earn more / earn a lot

Total Pay of 25 Top 25 Hedge Fund Managers Relative to
Total Estimated Pay of 500 S&P 500 CEOs from 2001 to 2012



Source: ExecuComp, AR Magazine Rich Lists

What does this mean?

- Pay increases have been pervasive at the very top.
 - Other groups -- investors, lawyers, athletes etc. have seen significant pay increases where there is a competitive market for talent and no agency problems exist.
 - » Increases are at least as large as for CEOs.
 - Private company executives with fewer agency problems have increased by more than public company executives.
 - If one uses evidence of higher CEO pay as evidence of managerial power or capture, one must also explain why the other professional groups have had a similar or even higher growth in pay.

What does this mean?

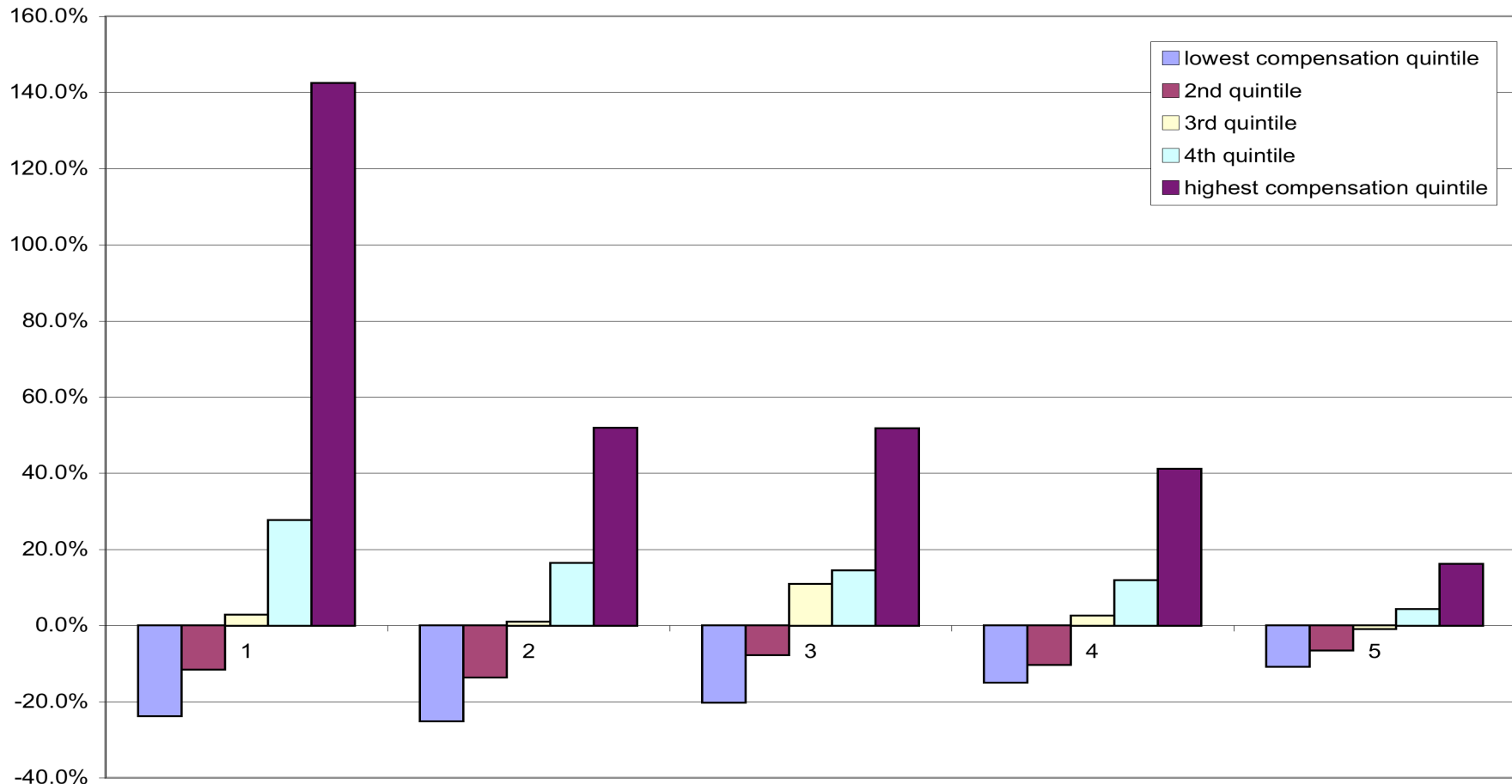
- Suggests that the market for talent has played an important role in the increase in CEO pay.
- In last several decades, technological change and greater scale have increased the returns / productivity at the top end.
 - Can manage / apply talent to greater assets / larger companies than in the past.
 - Can trade large sums much more efficiently.
 - Can access larger audiences.
- Those forces, not poor governance, have bid up the pay of CEOs.
 - As firms become more valuable and technology increasingly has allowed CEOs to affect that value, boards respond by spending more to attract and motivate talent.

Are CEOs Paid for Performance?

- Compare stock performance of most highly paid CEOs relative to least highly paid CEOs.
 - Look within similar sized firms (because pay increases with size).
- Realized pay is highly related to performance.
 - I.e., there is strong pay-for-performance.

Realized pay is highly related to performance.
I.e., there is strong pay-for-performance.

Figure 3: Three Year Performance Relative to Value Weighted Industry, CEOs Only



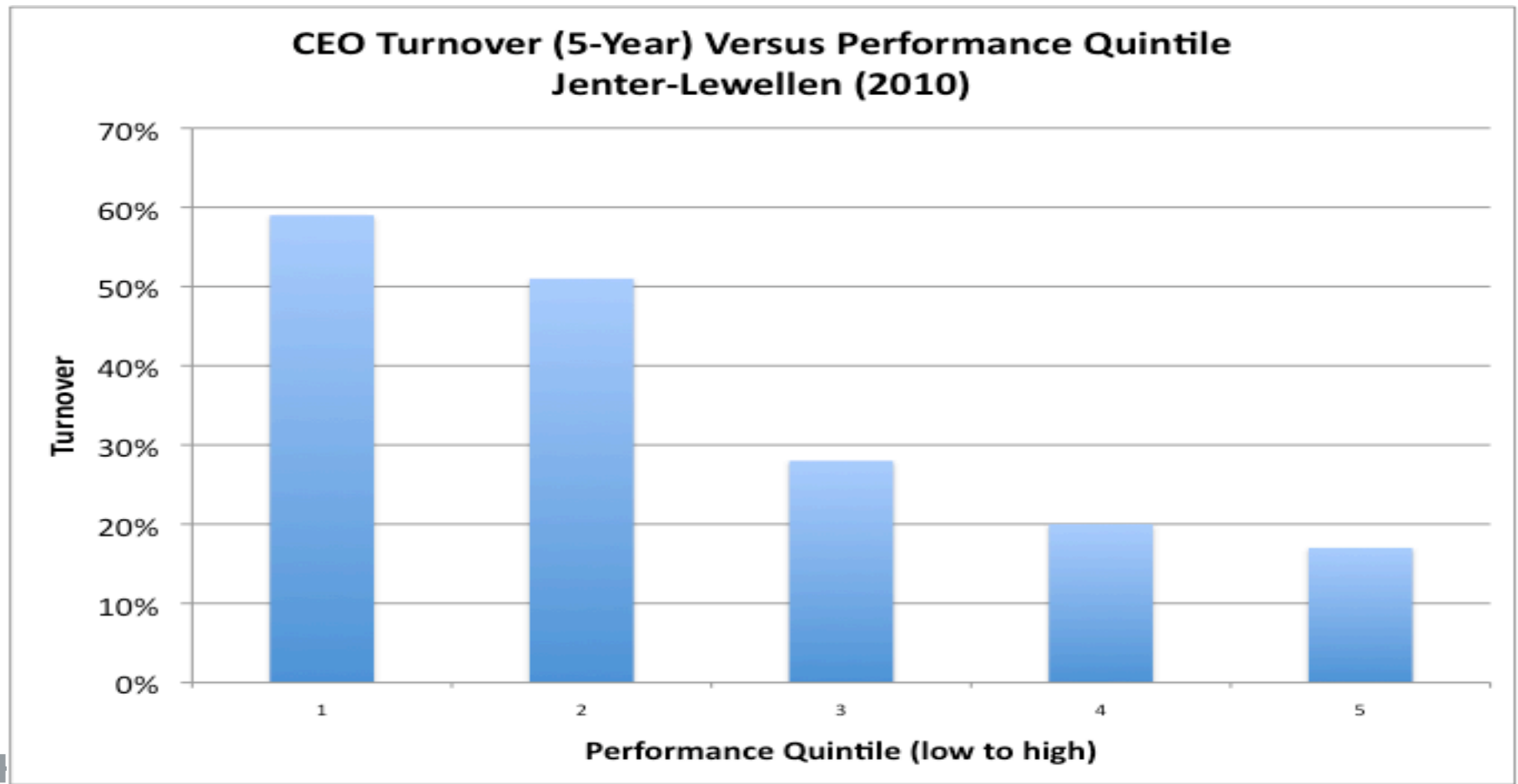
Are CEOs Paid for Performance?

- Frydman and Saks (2010) study correlation between executive's wealth and firm performance.
 - CEO wealth strongly tied to firm performance since the 1930s.
 - Relationship “strengthened considerably” after the mid-1980s.
- Murphy (2012) reports “equity at stake” – the change in CEO wealth from a 1% change in stock price – for median S&P 500 CEO is almost \$600,000 in 2010.
- Realized CEO pay and wealth are strongly tied to firm performance.
 - See also conclusions in Frydman and Jenter (2010) and Murphy (2012) surveys.

Do boards monitor? Are CEOs penalized for poor performance?

- Bernadette Minton and I studied CEO turnover in Fortune 500 firms from 1992 to 2007. Kaplan and Minton (2012).
 - Turnover strongly related to poor performance.
- Jenter and Lewellen (2010) looks at CEO turnover in the S&P ExecuComp database -- over 1,600 firms.
 - Boards aggressively fire CEOs for poor performance.

Meaningful difference in turnover for poor performers.



What is the Evidence on Perceptions?

- CEOs are overpaid and their pay keeps increasing?
 - Average CEO pay has declined since 2000. Median is flat.
 - Relative to other highly paid groups, average CEO pay
 - » has declined substantially since 2000.
 - » has returned to historically average levels.
 - Average CEO pay relative to operating income where it was in mid-1990s.
 - » relative to net income lower than in early 1990s.
 - Pay for private company executives has increased by more than for public company executives.
 - Average CEO pay has been roughly the same percentage of average firm value since the late 1970s.

What is the Evidence on Perceptions?

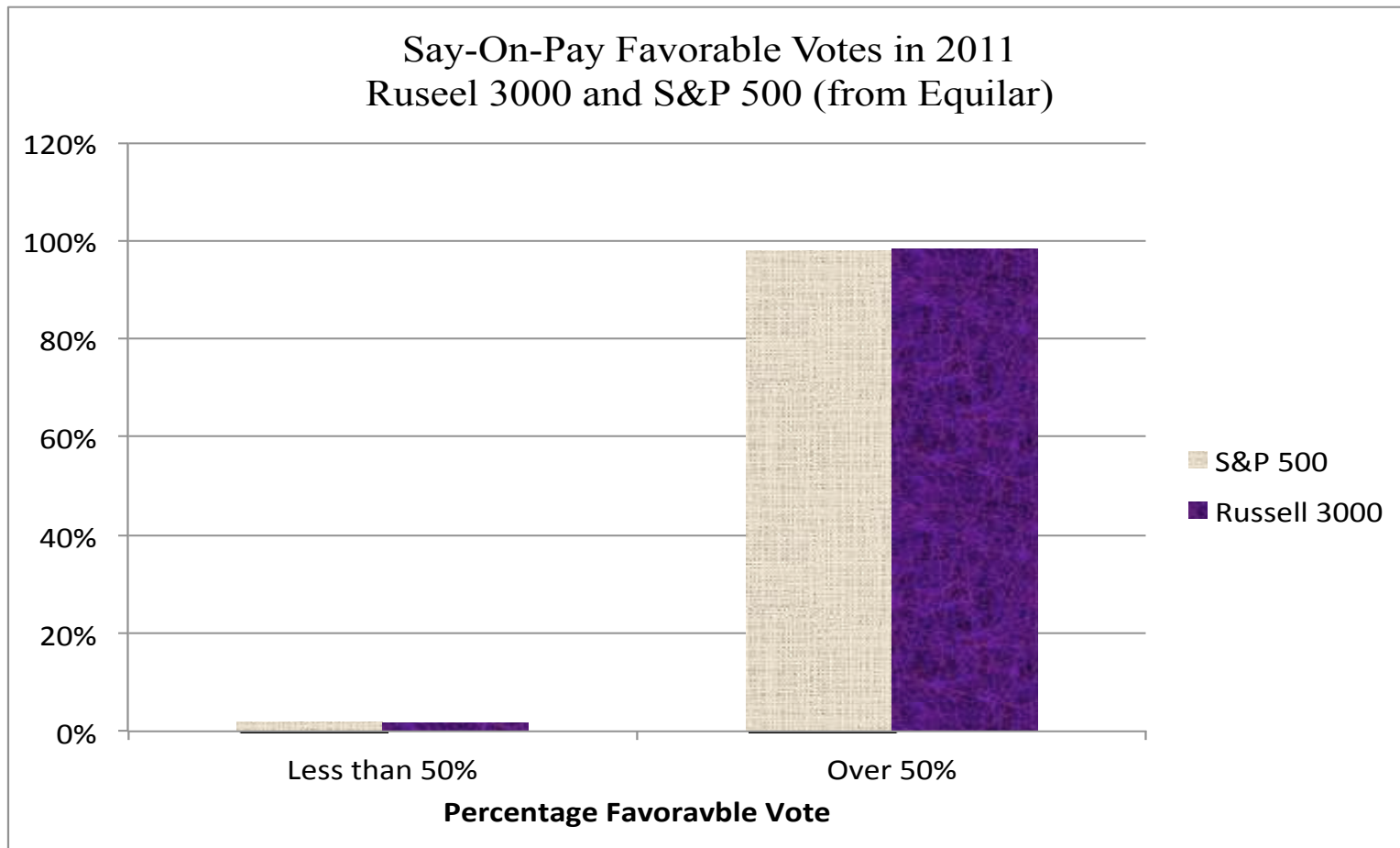
- CEOs are not paid for performance?
 - CEOs are paid for performance.
 - » Can ask whether pay-for-performance could be stronger.
- Boards do not penalize CEOs for poor performance?
 - Turnover has increased.
 - Turnover is strongly related to poor performance.
 - » Can ask whether that relation could be stronger.

What Do Shareholders Think?

- The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 mandated that firms with over \$75 million in publicly-traded stock hold an advisory (i.e., non-binding) shareholder vote on the compensation of the top five executives.
 - These votes are known as Say-on-Pay (SOP) votes.
 - The law went into effect for proxy votes in 2011.
- If governance perceptions were correct, would expect a lot of dissatisfaction with executive compensation and corporate boards.

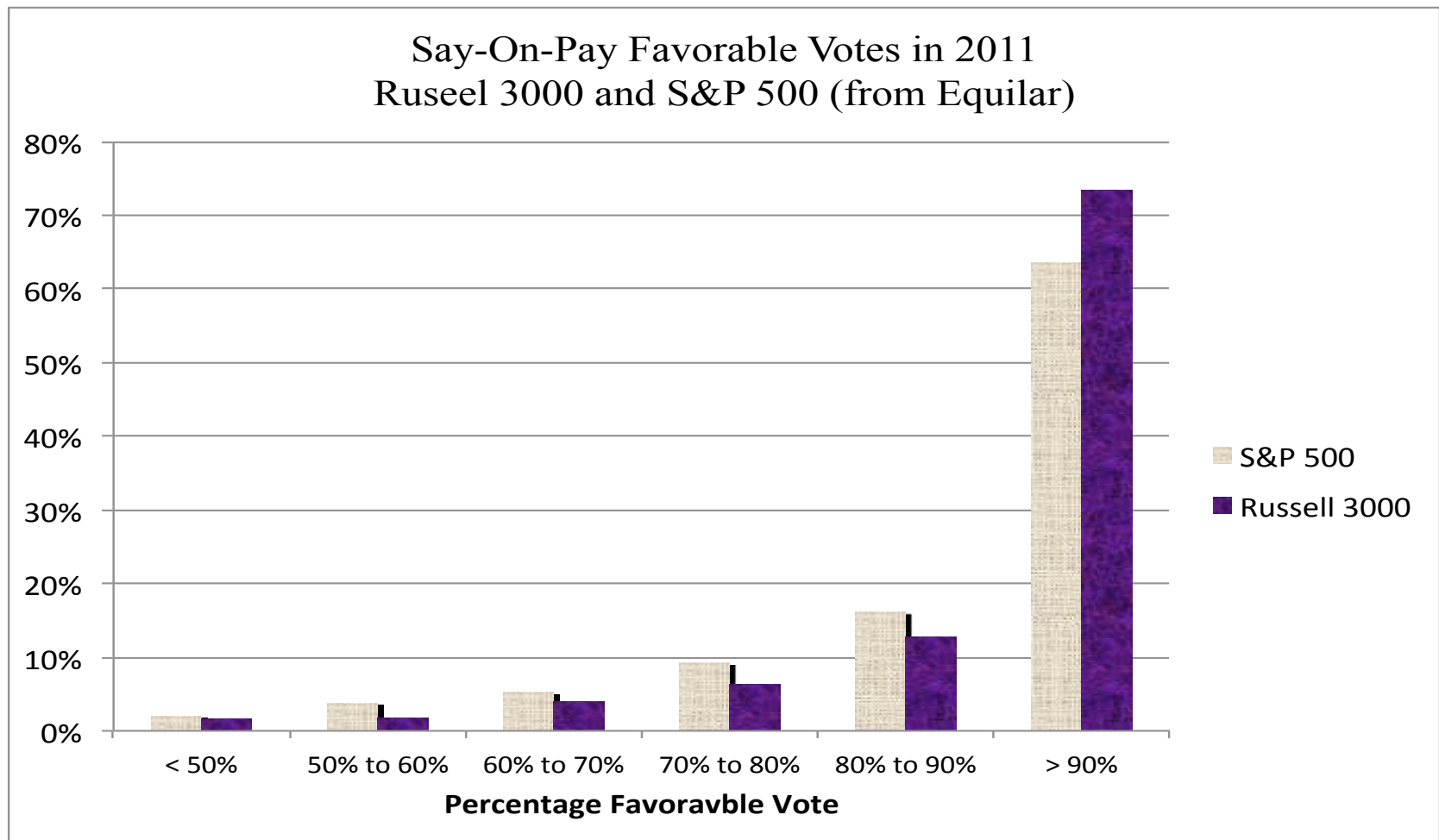
What Do Shareholders Think?

Over 98% of companies received majority approval



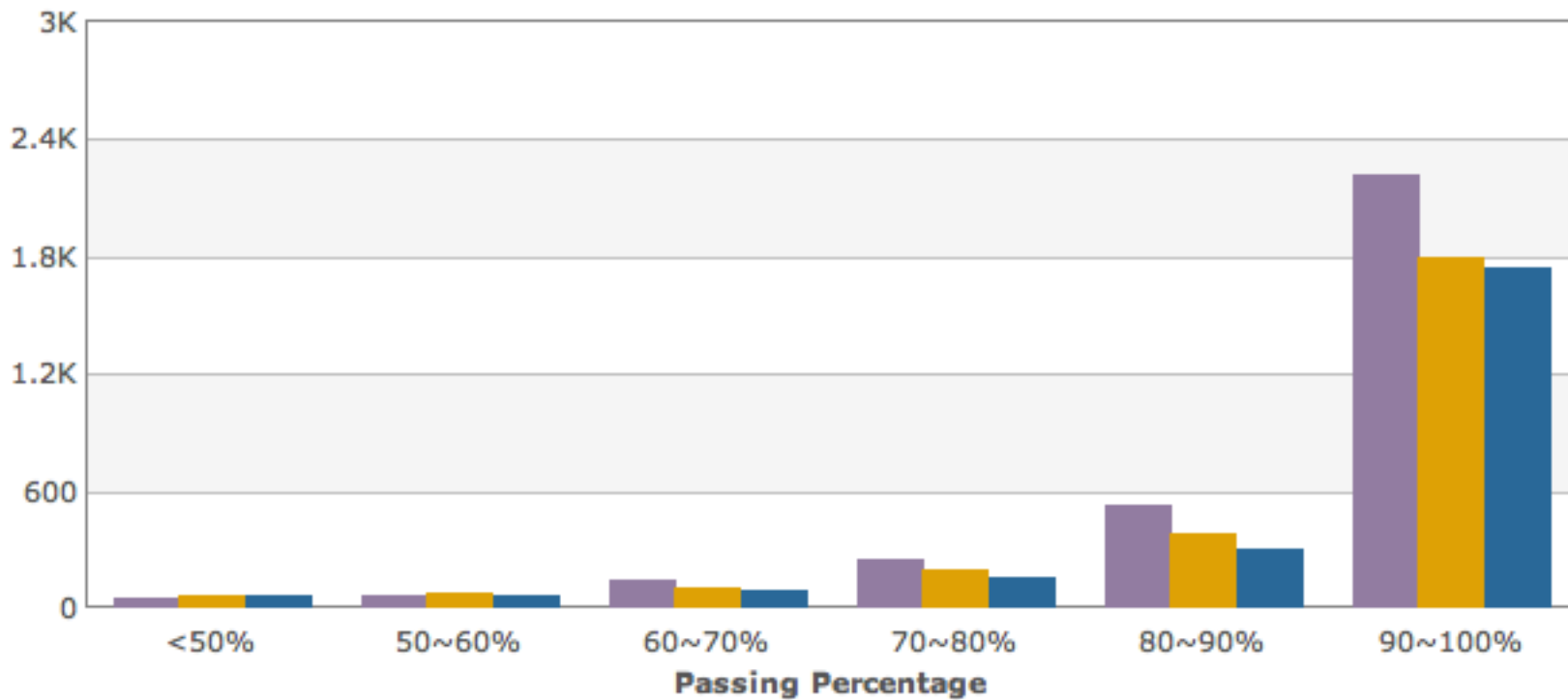
What Do Shareholders Think?

80% of companies received more than 80% approval



Similar results in 2012 and 2013

of Companies



2011 (3,222 Companies) 2012 (2,605 Companies) 2013 (2,406 Companies)

What Do Shareholders Think?

- Overwhelmingly positive votes:
 - not consistent with perception that system is broken;
 - consistent with stronger role for a competitive market for talent than for managerial power.
- Some negative votes consistent with:
 - some exercise of managerial power;
 - avenue for shareholders to put pressure on companies that have questionable policies.
- 2012 to 2014 election results qualitatively very similar.

How Have Companies Performed?

- Financial crisis.
- Deep recession.
- Modest recovery.

- What has happened to
 - S&P 500 operating margins?
 - S&P 500 balance sheets?
 - corporate profits?

- Given negative perceptions of corporate governance, one might think performance to have been poor,

How Have Companies Performed?

- Large companies, particularly non-financials, appear to have performed well.
 - Record operating margins.
 - Healthy balance sheets.
 - Average Operating Income up by 2 X (real) since 1993
 - Net Income up by 4 X (real) since 1993.
 - » Performance is net of compensation.
- If governance is so bad, why are profits and operating margins so high, and balance sheets so healthy?

Summary - Perception

- Three perceptions of CEO pay and corporate governance in the U.S.
 - CEOs are paid more and more;
 - CEOs are not paid for performance;
 - Boards do not penalize CEOs for poor performance.
- Reality is more complicated. Evidence at odds with the perceptions.

Summary - Challenges What Does This Mean?

- Explanations?
 - “It’s complicated.” Likely that “efficient contracting, managerial power, and political paradigms co-exist and interact.” Murphy (2012).
 - There have been corporate governance failures and pay outliers where managerial power is surely exercised. E.g., backdating.
 - » This is a source of the common perceptions.
 - The pay numbers are large relative to the median household.
 - » This is a source of the common perceptions.
 - That said,
 - » a meaningful part of pay appears driven by the market for talent.
 - » pay is tied to performance.
 - » boards increasingly hold CEOs accountable.

Summary - Challenges What Does This Mean?

- Boards and shareholders face a difficult problem.
 - Markets for talent push to reward top people a lot.
 - » Pay levels are high.
 - » Not just in U.S., but in many countries.
 - » Hence the rise in top end incomes and income inequality.
 - Combination of very visible high pay levels, prominent examples of managerial power, and lackluster economy creates political and popular criticism.

What Does This Mean?

- Challenging to:
 - pay enough to retain / hire talented executives; and
 - pay for performance; but
 - at the same time, not pay more than shareholders will approve;
 - remain within political and public constraints.



Thank you.

Steve Kaplan

Neubauer Family Professor of Entrepreneurship and Finance

University of Chicago Booth School of Business

skaplan@uchicago.edu