STANFORD
GRADUATE SCHOOL OF BUSINESS

CLOSER LOOK SERIES: TOPICS, ISSUES, AND CONTROVERSIES IN CORPORATE GOVERNANCE

CGRP-17
DATE: 06/21/11

SEVEN MYTHS OF EXECUTIVE COMPENSATION

INTRODUCTION

Executive compensation is perhaps the most contentious issue in corporate governance today. Common consensus holds that CEOs of publicly traded U.S. corporations, particularly the largest U.S. corporations, are overpaid. It is also widely believed that the structure of CEO pay is inappropriate, that rewards are offered without regard to performance, and that compensation design encourages excessive risk-seeking behavior that is costly to shareholders.[1] To cure these, activists have stepped up efforts to rein in pay, and Congress passed the Dodd-Frank Act of 2010 which, among its many provisions, mandates a series of compensation reforms.[2] While it is likely true that among some companies compensation is not merited based on performance, the truth about executive compensation is more nuanced than common consensus suggests. Public debate would benefit from the clarification of several commonly held misconceptions.

MYTH #1: THE RATIO OF CEO-TO-AVERAGE-WORKER PAY IS AN INFORMATIVE STATISTIC

Those who allege that executives in the United States are overpaid point to the large differential between the compensation awarded to the CEO and that of the average employee. Recent estimates put this ratio anywhere between 180 and 500, depending on methodology and the sample employed. Dodd-Frank now requires that companies calculate and disclose this ratio in the annual proxy. Proponents of this approach believe that companies with a high ratio will face shareholder pressure to decrease CEO pay.

---

1 For a discussion of CEO pay levels and pay for performance, see: David F. Larcker and Brian Tayan, "Seven Myths of Corporate Governance," CGRP-16 (Jun. 1, 2011). Available at: http://www.gsb.stanford.edu/cgrp/research/closer_look.html.

2 Compensation-related provisions of Dodd-Frank include the requirements that companies grant shareholders an advisory vote on executive compensation ("say on pay"), adopt clawback policies, disclose the ratio of total CEO compensation to that of the average worker, explain the relation between executive compensation and risk, and disclose whether executives are allowed to hedge their equity securities.

Professor David F. Larcker and Brian Tayan prepared this material as the basis for discussion. Larcker and Tayan are co-authors of the book *Corporate Governance Matters*. The Corporate Governance Research Program is a research center within the Stanford Graduate School of Business. For more information, visit: http://www.gsb.stanford.edu/cgrp/.

However, the ratio of CEO-to-average worker pay is a metric that suffers from several shortcomings. First, it is difficult to compare across companies. The ratio is influenced by a company's industry, size, location, and structure of the workforce. For example, a company that retains low-wage employees on a full time basis will have a higher ratio than one that relies on temporary or outsourcing contracts. As a result, companies might appear to have grossly different pay practices when in fact their ratios are skewed by situational factors relating to their strategy or environment. Furthermore, the statistic is difficult to interpret. Is the ratio supposed to measure the relative value creation between the work of the CEO and that of the average employee (i.e., does the CEO creates 200 times more shareholder value than the average employee)? Or does it measure relative responsibility (i.e., does oversight responsibility for a $20 billion company merit 200 times more in compensation than the oversight responsibility of the average worker in that company)? Or does it measure relative expendability of the positions (i.e., would the company choose to eliminate the CEO position or 200 other positions selected at random)? Although pay inequity is an important social consideration, it is dangerous to collapse a complicated issue into a single ratio.

MYTH #2: COMPENSATION CONSULTANTS CAUSE PAY TO BE TOO HIGH

Another area of popular concern is the use of third-party consultants to assist in the process of setting compensation. Critics claim that compensation consultants recommend overly generous pay contracts because they are beholden to the managers who hire them. They also allege that a conflict arises when a company uses the same consulting firm to structure CEO compensation and perform other corporate services, such as designing benefits plans or managing pension assets. In such a situation, the consulting firm might recommend generous pay for fear of losing the other service contracts.

Although potential conflicts of interest should always be a concern to investors, this myth is not supported by the research literature. The research shows that excessive pay levels tend to result from governance shortcomings in firms and not whether firms use a compensation consultant or whether the compensation consultant is potentially conflicted. Pay levels tend to be too high (relative to size, industry, performance, etc.) when board members are personal friends of the CEO, appointed by the CEO, highly busy in terms of total board appointments, and when other systemic flaws are present. Once these variables are controlled for, the correlation between use of a consultant and pay levels disappears.[3]

MYTH #3: IT IS EASY TO TELL WHETHER PAY CAUSES "EXCESSIVE" RISK TAKING

Many accept the claim that excessive risk taking caused the financial crisis and that the structure of executive compensation contracts (particularly those awarded by financial institutions) encouraged excessive risk taking. As a result, the Dodd-Frank Act now requires companies to disclose the relation between the executive compensation contract and organizational risk.

[3] See: Kevin J. Murphy and Tatiana Sandino, "Executive Pay and 'Independent' Compensation Consultants," Journal of Accounting & Economics (2010); and Chris S. Armstrong, Christopher D. Ittner, and David F. Larcker, "Corporate Governance, Compensation Consultants, and CEO Pay Levels," Review of Accounting Studies (forthcoming).

Unfortunately, we do not know the relation between compensation and excessive risk taking. First, "excessive risk" is not a well-defined term. CEOs are responsible for making decisions about corporate strategy and this, in part, requires the pursuit of investments that are "risky," in that their future payout is unknown in advance. However, there is no bright-line rule that distinguishes "excessive" versus "acceptable" risk.[4] Second, researchers do not have the tools to examine a compensation plan and determine which elements encourage excessive risk and which do not. Many blame equity incentives (stock options, restricted shares, and performance plans), but this is naïve because equity incentives are an important tool to motivate positive behavior among executives. They extend the time horizon of the executive and increase in value only if he or she is able to increase shareholder value. A lot more careful research will be necessary before we have a clear understanding of how the structure of a compensation package correlates with excessive risk taking.

One potentially serious and unintended consequence of Dodd-Frank is that companies might respond to the new disclosure laws by eliminating appropriate incentives (such as stock options) or capping the maximum bonus at a relatively low level regardless of performance in order to decrease the appearance of risk. To the extent that these actions remove important incentives, shareholders could suffer through less innovation and lower investment returns (see **Exhibit 1**).

MYTH #4: PERFORMANCE METRICS AND TARGETS TIE DIRECTLY TO CORPORATE STRATEGY

Annual bonus plans tend to be complicated. In many cases, the target value depends on the achievement of several financial and nonfinancial targets, each of which carries an individual weighting. Many shareholders assume that these targets map directly to the corporate strategy and that the company has verified through rigorous statistical analysis that performance measures correlate with the desired corporate outcomes. However, the research evidence contradicts this assumption. Many companies simply do not do a good job of making this connection in a rigorous way.[5] For one thing, it is difficult to develop a causal business model that links specific metrics in a logical chain to delineate how performance metrics translate into shareholder value. Instead, many companies rely on performance metrics that are easily observable and ones that are widely used or have been used in the past. They also tend to overemphasize financial metrics at the expense of important nonfinancial metrics, such as customer satisfaction, product innovation, and employee turnover. As a result, in many companies there is a gap between the measures they should use to determine performance and the measures they actually use (see **Exhibit 2**).

MYTH #5: DISCRETIONARY BONUSES SHOULD BE ELIMINATED

In some cases, the board of directors might choose to grant a bonus to the CEO, even though the company has missed its predetermined performance targets. Such bonuses are called discretionary. Some shareholder activists believe that discretionary bonuses should not be

[4] One possible definition for excessive risk taking would be investments characterized by large volatility and negative net present value (i.e., investments that are "speculative").

[5] See Deloitte Touche Tohmatsu, "In the Dark: What Boards and Executives Don't Know about the Health of Their Businesses." (2004); "In the Dark II: What Many Boards and Executives Still Don't Know About the Health of Their Businesses." (2007); and Christopher D. Ittner and David F. Larcker, "Coming Up Short on Nonfinancial Performance Measurement," Harvard Business Review (Nov. 2003).

awarded, because they reflect pay that is unmerited (so-called "pay without performance"). However, there are times when external factors outside an executive's control—such as an unexpected change in economic conditions or competitive dynamics—hurt the company performance. The board needs to assess whether operating results would have met or exceeded expectations had these events not occurred. If so, it might make sense to reward management despite missing predetermined objectives. In doing so, the board should clearly explain the basis of its decision to shareholders. (Companies are now required to highlight discretionary bonuses in SEC filings.)

MYTH #6: PROXY ADVISORY FIRMS KNOW HOW TO EVALUATE COMPENSATION CONTRACTS

Dodd-Frank requires that companies grant shareholders a nonbinding, advisory vote on the executive compensation plan. Such votes must occur every one, two, or three years (at the determination of shareholders). This practice is known as "say on pay" and has been adopted in various forms by countries outside the U.S.

Proxy advisory firms are heavily influential in the say-on-pay process. By some estimates, an unfavorable recommendation on management-sponsored compensation proposals can reduce shareholder support by 20 percent.[6] All 31 companies that have failed to receive majority support for their say-on-pay vote so far in 2011 received a negative recommendation from Institutional Shareholder Services, the largest advisory firm.[7]

While there is clearly a place in the market for third-party firms to advise on proxy-related issues (particularly complicated ones such as compensation), it is not clear that the models currently used by these firms enhance shareholder value. They tend to emphasize relative one- and three-year total shareholder return and change in CEO pay, without taking into account specific industry, company, or strategic factors.[8] They also automatically recommend against a compensation plan if certain features are in place, such as the company allows stock option repricing without shareholder approval, "excessive" perquisites, tax gross-ups on benefits, and new or extended employment agreements. While governance experts might disapprove of these pay practices, to our knowledge there is no rigorous research evidence that the methodology employed by proxy advisory firms is predictive of future performance or that it is accurate in distinguishing between "good" and "bad" pay practices (see **Exhibit 3**).

MYTH #7: CURRENT MODELS ACCURATELY REFLECT THE VALUE OF CEO OPTIONS

Companies include stock options in the compensation plan to provide incentive to create long-term value. Research evidence suggests that options are effective in this regard: executives understand that the expected value of a stock option increases with the volatility of the stock

---

[6] Angela Morgan, Annette Poulsen, and Jack Wolf, "The Evolution of Shareholder Voting for Executive Compensation Schemes," Journal of Corporate Finance (2006).

[7] Companies include Hewlett-Packard, Jacobs Engineering, Stanley Black & Decker, and Masco Corp. Source: Semler Brossy, "2011 Say on Pay Results: Russell 3000," (Jun. 9, 2011). Available at: http://www.semlerbrossy.com/pages/pdf/SOP_Update.pdf.

[8] For example, it might not make sense to use one- and three-year total shareholder return to evaluate the performance of companies that have considerably longer investment horizons, such as oil production companies and biotechnology.

price, and they tend to respond to stock option awards by investing in riskier projects to create this volatility.[9]

Although companies are required to report the value of stock option grants in their financial statements and the annual proxy, the truth is that the models used to value such options (Black-Scholes and the binomial pricing model) do not take into account important human behavior that might influence their value. For example, an uninterested third-party who purchases or sells an option in the secondary market has no ability to affect that option's value in the future. He or she is simply making a financial investment whose future value is outside of their personal control. By contrast, in the case of an executive stock option, the board of directors is providing a financial incentive because it explicitly wants the executive to take actions to increase the stock price. The models used in financial statements do not take this factor into account. They also do not take into account other known behavioral attributes, such as the fact that executives might be risk averse and exercise their options early (due to unwillingness to bear risk when the option is "in the money"). Although these factors are difficult to quantify, boards of directors would benefit from more precise valuation models that more closely measure the cost of stock options to the firm and their value to the executive.

WHY THIS MATTERS

1. The size and structure of executive compensation contracts clearly affect the ability of companies to attract, retain, and motivate qualified executives who will create value on behalf of shareholders and stakeholders. Artificial changes to satisfy the unsupported claims of experts without a careful consideration of the impact on executive behavior will almost certainly do more harm than good.

2. The problem of inappropriate compensation (when it occurs) likely will not be remedied by governmental reform and congressional legislation. A better solution is to use the research on executive compensation and corporate governance to provide a fact-based solution.

[9] Shivaram Rajgopal and Terry Shevlin, "Empirical Evidence on the Relationship Between Stock Option Compensation and Risk Taking," Journal of Accounting & Economics (2002); and W. M. Sanders and Donald C. Hambrick, "Swinging for the Fences: The Effects of CEO Stock Options on Company Risk Taking and Performance," Academy of Management Journal (2007).

Exhibit 1
Disclosure: Relation between Compensation and "Excessive" Risk Taking

Moog

In light of the current global economic and financial situation, the Committee has considered how recent events might affect the Company's Executive Compensation program. After review, a determination was made that no modifications to the compensation programs need to be made at this time. There are no risks associated with the Company's incentive compensation programs which could threaten the value of the Company or its shareholders.

Lilly

The committee noted several design features of the company's cash and equity incentive programs for all employees that reduce the likelihood of excessive risk-taking:

- The program design provides a balanced mix of cash and equity, annual and longer-term incentives, and performance metrics (revenue, earnings, and total shareholder return).
- Maximum payout levels for bonuses and performance awards are capped at 200 percent of target.
- All regular U.S. employees participate in the same bonus plan.
- Bonus and equity programs have minimum payout levels for nonexecutive officers.
- The company currently does not grant stock options.
- The compensation committee has downward discretion over incentive program payouts.
- The executive compensation recovery policy allows the company to "claw back" payments made using materially inaccurate financial results.
- Executive officers are subject to share ownership and retention guidelines.
- Compliance and ethical behaviors are integral factors considered in all performance assessments.

Ameriprise Financial

There are no objective tests to determine whether one type of incentive compensation plan encourages executive officers to take excessive and unnecessary risks while another type of plan encourages only prudent and appropriate risk taking. Nevertheless, we will continue to examine our incentive compensation plans during 2010 to identify any plan features that may be incompatible with our enterprise risk-management program. With that said, it is not always easy to categorize risks as excessive or appropriate, except with the benefit of hindsight. [T]he question we have been asking ourselves is this: 'Are the Company's enterprise risk-management framework and internal controls effective to prevent or to identify and mitigate risk taking by our executive officers that exceeds our risk tolerances, regardless of the incentive compensation plan in which he or she participates?' We believe that the answer to that question is 'Yes.' Nevertheless, we will continue to give additional attention to the subject of risk and compensation as we continue to enhance our enterprise risk-management program.

Sources: Moog, Form DEF-14A, filed with the SEC Dec. 10, 2008; Lilly, Form DEF-14A, filed with the SEC Mar. 8, 2010; and Ameriprise Financial, Form DEF-14A, filed with the SEC Mar. 19, 2010

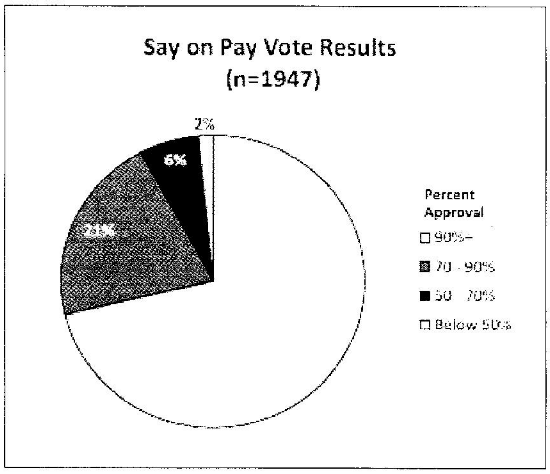
Exhibit 2
Measures to Determine Corporate Performance

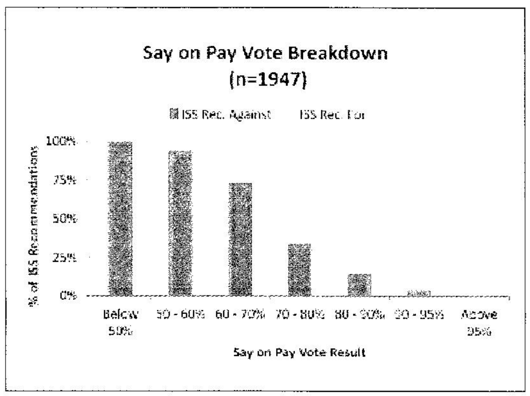
Measures Used for Corporate Employees	Overall Prevalence
Profit Measures	**77%**
Earnings Per Share	29%
EBIT/EBITDA	19%
Net Income	16%
Operating Income	15%
Pretax Profit	7%
Return Measures	**14%**
Return on Capital	6%
Return on Assets	3%
Return on Equity	3%
Return on Investment	2%
Return on Net Assets	2%
EVA/Cash Flow Measures	**26%**
Cash Flow	16%
Economic Value Added (EVA)/Economic Profit	8%
Working Capital	3%
Cash Value Added (CVA)	1%
Other Measures	**62%**
Individual Objectives	23%
Sales/Revenue/Revenue Growth	20%
Customer Satisfaction	8%
Service/Quality	6%
Strategic Goals/Projects	6%
Discretionary	4%
Expense Reduction	3%
Safety	3%
Employee Satisfaction	2%
Total Shareholder Return	1%
Other Various/Combinations of Measures	28%

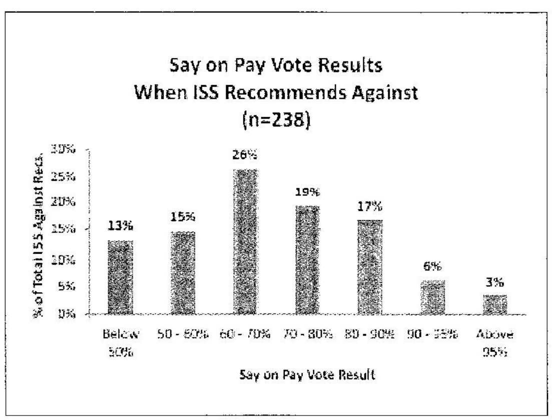
Note: Some of the other measures used include inventory turnover, operating expenses, and process/product improvement.

Source: Confidential survey (2005). Sample includes 343 industrial and service companies.

Exhibit 3
Say on Pay: Voting Results (2011)







Source: Semler Brossy. 2011 Say on Pay Results: Russell 3000 (Jun. 9, 2011).

THE HIGH PAY COMMISSION

Cheques With Balances: why tackling high pay is in the national interest

Final report of the High Pay Commission

Top pay as a symptom of market failure

Too often pay is seen as a rather opaque and specialised part of a company isolated from the rest of business behaviour. Yet it is through looking at executive remuneration that we see the classic problems of corporate governance laid bare. Nowhere do the conflicts of interest in corporate governance lie so close to the surface.

Our investigation has highlighted the flaws in remuneration committees, the extent of management power and the challenges inherent in placing all control in the hands of an increasingly disparate range of owners. Top pay is a symptom of a wider market failure based on a misunderstanding of how markets work at their best. Though we have only looked at high pay, we have been cognisant of this broader debate and acknowledge that our recommendations are part of a wider solution that would see a new, fairer, more sustainable and more vibrant form of capitalism.

Furthermore, the economic damage from over-paying at the top and under-paying everyone else goes wider. High levels of inequality in income are seen to contribute to sectoral imbalances, regional disparities in investment and asset bubble inflation.

In the current economic environment pay becomes ever more important. It is argued that extremes in pay distribution are dampening our ability to grow out of the crisis. When a bigger and bigger slice of corporate profit is going to a select group of people who invest in safe assets or commodities (often in other parts of the world), rather than spend their money on goods and services here, economic growth in the UK is stunted.

But top pay is also a story about the health of society. The social impact of gross inequality has been well investigated from the early work of Sir Michael Marmot, and the Whitehall Study, to the more recent findings or Richard Wilkinson and Kate Pickett in *The Spirit Level*.[20] While there is some controversy over their findings, which they have robustly rebutted in peer reviewed journals, there seems to be little doubt that gross inequality affects morbidity and mortality rates, including infant mortality rates. More unequal societies also have lower levels of social mobility. As Conservative Minister Rt Hon David Willetts MP has stated, 'Western societies with less mobility are the ones with less equality too.'[21]

Over the past 30 years, most people supplemented their incomes through credit and paper wealth in the form of equity in property. This has now gone – as the pendulum swings the other way restricting credit to all but the safest of applicants – and spending will remain slow as psychological poverty persists.

As pay escalates for those at the top it creates a new point of comparison – a new norm. Executives look to finance, finance to private equity, and private equity to footballers – each proclaiming the other is where the problem lies. Yet the dramatic escalation of executive pay is cause for specific concern in our companies and for our economy.

Fair pay within companies matters; it affects productivity, employee engagement and trust in our businesses. Moreover pay in publicly listed companies sets a precedent, and when it is patently not linked to performance, or rewards failure, it sends out the wrong message and is a clear symptom of market failure.

Within the business community there is a blame game going on. Talk to executives and the problem is shareholders; talk to shareholders and the problem is non-executive directors; non-executive directors in turn blame the executive for demanding too much; and everyone blames remuneration consultants for making the whole system too complicated.

This blame game, however, cannot continue indefinitely as there is a growing public disquiet, which threatens to boil over into anger. Business leaders – those who can invest and help us grow out of this crisis – are seen as being on a par with estate agents in the degree of public trust they inspire. That, in the words of John Cridland, Director General of the CBI, the business lobby, 'is not a good space to be in'.[22]

Business leaders universally recognise that employee engagement is essential for a successful company and yet they fail to recognise the negative impact on engagement caused by their own pay. The more thoughtful and engaged corporate executives recognise there is a problem with pay, but feel unable to combat it from within – they are trapped n a system they do not believe works. Time is running out. The public demands change. The economy needs change.

Businesses must take a lead on this issue and elect to introduce the changes in company practice we recommend. But government must act too. Government should introduce the changes recommended in the report; use its power as a purchaser; and set a tax regime that incentivises the sort of behaviour that leads to market success and not market failure.

It took 30 years to reach this point of pay excess. Even with the best ambitions it may take that long to resolve. This problem goes deep. It is a symptom of a particular form of free market capitalism and we should recognise that no single set of policy recommendations will resolve it. Business must work with government, trade unions and civil society to address this problem over the longer term.

It is no longer possible to contest the fact that there has been an enormous upward redistribution of income since the 1980s. Only one question remains – what do we do about it?

[20] See www.ucl.ac.uk/epidemiology/people/marmotm.htm; Wilkinson and Pickett, The Spirit Level.
[21] Quoted in 'Viewpoint: why the class struggle is not dead' (2011) BBC News, http://www.bbc.co.uk/news/uk-politics-14721315.
[22] L. Elliott (2011) 'CBI's John Cridland: "There is a sense of urgency about making Plan A work"' Guardian, 15 April, www.guardian.co.uk/business/2011/apr/15/john-cridland-sense-of-urgency-plan-a-work.

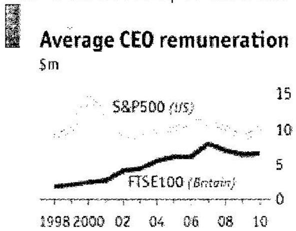
The Economist

Executive pay

Bosses under fire

Britain is a case study in how politicians miss the point when they try to "fix" executive pay

Jan 14th 2012 | From the print edition



WHEN things went wrong for Middle Eastern tribes a couple of millennia ago, the accepted remedy was to send a sacrificial goat out into the wilderness to placate the gods. The practice continues today, but the voters have replaced the gods, and highly paid businesspeople the goats.

The growth of inequality all over the world encourages these rituals, and recent trends in remuneration certainly make bosses harder to sympathise with than goats. In Britain, where the latest bout of politicking about pay has broken out, chief executives can expect to receive average compensation in excess of £4.5m ($6.9m) this year. Pay at the top grew by over 300% between 1998 and 2010. At the same time, the median British worker's real wage has been pretty stagnant. These trends mean the ratio of executive to average pay at FTSE 100 firms jumped from 47 to 120 times in 12 years.

This is feeding the view that there is something wrong with British capitalism. Britain's political parties, although deeply divided on most economic policy, are competing for a middle ground which demands action on pay. The prime minister, David Cameron, thinks there is a "market failure", and his coalition government wants to empower shareholders and staff to constrain pay at the top. Specific options include giving shareholders a binding veto on board pay, changing the make-up of pay committees and making compensation, including pay ratios, more transparent.

This remedy will be about as effective as the goat. Bosses' pay has gone up not because corporate governance is failing but because of globalisation (see article (http://www.economist.com/node/21542802)). In the 1970s the FTSE 100 was made up largely of parochial companies serving British customers. Now it is a global index of multinational companies operating in many different industries and countries. FTSE bosses are picked from a global pool. The skills they need, and the pay they receive, have changed.

Nor is it clear that British shareholders are weak. British corporate-governance rules, which allow shareholders to sack board members, are envied in America. At private firms, where owners are more directly in control, top pay is less visible, but has risen at similar rates. FTSE 100 bosses are facing criticism not because their pay is the highest, but because it is the most transparent. Heads of legal and consultancy firms (which are not, by and large, public companies) are paid similar rates. British bosses are paid rather less than

American ones and less too than the bosses of top European companies.

The long and the short of it

Giving more power to British shareholders is not a bad idea, but it will not make any difference. Getting and keeping a good boss matters more to a firm's owners than how much he or she is paid; and they invest internationally, so they know how much good bosses need to be paid. This looks more like a market rate than a market failure.

Mr Cameron should have focused on the weakest part of British pay: its emphasis on short-term performance. Tying bonuses to next year's earnings encourages scrimping on investment to buy back shares. Return-on-equity targets (until recently favoured by British banks) reward leverage, prioritising risky over risk-adjusted returns. A greater share of total pay in Britain should be tied to a firm's long-term performance, as it is in America. But if that happens, executives' pay will probably go up further to compensate them for waiting for their cash.

Inequality is undoubtedly a serious political issue in the West. But governments that try to deal with the problem by passing the buck to companies will at best fail, and at worst harm the economy. Better sacrifice a goat.

From the print edition: Leaders

RESEARCH-DRIVEN INSIGHTS ON BUSINESS, POLICY, AND MARKETS
CHICAGOBOOTHREVIEW
(formerly Capital Ideas)

Are CEOs overpaid? The case against

By Vanessa Sumo |Sep 26, 2013

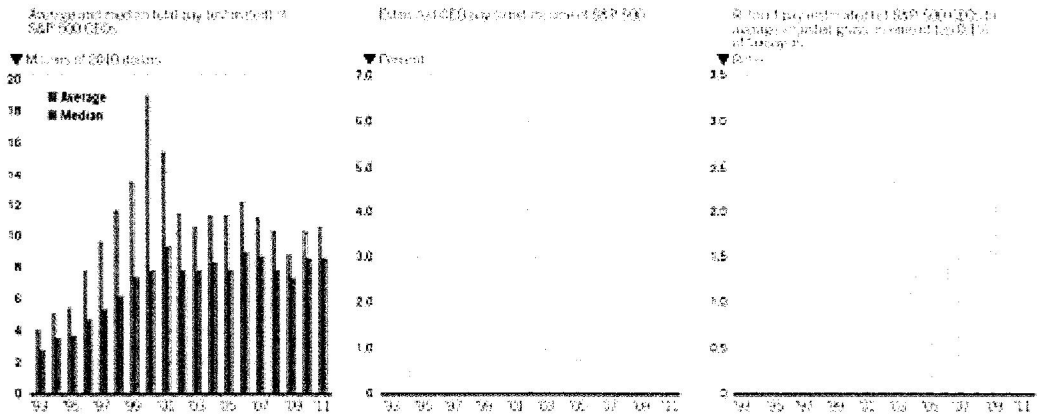
Oracle CEO Larry Ellison reportedly made $96 million last year, Tesla Motors' Elon Musk made $78 million, while JP Morgan Chase CEO Jamie Dimon reportedly made just $23 million. The average pay of the chief executive of an S&P 500 company has risen markedly since 1980, reaching about 100 times the median household income by the early 1990s. By 2000, it hit a high of 350 times. Although it is down to 200 today (to about $10 million), that figure still suggests a huge discrepancy in incomes. Perhaps unsurprisingly, two-thirds of respondents to the Chicago Booth/Kellogg Financial Trust Index, a survey of a representative sample of US households, say business leaders receive too much income for the jobs they perform.

But while there is more anger than pity circulating for the corporate elite, Steve Kaplan, Neubauer Family Distinguished Service Professor of Entrepreneurship and Finance at Chicago Booth, is making a sometimes–unpopular but data–driven case in defense of high–earning CEOs. Kaplan has written a string of papers challenging the common views that executive pay isn't tied to performance, that boards rarely punish underperforming CEOs, and that average CEO pay keeps going up.

Instead, he argues, the market for talent largely determines CEO pay. This view puts him at odds with conventional wisdom, popular notion, and some of his colleagues down the hall. But the debate he is eager to have sheds light on questions about CEO pay, and his research suggests the issue is more complicated than is widely portrayed.

Putting compensation in context

*According to Chicago Booth's **Steven Neil Kaplan**, pay to CEOs of S&P 500 companies has declined by several measures.*



CEO compensation, by the data

Kaplan, a driving force behind Booth's Polsky Center for Entrepreneurship and Innovation, notes that the data do not support the popular narrative: in the United States, the pay of CEOs at publicly traded companies went down in real terms by 46% between 2000 and 2011, although it bounced back—as did corporate profits—in 2012, while still remaining well below the 2000 level.

He also notes that comparing those executives' compensation with median incomes misses that the former have risen and fallen in line with the pay of other highly paid professionals. "CEO pay went up more than it should have in the late 1990s and then came back down," Kaplan says. "If you look at CEO pay compared to the average pay of people in the top 0.1%, it's about where it was 20 years ago—in line with [that of] lawyers and private-company executives, and less than hedge-fund managers."

It is not difficult to see how the widespread impression of roguish CEO behavior has been formed. Consider the options backdating scandal in the United States in 2005 and 2006. The University of Iowa's Erik Lie discovered that in many cases, companies granted stock options to executives just before their stock prices spiked. The Securities and Exchange Commission and the US Department of Justice subsequently investigated more than 100 businesses, and companies' own investigations led to dozens of financial restatements and executive dismissals. Although only 12 executives ultimately received criminal sentences, and only five were given prison terms (the others were sentenced to probation), the scandal helped reinforce the notion that CEO compensation often results from underhand means.

The media tend to focus on these titillating scandals of egregious pay, outlandish profligacy, and failures of corporate governance. Such tales make fascinating stories, but they are not the norm, Kaplan says. "There are outliers and bad actors," he acknowledges. But, "What you've seen in the past 15 years is those outliers have come way down. The median CEO pay hasn't changed much, but the mean is down a lot, so it tells you that the big outliers have come down."

Paying for performance?

Research by other Booth faculty takes a different tack. Work by Amit Seru, professor of finance at Chicago Booth, suggests some CEOs manipulate performance measures that are used to determine their pay. In a paper cowritten with Adair Morse, formerly of Chicago Booth and now at Berkeley, and Vikram Nanda of Georgia Tech, Seru analyzed more than 1,000 companies from 1993 to 2003, finding that CEOs influenced measures used to assess their performance. The evidence suggests that powerful CEOs may pressure boards to use gauges that show the CEOs' performance in the best possible light. CEO compensation correlates well with the better performing performance measure, but only for powerful CEOs (those who chair the company's board, or appointed a large number of the board's members).

The researchers cite the case of former Home Depot CEO Robert Nardelli. A footnote in the company's 2004 proxy statement given to shareholders stated that Nardelli's long-term incentive pay would be calculated based on the total return to shareholders over three years, compared with a peer group of retailers. "By that measure, Nardelli had bombed," write the authors. A year later, they point out, the proxy stated that Nardelli would receive incentive pay if the company achieved a certain level of average diluted earnings per share, a measure by which Home Depot looked far more successful.

Up to 30% of the fluctuation of incentive pay based on performance can be explained by rigged performance measures, the researchers estimate. "Incentive contracts are at best only partially effective in compensating for weak corporate governance," Seru, Nanda, and Morse write.

Kaplan acknowledges that there have been corporate governance failures and pay outliers where managerial power is exercised, but he observes that Seru, Nanda, and Morse's research suggests that CEO pay should have risen along with increasing corporate profits from 2000 to 2011. Instead, the opposite happened. "The puzzle is that profits have gone up but pay has gone down," Kaplan says. "Everybody's complaining that something's broken, but if you look at those trends, that complaint makes no sense." Seru, Nanda, and Morse argue that such aggregate trends may mask the cross-sectional differences uncovered in their study. Moreover, they say, some of the patterns they identified in their paper may have been ameliorated after the Securities and Exchange Commission sent several companies letters in 2007, critiquing the disclosure practices of their executive pay contracts.

Pay and corporate governance

While Kaplan sees the increasing use of equity-based pay such as stock options and restricted stock in executive compensation packages as a positive development, other Booth faculty argue that stock options can become very valuable even though a company is only performing in line with the rest of its rivals in the same sector. A study by

Marianne Bertrand, Chris P. Dialynas Distinguished Service Professor of Economics at Chicago Booth, written with Harvard's Sendhil Mullainathan, finds that the CEOs of the largest oil companies in the United States received big rewards between 1977 and 1994 for improvements in company earnings and stock returns, even when these increases were caused by factors beyond the CEOs' control.

Specifically, the authors find that oil bosses' pay was very sensitive to increases in oil prices, which arguably wasn't influenced by any individual CEO's efforts. That CEOs were apparently paid for luck appears to undermine the effectiveness of incentive contracts in tying pay to performance.

Bertrand and Mullainathan find that "pay for luck" is strongest among poorly governed firms, specifically, in companies without large shareholders who own at least 5% stake. In another paper, they find that firms with weak and strong corporate governance reacted differently when several US states in the mid-1980s passed laws that made hostile takeovers more difficult. Antitakeover laws removed an important check on companies, because the threat of a takeover kept managers on their toes, thus giving them an incentive to increase the value of the company.

In firms that had no large shareholders, Bertrand and Mullainathan find that average CEO pay increased after antitakeover laws were passed, suggesting that such laws made it easier for CEOs to pay themselves more. CEO pay in firms with large shareholders did not go up, and, without the discipline offered by the threat of a hostile takeover, shareholders made sure that CEO pay was more strongly tied
to performance.

Kaplan is skeptical of the notion that companies with no large shareholders pay their CEOs differently. He notes that Bertrand and Mullainathan's pay-for-luck research only examined public companies, not private equity–funded ones. Including these data from companies that have one very large shareholder, the private equity firm, challenges Bertrand and Mullainathan's basic thesis, Kaplan says. "He has one proxy for governance, we have another," says Bertrand, maintaining that her research finds systematic differences in the level of pay between companies with and without large shareholders.

Supply and demand

Instead of bad corporate governance or skewed pay incentives, Kaplan argues that the big paychecks executives receive are mostly determined by the demand for and supply of talent. If the market rate of compensation reflects what a CEO's time is worth, CEOs are not overpaid but rewarded appropriately—or otherwise punished with a pink slip.

In Kaplan's view, there are two ways to measure CEO pay, which are sometimes used misleadingly. The first is estimated pay, which includes a CEO's salary, bonus, restricted stock, and the estimated value of stock options at the time they were granted. This measure is useful for looking at how much boards awarded their CEOs in a given year. The other measure is realized pay, which values options when they are exercised. Realized pay is what the CEO actually took home and is therefore more useful for analyzing whether CEOs are paid for performance.

CEOs may earn a lot, but most of them deserve their pay for increasing the value of their companies, he says. A paper by Kaplan and Joshua Rauh of Stanford finds that the highest-paid CEOs in terms of realized pay—the top 20% out of 1,700 firms—generated three-year stock returns that were 60% higher than those of other firms in their industries. The bottom 20% of CEOs, on the other hand, underperformed other companies in their industries by 20%.

CEOs who don't perform get fired, and they're being tossed out more frequently than in the past. Kaplan says that the average S&P 500 CEO today can expect to stay on the job for six years, down from about eight years before 1998. In a paper with Bernadette Minton at The Ohio State University, Kaplan finds that since 1998 about one out of six Fortune 500 CEOs lost their jobs, compared with only one out of 10 in the 1970s.

Bertrand argues that the fact that CEOs stick with their jobs, even though average pay has fallen and employment conditions have become more precarious, indicates that CEOs may have been overpaid. "It's another sign that you can retain those guys with less pay and on worse conditions, so pay probably was too high," she says.

She also observes that corporate governance has improved markedly since 2000, in part because of accounting scandals such as Enron. That improvement in governance combined with the increased debate about the subject, Bertrand says, could also be a big factor in helping to explain why CEO pay has dropped in real terms.

A global context

One purported reason executive pay has become so fraught is due to the economic downturn and the perception of the growing inequality between the elite "1%" and the rest of society. Policymakers fret about the public's frustration. The United Nations warned in June that widening disparities in income have created a "disturbing picture" in Europe that's leading to heightened social tensions.

Kaplan says he shares those concerns, but argues it is not executive pay that causes social tensions so much as high unemployment and a weak economy. "That's caused by bad government policies," he says. "Europe has the worst, most rigid labor laws, and therefore you have high unemployment, which causes unhappiness."

The share of national income held by the top 1% was higher in 1999 than it is today, and income inequality has decreased since 2007. And yet nobody was protesting between 1999 and 2007, he points out, because the economy was growing. People become unhappy when unemployment is high and the economy is stagnant, as became the case after 2007. And data suggest median incomes in the United States have been stagnant for decades. To Kaplan, anger of CEO pay is merely a symptom of this stagnation, aggravated by the economic downturn.

Kaplan is interested in looking at trends in the global labor market. Technological change has shaped the global economy over the past three decades in three important ways, he says. First, it has spurred the growth of corporate profits and benefited the executives who run big companies. Secondly, it has harmed the middle class in industrialized countries, who have seen blue-collar job opportunities diminish. Thirdly, it has pulled millions of people out of poverty in emerging economies.

"Technological advances have allowed lawyers to do more work faster and on bigger deals, investors to trade large amounts more efficiently, and CEOs to better manage large global organizations," Kaplan wrote in an article this summer in *Foreign Affairs*. "As firms have grown larger, so, too, have the returns for leading them."

But the poor, too, have benefited from these changes. "The big beneficiaries of technology have been corporations, the people at the top, and people in countries such as India and China," Kaplan says. "The people who've been hurt to an extent are the middle class in the United States because some of those jobs have gone away. That's the source of some of this angst, but income inequality is the residual, not the driver. The driver has been technological change and the success of the corporate model in generating value."

Just as the worries over the fate of the middle class in industrialized economies overshadows the story of the emerging middle class in developing countries, Kaplan thinks the public concern over CEO pay masks a positive narrative about the success of corporations.

"On the one hand, people complain about corporate governance. On the other, they say companies are hoarding cash," he says. "But how do you get too much cash? By being successful." The real story, he says, is about the growth in recent decades in labor productivity, the rise in stock markets, increasing corporate profits, and the expanding global economy. Others may see executive pay as a sorry tale of greed and excess. For Kaplan, it is a symptom of a much bigger success story.

Works cited

- Marianne Bertrand, "CEOs," *Annual Review of Economics*, April 2009.
- Marianne Bertrand and Sendhil Mullainathan, "Agents with and without Principals," *American Economic Review*, May 2000.
- __________, "Are CEOs Rewarded for Luck? The Ones Without Principals Are," *Quarterly Journal of Economics*, August 2001.
- __________, "Executive Compensation and Incentives: The Impact of Takeover Legislation," NBER working paper no. 6830, December 1998.
- Steven Neil Kaplan, "Are US CEOs Overpaid?" *Academy of Management Perspectives*, May 2008.
- __________, "Executive Compensation and Corporate Governance in the US: Perceptions, Facts, and Challenges." NBER working paper no. 18395, September 2012.
- __________, "The Real Story Behind Executive Pay: The Myth of Crony Capitalism," *Foreign Affairs*, May/June 2013.
- Steven Neil Kaplan and Bernadette Minton, "How has CEO Turnover Changed? Increasingly Performance Sensitive Boards and Increasingly Uneasy CEOs," *International Review of Finance*, March 2012.
- Steven Neil Kaplan and Joshua Rauh, "Wall Street and Main Street: What Contributes to the Rise in the Highest Incomes?" *Review of Financial Studies*, March 2009.

- Adair Morse, Vikram Nanda, and Amit Seru, "Are Incentive Contracts Rigged by Powerful CEOs?" *Journal of Finance*, October 2011.