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Source: *Academy of Management Perspectives*, May, 2008, Vol. 22, No. 2 (May, 2008), pp. 5-20

Published by: Academy of Management

Stable URL: <https://www.jstor.org/stable/27747441>

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E X C H A N G E

Are U.S. CEOs Overpaid?

by Steven N. Kaplan

Executive Overview

Critics of U.S. corporate governance claim that public company (a) CEOs are overpaid, (b) CEOs are not paid for performance, and (c) boards do a poor job of compensating and monitoring CEOs. In this paper, I argue that the critics are wrong. While corporate governance and CEO pay are not perfect, a great deal of evidence suggests that CEO pay is largely determined by market forces. CEOs have been affected by the same forces that have increased income inequality. They have not done better than several similar groups. (In fact, average CEO pay declined in real terms from 2000 to 2006.) CEOs are strongly paid for performance. And boards do monitor CEOs. CEO tenures are lower than they have been since tenures began to be measured in the 1970s; CEO turnover is more closely tied to stock performance than it has been since turnover began to be studied in the 1970s. Increased transparency for CEO pay (required by the SEC), increased shareholder activism, and the increased prevalence of majority voting in director elections should further reduce any remaining unwise compensation practices. More regulation, such as the proposed "Say on Pay" bill to mandate a shareholder vote on executive compensation, is likely to impose costs with little additional benefit.

In the last several years, corporate governance in the United States has come under great scrutiny and attack. The scandals of Enron, WorldCom, and others early in this decade led to the Sarbanes-Oxley legislation. Since that legislation, the criticism of corporate governance has continued. CEOs are routinely criticized for setting their pay, for being overpaid, and for stealing when they can. Boards of directors are routinely criticized for paying the CEOs too much, for not paying for performance, and for being too friendly to management.¹

Are the critics right? Is it true that the typical CEO is overpaid? Is it true that the typical CEO is not paid for performance? Is it true that public

company boards are doing such a bad job? In this paper, I argue that the answers to these questions are no, no, no, and no. While CEO and top executive pay practices are by no means perfect, they are nowhere near broken. And they have been improving.

First, it is useful to put the U.S. economy in perspective. Over the last 15 or 20 years, the period in which corporate governance and CEO pay have been criticized, the U.S. economy has done extremely well—both on an absolute basis and relative to other developed countries. Productivity growth in the United States has been unexpectedly good, and despite the tech bust, the stock market has performed well. While this performance does not in any way establish causality, it does not suggest that U.S. companies have been poorly managed.

Second, are CEOs overpaid? While there have clearly been abuses and unethical CEOs, the evi-

This report is largely based on Mr. Kaplan's testimony in March 2007 to the Committee on Financial Services of the United States House of Representatives on empowering shareholders on executive compensation and H.R. 1257, the Shareholder Vote on Executive Compensation Act.

¹ Jensen, Murphy, and Wruck (2004) documented the increase in CEO pay since the 1970s. Bebchuk and Fried (2004, 2005) documented a substantial increase in CEO pay that accelerated after 1995.

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dence suggests that pay for the typical CEO is largely driven by market forces. Kaplan and Rauh (2008) found that while CEO pay has increased substantially since the early 1990s, the pay of other talented and fortunate groups has increased by at least as much. For example, hedge fund, private equity, and venture capital investors have seen fees increase by a factor of five to 10 times from 1994 to 2005. These increases have translated into very high pay for those groups. By one estimate, the top 20 hedge fund managers earned more in 2005 than all 500 CEOs in the S&P 500. The number of professional baseball, basketball, and football players earning more than \$5 million a year increased by a factor of almost 10 from 1994 to 2004. Even top lawyers saw their pay increase by more than two and a half times since 1994. In line with these other groups, the pay of S&P 500 CEOs has increased by roughly three to four times over the same period. It also is worth adding that most of the increase in CEO pay occurred by 2001. CEO pay in 2006 remained below CEO pay in 2000 and 2001.

In other words, while CEOs earn a great deal, they are not unique. Other groups with similar backgrounds and talents have done at least as well over the last 10 or 15 years. The increase in pay at the top appears to be systemic. Rising CEO pay, therefore, appears to be part of (not the cause of) the general increase in economic inequality that we have seen in the last several decades. Market forces (and arm's-length bargaining) have driven the large increase in pay of these other groups. It is difficult to understand how the CEO pay increase could have been driven largely by non-market forces (and cozy board arrangements) when the pay of the other groups has increased by at least as much.

Third, are CEOs paid for good stock performance? Critics contend that CEOs are not paid for performance. That is just not true. In some cases, the critics confuse theoretical pay—what the boards give to the CEOs as estimated pay—and actual pay. The key question is whether CEOs who perform better earn more in actual pay.

And the answer is yes. Kaplan and Rauh (2008) looked at actual CEO pay in a given year. Firms with CEOs in the top quintile (top 20%) of

actual pay generate stock returns 60% greater than those of other firms in their industries over the previous three years. Firms with CEOs in the bottom quintile of actual pay underperform their industries by almost 20% over the previous three years. The results are qualitatively similar if we look at performance over the previous five years or the previous year. There can be absolutely no doubt that the typical CEO in the United States is paid for performance.

This is true even for the financial service firm CEOs who lost their jobs during the recent credit market turmoil. Charles Prince, Stanley O'Neal, and James Cayne all lost a great deal because so much of their pay and wealth were tied to the stock price of Citigroup, Merrill Lynch, and Bear Stearns, respectively. Collectively, the poor performance of their companies cost them many hundreds of millions of dollars.

Fourth, are boards today dominated by their CEOs? The evidence suggests not. Kaplan and Minton (2008) studied CEO turnover in Fortune 500 companies. They found turnover levels since 1998 that were substantially higher than those found in previous work that studied previous periods. In any given year, one of six Fortune 500 CEOs loses his or her job. This compares to one of 10 in the 1970s. The CEO job is riskier today than it has been in the past. Second, CEO turnover is strongly related to poor firm stock performance—both poor performance relative to the industry and poor industry performance. These sensitivities have been stronger in recent years than in any other period since 1970.

Is there a market for CEOs? The critics contend that CEO pay is driven by consultants and board relationships, not by market forces. The factors described above suggest that this view is wrong. In fact, some of the arguments above suggest that the CEO job has become increasingly difficult and less pleasant. It is possible that good CEOs are not overpaid, but underpaid.

The unprecedented volume of private equity activity from 2005 to 2007 provides further support to these arguments. Many public company executives chose to go to work for private equity-funded companies or for private equity firms themselves. These were market-based decisions. It

is difficult to understand why so many would do so if they were so overpaid at public companies. While private equity activity has slowed as this paper is written amid the credit woes of 2008, it seems likely that CEOs will again be attracted to private equity when debt markets recover.

In other words, the regulation, criticism, and hounding of public company CEOs may have a major cost. CEOs can and will leave public companies to do something else. And it is the better CEOs who will tend to do so. Critics often simply assert that a market for executives does not exist, ignoring all evidence to the contrary.

Three other recent changes in the current corporate governance system are likely to exert pressure to reduce any remaining inappropriate pay practices. First, the SEC recently implemented new rules for the disclosure of executive compensation. These new rules increase transparency for investors and for boards of directors.

Second, as Brav et al. (2008) documented, public company CEOs and boards face increased pressure today from activist shareholders and hedge funds.

Third, Allen (2007) documented a marked increase in the number of firms that have implemented majority voting for directors. She reported that two thirds of the companies in the S&P 500 had adopted majority voting by the end of 2007, compared to 16% at the start of 2006. If shareholders are or continue to be dissatisfied, they can withhold their votes from directors in board elections.

Given all of this, I conclude that increased regulation of CEO pay is unwarranted and unnecessary at this time. This is particularly true of the "Say on Pay" bill passed by the House of Representatives in 2007. This bill would mandate an advisory shareholder vote on executive compensation for every U.S. company every year. If passed, it would impose costs on companies with little additional benefit. As I explain below, the bill would be the equivalent of subjecting every airline passenger (company) to a physical search despite their having gone through the X-ray machine (SEC disclosure) without any problem.

In summary, the evidence strongly supports the view that CEO and top executive pay is largely

driven by market forces. While there have been pay abuses (and the press has focused on them), those examples are not typical and are likely to become less common. The costs of further regulation are likely to exceed the benefits.

The rest of this paper details and expands on the statements above.

How Have U.S. Public Companies Performed?

Before talking about top executive pay, it is worth noting that the U.S. economy—particularly the corporate sector—has performed well in the last 15 years or so, the period in which corporate governance and CEO pay have been criticized. During that period, the productivity of the U.S. economy has increased substantially, both on an absolute basis and relative to other developed countries.² Furthermore, the U.S. stock market has performed well. In late 2005, Berkeley economist Brad DeLong noted that since Alan Greenspan's famous "irrational exuberance" speech in 1996, the U.S. stock market has not declined but, rather, has increased by 6% per year above inflation.³ Rather than being irrationally exuberant, the U.S. stock market and U.S. companies benefited from unexpectedly good productivity growth.

So, as one considers CEO and top executive pay, the starting point is one in which U.S. companies and their executives appear to have been successful on average in delivering productivity growth and shareholder returns.

How Is CEO Pay Measured?

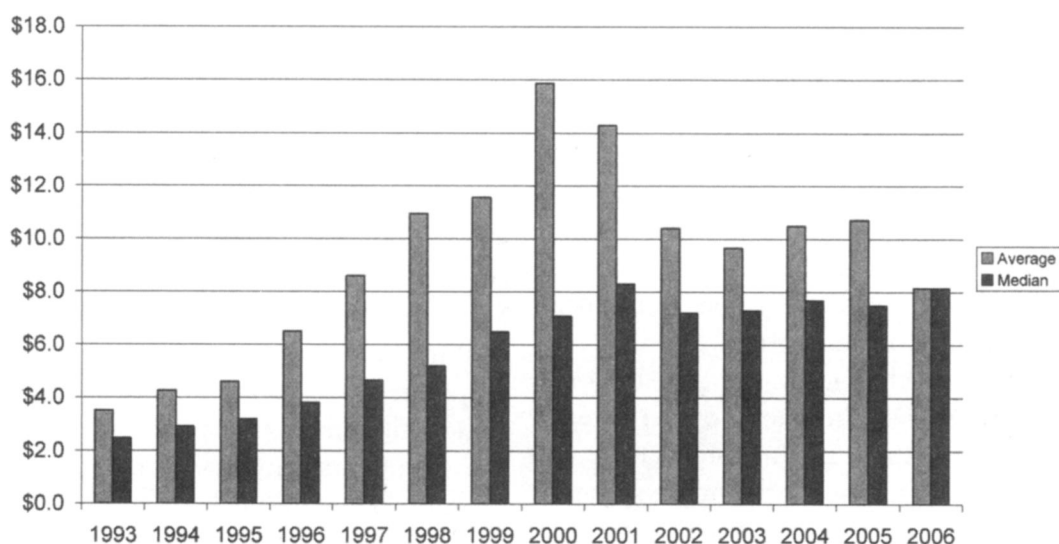
There are two ways to measure CEO and top executive pay. Unfortunately, these two measures are often confused and are sometimes used in misleading ways.

The first measure is the estimated or ex ante value of CEO pay. This includes the CEO's salary, bonus, the value of restricted stock issued, and the estimated value of the options issued that year (usually calculated with Black-Scholes). This is a

² See Jorgenson et al. (2008) and van Ark et al. (2008).

³ www.j-bradford-delong.net/movable_type/2005-3_archives/001805.html, accessed May 18, 2008.

Figure 1
Average & Median Total Pay (Estimated or Ex Ante) of S&P 500 CEOs from 1993 to 2006 (Millions of 2006 \$)



Source: ExecuComp

good estimate of what the board expects to give the CEO that year. It is not a measure of what the CEO actually gets to take home. The CEO takes his or her salary and bonus, but does not get to cash in the options. This measure, therefore, is inappropriate for considering whether CEOs are paid for performance.

The second measure is realized or actual CEO pay. This includes the CEO's salary, bonus, the value of restricted stock, and the value of the options the CEO exercised that year. Because it uses actual option gains (not the theoretical values), this second measure is a better measure of the amount of money the CEO actually takes home in a given year. This measure, therefore, is more appropriate for considering whether CEOs are paid for performance.⁴

It also is worth remembering that the realized pay measure does not necessarily include the options granted in just one year. For example, in any given year a CEO may choose to exercise options granted over many years or may choose not to exercise any options.

⁴ Because it measures realized gains, it also includes any benefits from backdating that lowered the exercise price of the options.

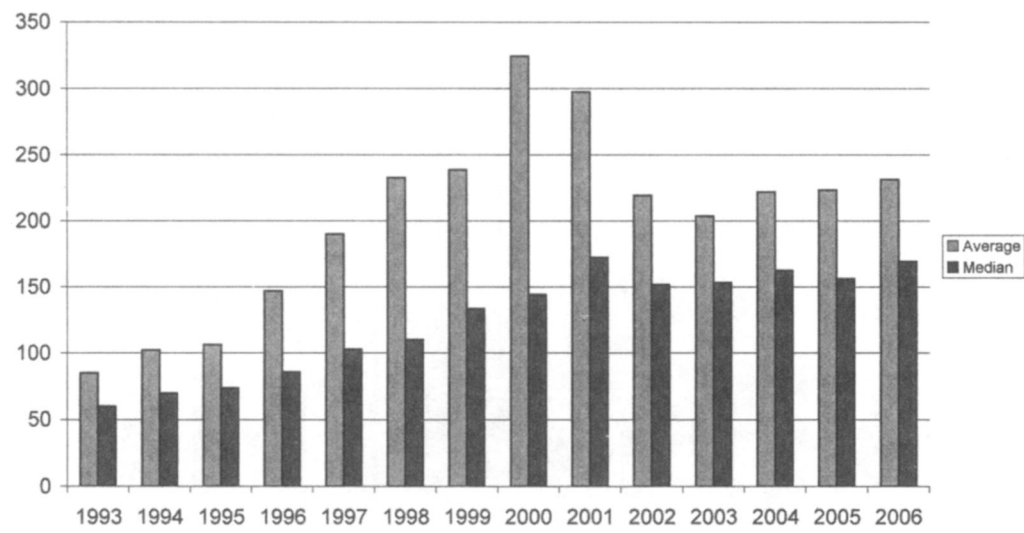
What Are the Facts About CEO Pay?

In this section, I report time series information on the pay of CEOs of S&P 500 companies. The S&P 500 includes many of the largest companies in the United States and, correspondingly, many of the most highly paid CEOs. The median S&P 500 company employs more than 20,000 people.

Figures 1 to 4 report information on the pay of S&P 500 CEOs from 1993 to 2006. The exhibits show that CEO pay increased significantly from 1993 to 2000. Since 2000, however, average CEO pay has not increased. By some measures, it has declined.

Figure 1 reports the average and median total pay (estimated/ex ante) of S&P 500 CEOs from 1993 to 2006 (in millions of 2006 \$). This is the pay the board expects to give the CEO. The figure shows that average CEO pay increased markedly from 1993 to 2000. Average CEO pay peaked in 2000 and has declined by roughly 50% since then. Median CEO pay also increased markedly from 1993 to 2001. Median pay peaked in 2001 and has declined slightly since then. The differences in the mean and median patterns suggest that boards have become substantially less likely to award large and unusual pay packages to CEOs since 2000. Nevertheless, the exhibit indicates that

Figure 2
Average & Median Total Pay (Estimated or Ex Ante) of S&P 500 CEOs to Median Household Income from 1993 to 2006



Source: ExecuComp, Census Accounts, Steven Kaplan

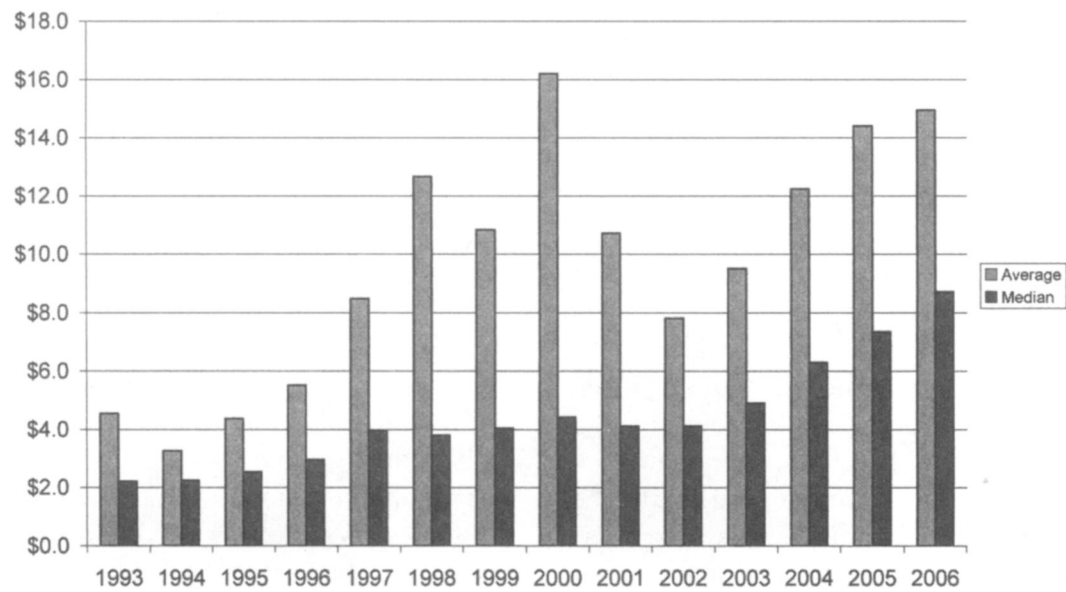
boards expected to pay CEOs well. In 2006, the median S&P 500 CEO received estimated pay of just over \$8 million.

Figure 2 reports CEO pay relative to median household income. Again, average and median CEO pay peaked in 2000 and 2001. Average CEO pay peaked in 2000 at more than 300 times the median U.S. household income. It has since come

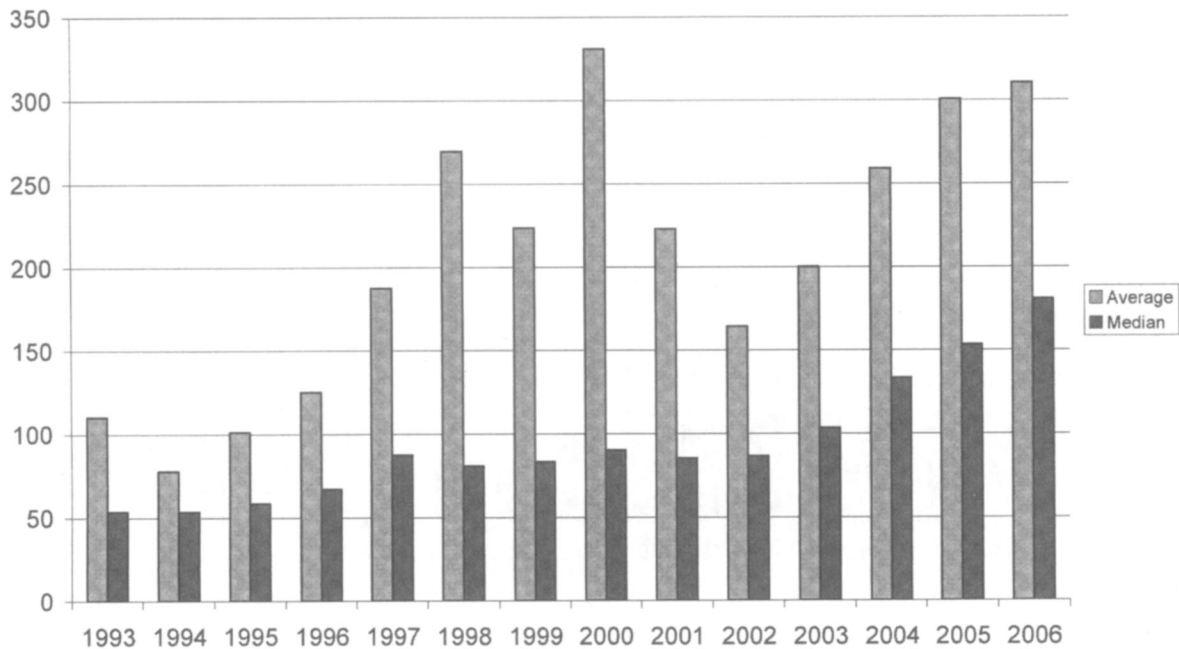
down to roughly 225 times. Median CEO pay peaked in 2001 at somewhat more than 150 times median household income and has more or less remained there since. Although these numbers are large, they have declined since 2000, and are lower than some of the figures suggested by critics.

Figures 3 and 4 present the analogous figures for actual or realized CEO pay. Recall that this in-

Figure 3
Average & Median Total Pay (Actual) of S&P 500 CEOs



Source: ExecuComp, Steven Kaplan

Figure 4**Average & Median Total Pay of S&P 500 CEOs to Median Household Income from 1993–2006**

Source: ExecuComp, Census Accounts, Steven Kaplan

cludes exercised options that had been issued in the past. Figure 3 shows that average actual pay also peaked in 2000, dipped by almost 50% by 2002, and rebounded close to 2000 levels by 2006. Median pay has continued to increase and peaked in 2006 at a value of just over \$8 million. The increase in the median is likely the result of the increased use of restricted stock rather than stock options. Figure 4 shows a similar pattern for average and median realized pay relative to median household income.

Are CEOs Unique or Unusual? Is CEO Pay Driven by Market Forces?

Although estimated (average and median) and actual (average) CEO pay have declined since 2001, it is clear that CEOs are highly paid and have done very well since the early 1990s. The important question is why they have done so well. Are the increases driven by market forces? Or, as the critics argue, is much of the increase due to unethical behavior and cozy arrangements between CEOs and their boards? While inappropriate behavior has occurred and undoubtedly will continue to occur in some instances, the prepon-

derance of the evidence points toward market forces as the driver of high CEO pay.

Gabaix and Landier (2008) argued that the increase in CEO pay can be explained by market forces. In a simple competitive model, they showed that as firms get bigger, CEOs will get paid more. A talented CEO creates more value as a firm becomes larger. In a competitive market, CEO pay will be bid up as firms become larger. Larger firm size increases the returns on hiring a more productive CEO. They then showed empirically that the market values of large U.S. firms have increased by a factor of four to seven times since 1980. As predicted by their model, CEO pay has increased by a similar factor over this period.

Frydman and Saks (2008) studied top executive pay from the 1930s to 2005. They concluded that the evidence is not consistent with the managerial power/rent extraction story. (To be fair, their results also questioned the simple story in Gabaix and Landier, 2008.)

Perhaps more important, the argument for market forces also implies that other, similar individuals should have done as well as the CEOs over the last 20 years. My colleague Josh Rauh and I

Figure 5
2005 Pay of Top Hedge Fund Managers and S&P 500 CEOs in \$ Millions

<u>Top 10 Hedge Fund</u>	<u>Top 10 CEOs Ex Ante</u>	<u>Top 10 CEOs Actual</u>
\$1,500	\$92	\$295
\$1,400	\$66	\$249
\$840	\$63	\$203
\$550	\$53	\$183
\$500	\$53	\$156
\$425	\$49	\$142
\$400	\$49	\$114
\$400	\$44	\$104
\$340	\$44	\$95
\$275	\$41	\$87
Total top 20	Total All 500 S&P	Total All 500 S&P
\$8,560	\$5,177	\$6,966

Source: Institutional Investor Alpha 25, ExecuComp

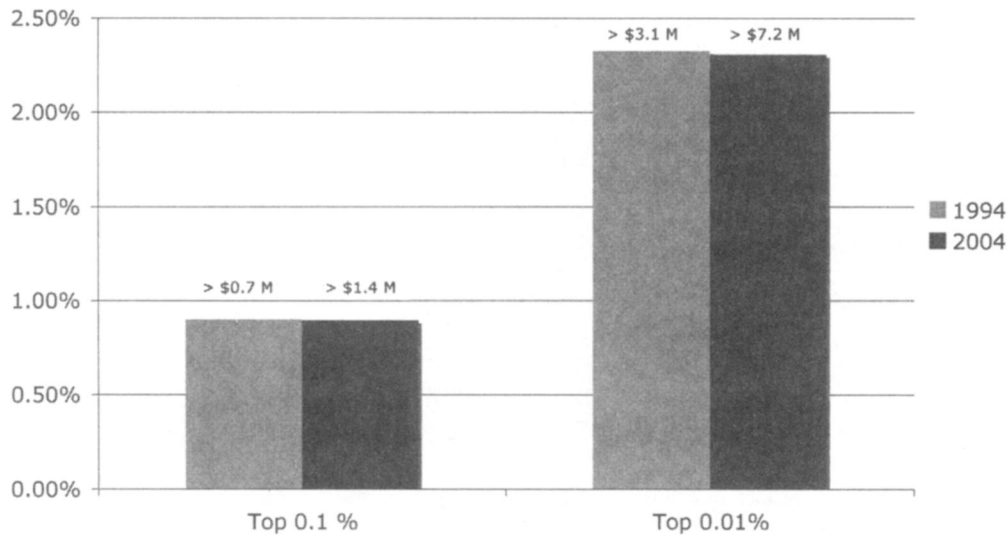
studied this issue and found evidence consistent with this. Kaplan and Rauh (2008) found that while CEOs have done well, so have several other fortunate and talented groups. In fact, several of those groups have done better than the CEOs. In other words, the increase in CEO pay is a factor in the increase in income inequality at the very top end of the income distribution. It is not, however, the driver of that inequality.

Figure 5 provides a good example. It presents the top 10 incomes in 2005 for three groups. The first is the top 10 highest paid hedge fund managers. The second is the top 10 highest paid S&P 500 CEOs using estimated/ex ante pay. The third is the top 10 highest paid S&P 500 CEOs using actual/realized pay. As the figure makes clear, CEOs are not the only fortunate group. In fact, the top 20 hedge fund managers earned more in 2005 than all 500 S&P 500 CEOs combined, measured using both estimated pay and actual pay.

Kaplan and Rauh also considered how well off CEOs and top executives were in 2004 (the most recent year with good data available when we wrote the paper) compared to 1994 (the first year in which good data were available) relative to other top earners. To do this, we compared the fraction of the top income brackets occupied by

CEOs in those two years. By the measure of estimated pay—the pay the board expected to pay—public company CEOs were no more fortunate in 2004 than they were in 1994. Figure 6 reports the fraction of the top Adjusted Gross Income (AGI) brackets comprised by public company CEOs tracked by the ExecuComp database in 1994 and 2004. The ExecuComp database covers roughly 1,700 companies in both years. The figure shows that the top bracket (top 0.01%) increased a great deal, from \$3.1 million to \$7.2 million, in that period. The share of ExecuComp CEOs in that top bracket, however, remained constant, with the CEOs representing roughly 2% of the very top income bracket (top 0.01%) in both 1994 and 2004. We obtained similar results when we used all executives (not just CEOs) in ExecuComp. The results also appear to be similar using 2005 or 2006 CEO pay. The point here, again, is that CEOs are not the only ones who are earning more.

Figures 7 to 9 provide an indication of other groups that have done extremely well over this period: hedge fund, private equity, and venture capital investors; investment bankers; and lawyers. Figure 7 documents the estimated increase in hedge, venture capital, and private equity fund fees over time. Hedge fund fees have grown from

Figure 6**ExecuComp CEOs in Top AGI Brackets in 1994 and 2004 Using Estimated/Theoretical Pay**

Source: Kaplan and Rauh (2006)

less than \$4 billion in 1994 to \$30 billion in 2005. By comparison, the total pay of S&P 500 CEOs grew from \$1.6 billion in 1994 to \$5 billion in 2005 using estimated pay. Because of lack of transparency, it is impossible to know exactly how those fees are divided among individuals. But as Figure 5 indicates, much of that increase has gone to a few fortunate individuals.

Figure 7 also documents the increase in expected fees to private equity and venture capital investors. According to these estimates, the fees increased from \$5 billion in 1994 to \$30 billion in 2005. And our calculations likely understate total fees. Again, a lack of transparency makes it impossible to calculate exactly how these increased fees are divided.

Figure 8 compares our estimates of top investment banker pay to the pay of all top executives in the ExecuComp database. We compare roughly 7,500 top executives of nonfinancial public companies to our estimate of 10,000 managing directors and highly paid investment bankers in 2004. (We exclude CEOs of financial companies because a number of the highly paid ones run investment banks.) Figure 8 indicates that the investment bankers comprise a greater fraction of the top 0.1% and top 0.01% of the income distribution.

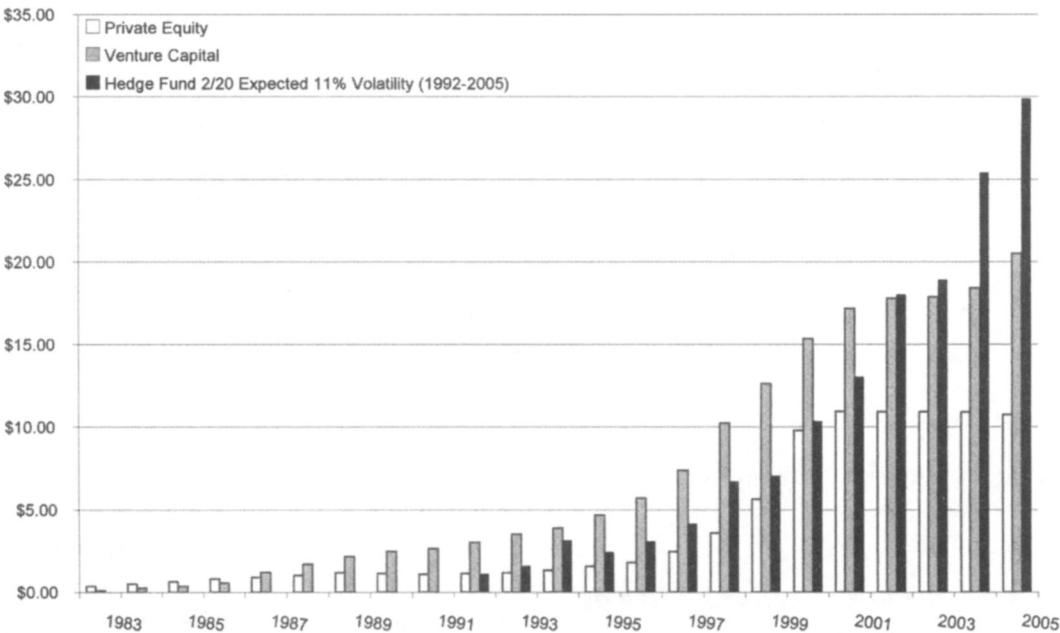
Figure 9 shows that lawyers also have done extremely well over the period from 1994 to 2004.

According to an *American Lawyer* survey, the average partner at a top 50 law firm increased his or her income from \$0.6 million in 1994 to more than \$1.2 million in 2004 (using 2004 \$). And there were almost 50% more partners. As a result, we estimate that lawyers also increased their presence substantially in the top 0.1% of the income distribution.

Finally, we obtain similar results when we compare pay in 1995 and 2004 for professional athletes in baseball, basketball, and football. In 1995, fewer than 40 professional athletes earned more than \$5 million. In 2004, more than 350 did. Like the other groups, professional athletes increased their presence in the very top of the income distribution.

The point of these statistics and exhibits is that while CEOs earn a great deal, they are not unique. Other groups with similar backgrounds and talents—particularly hedge fund, venture capital, and private equity investors; investment bankers; and lawyers have done at least as well over the last 10 or 15 years. The increase in pay at the top appears to be systemic. Rising CEO pay, therefore, appears to be part of (not the cause of) the general increase in economic inequality that we have seen in the last several decades. The compensation of these other (non-CEO) groups, undoubtedly, has been driven by

Figure 7
Estimated Private Equity, Venture Capital, and Hedge Fund Fees



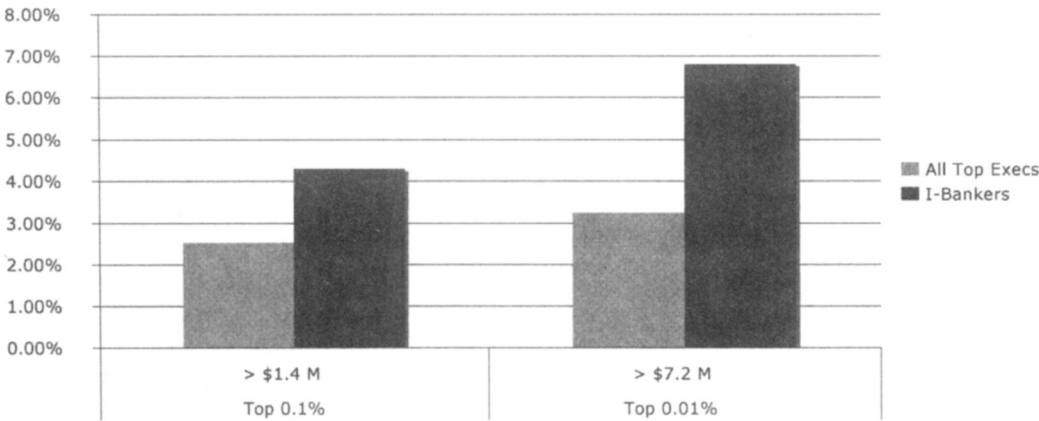
Source: Kaplan and Rauh (2008)

market forces. Given those trends, it seems likely that most if not all of the increase in CEO pay has been driven by market forces as well. In other words, it is very difficult to understand how the pay of investors, investment bankers, and lawyers can increase so much because of market forces at the same time that CEO pay increases largely because of managerial power and cozy CEO-board relationships.

What are those market forces? Our best guess is that changes in technology along with a large

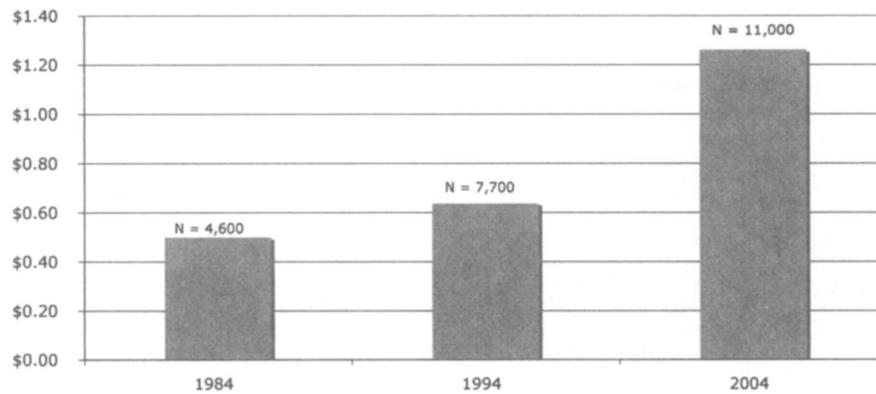
increase in the scale of enterprises and finance have allowed the most fortunate and talented to increase their productivity relative to others. This seems likely to provide some if not much of the explanation for the increase in pay of professional athletes (technology increases their value by allowing them to reach more consumers) as well as Wall Street investors and CEOs (technology allows them to acquire information and trade large amounts more efficiently). Ben Bernanke discussed these issues and appeared sympathetic to

Figure 8
ExecuComp Top Executives (Estimated Pay) and Investment Bankers in Top AGI Brackets in 2004



Source: Kaplan and Rauh (2006)

Figure 9
Average Profits Per Partner at Top 50 Law Firms (in \$2004)



Source: Kaplan and Rauh (2008)

this explanation in remarks on economic inequality.⁵

What Do Boards Do? Are They Controlled by Their CEOs?

According to the critics, managers control their boards and the boards are too friendly to management: Boards do not pay for performance, and boards do not fire CEOs for poor performance. The truth is, in fact, the opposite.

Are CEOs Paid for Performance?

Critics contend that CEOs are not paid for good stock performance. That is just not true. In some cases, the critics confuse estimated or ex ante pay—what the boards give to the CEOs as estimated pay—and actual or realized pay. The key question is whether CEOs who perform better earn more in actual pay. And the answer is yes.

For each year from 1999 to 2004, Kaplan and Rauh (2008) took all the firms in the ExecuComp database and sorted them into five groups based on size (assets). We did this because it is well established that pay is tied to firm size. Bigger firms do pay more. Within each size group for each year, we sorted the CEOs into five groups based on how much compensation they actually realized. We then looked at how the stocks of each group performed relative to their industry over the previous three years. (The results are qualitatively

and statistically identical if we use one year or five years.)

Figure 10 presents the results. Actual compensation is highly related to firm stock performance. Firms with CEOs in the top quintile of actual pay are the top-performing quintile relative to their industries in every size group. Firms with CEOs in the bottom quintile of actual pay are the worst-performing quintile relative to their industries in every size group. And the magnitudes of the performance differences are large.

There can be no doubt that the typical CEO in the United States is paid for performance.

Are CEOs Fired for Poor Performance?

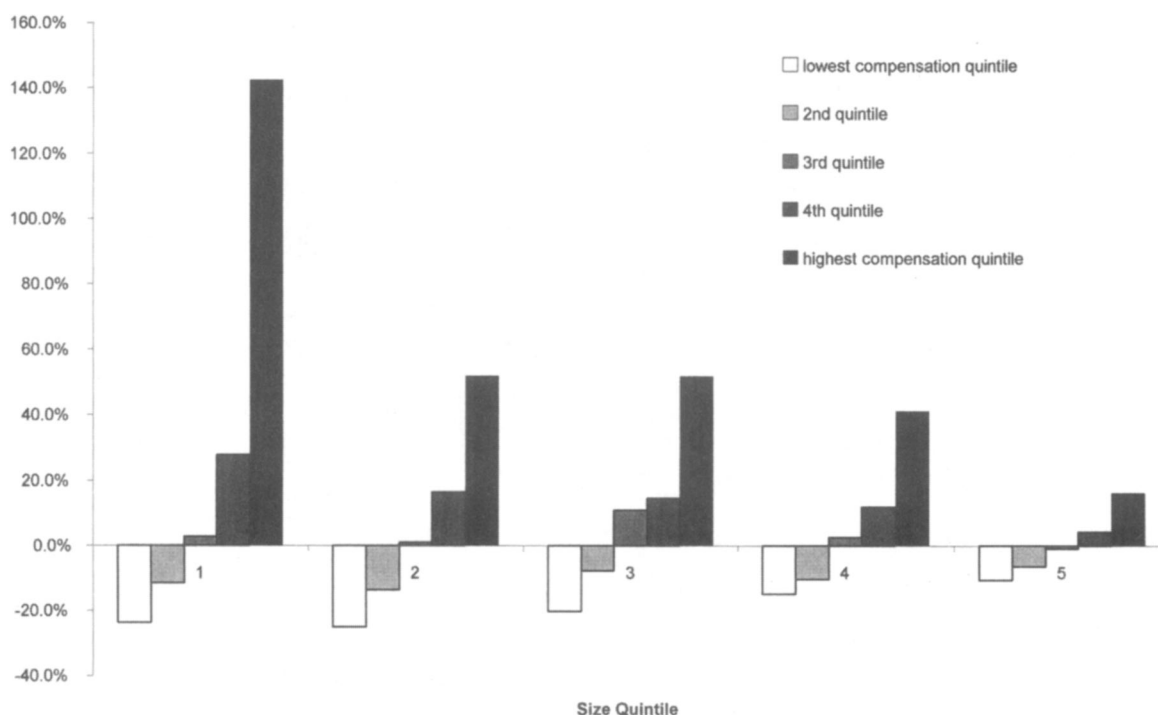
Critics contend that boards are too friendly to management. Is that true? Bernadette Minton and I studied CEO turnover in Fortune 500 firms from 1992 to 2005 (Kaplan & Minton, 2008). We considered all turnover, both internal and turnover that occurs through takeover and bankruptcy. We then looked at how turnover varies with firm performance.

Two patterns emerged. First, turnover levels since 1998 have been substantially higher than those found by previous work that studied previous periods. The CEO job is riskier today than it has been in the past. Second, CEO turnover is strongly related to poor firm performance.

Figure 11 shows the likelihood that a CEO lost his or her job in a given year from the 1970s through 2005, excluding takeovers. The data for the 1970s and 1980s are taken from Murphy and

⁵ Ben Bernanke, "The Level and Distribution of Economic Well-Being," Federal Reserve Board, February 6, 2007.

Figure 10
Three Year Performance Relative to Value Weighted Industry CEOs Only



Source: Kaplan and Rauh (2008)

Zabojnik (2005). Not counting takeovers, 10% of CEOs turned over each year. We found a similar percentage through 1997. Since 1998, however, turnover has increased substantially. Not counting takeovers, 12.8% of CEOs turned over each year from 1998 to 2005.

When takeovers are included, the numbers are even greater. Figure 12 shows that since 1998, an average of 16.5% of CEOs of Fortune 500 companies lost their jobs each year. This means the average CEO can expect to have the job for only six years. Thirty years ago it was closer to ten years.

Next, we considered how CEO turnover is related to firm stock performance. We divided that performance into the performance of the firm's industry and performance relative to the industry. We found that board-driven CEO turnover is strongly related to both. CEOs are more likely to lose their jobs when their firms perform poorly relative to the industry and when their industries perform poorly. And the relationships are meaningful. These relations have been particularly strong since 1998–2005. This result is not driven

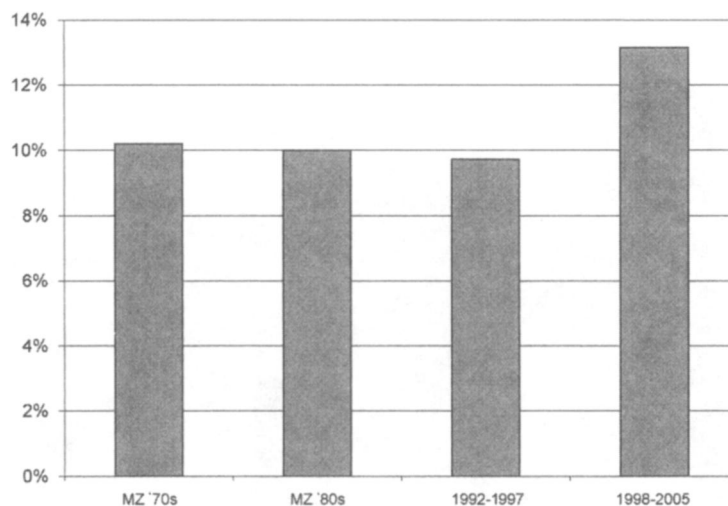
by the firms involved in scandals; i.e., the result is driven by boards, possibly pressured by institutional shareholders and hedge funds.

The bottom line is that since 1998, annual CEO turnover has been higher than at any time since 1970. The job is riskier. And turnover initiated by the board is significantly related to industry stock performance and firm stock performance relative to the industry, i.e., CEOs face significant performance pressure. This is consistent with corporate governance systems/boards having performed better in their monitoring role from 1998 to 2005 than in any previous period.

What About Pensions and Severance Payments?

Pensions received a great deal of attention when the large accumulated pensions of Pfizer's Hank McKinnell and Exxon's Lee Raymond were revealed. While the CEO pay numbers above do not include pensions, including pensions is unlikely to change the results appreciably for the typical CEO.

Figure 11
Internal CEO Turnover from 1970–2005 by Sub-period



Source: Kaplan and Mintor (2008) and Murphy and Zabochnik (2004)

Sundaram and Yermack (2006) studied the value of CEO pensions for a sample of Fortune 500 companies. They found that the annual increment to pension value is less than 10% of total pay on average. The annual increment is appreciably smaller for the typical or median CEO. In other words, annual pension income increases the incomes estimated previously by a small amount for the typical CEO. In addition, it is not clear that these pensions have increased over time. Based on this evidence, McKinnell and Raymond appear to represent extremes on the distribution of pensions.

It also is likely that in the future, boards will make less use of these types of pension plans when they are not appropriate. The adverse shareholder reaction and the improved disclosure of top executive pay now required by the SEC will likely lead to such a result.

The compensation numbers above also exclude severance agreements. The media and shareholder activists have focused on some of the more egregious examples of these agreements. Again, the average or median case is quite different from the extremes. Yermack (2005) looked at severance agreements in 179 instances of CEO turnover in Fortune 500 companies. The mean separation payment was \$5.4 million (compared to average pay of \$8.1 million), while the median was \$0.7 million (compared to median pay of \$4.8 million).

Most observers would be surprised that these numbers are not larger. The disparity between the mean and the median indicates that the mean is driven by a few large (and well-publicized) separation payments.

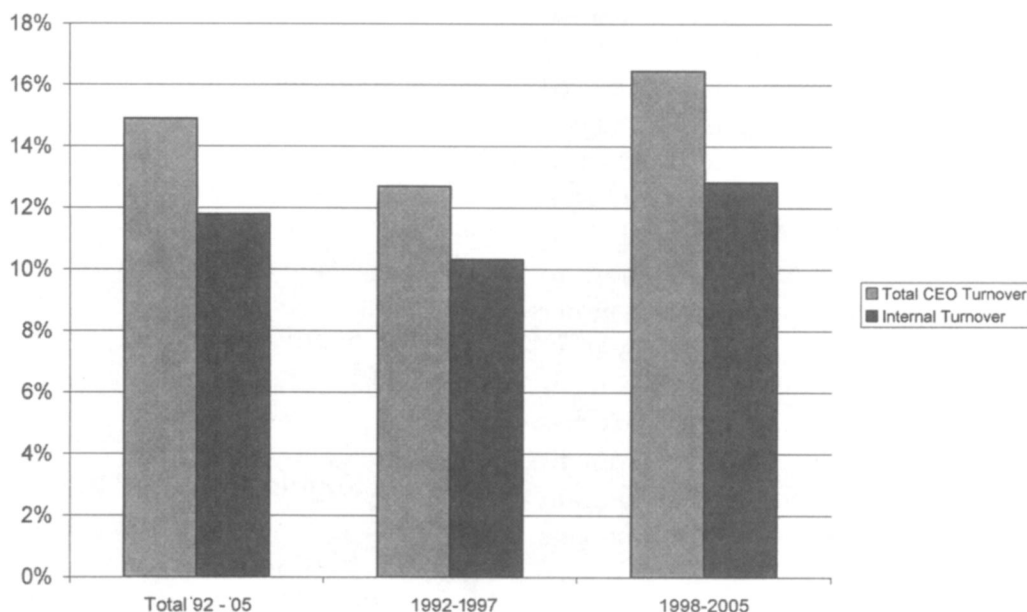
Again, as is the case with pensions, it seems probable that boards will respond to adverse shareholder reaction and improved disclosure to make less use of severance when it is not appropriate.

Is It Better in the U.K.?

The U.K. is sometimes cited as a model for CEO pay. Shareholders are supposed to be more active in the U.K. And since 2003, U.K. shareholders have been allowed to cast advisory votes on executive compensation packages in public companies. It is not clear what difference this has made.

One academic study by Conyon, Core, and Guay looked closely at similar-size U.K. and U.S. companies in 1997 and 2003. They used the estimated or theoretical value of CEO pay (i.e., the pay the board expected to give in those years). They found that the pay of the U.S. CEOs increased by less than 25%, from \$3.6 million to \$4.5 million in that period. At the same time, the pay of U.K. CEOs increased by almost 100%, from \$1.3 million to \$2.5 million.⁶

⁶ Conyon, Core, and Guay (2006).

Figure 12**Annual Internal and Total CEO Turnover Fortune 500 from 1992–2005 by Sub-period**

Source: Kaplan and Minton (2008)

According to a recent *Wall Street Journal* article, the trend may have continued.⁷ The article reported that from 2003 to 2005, CEO salaries and bonuses increased by 35% in the U.K. (ISS UK) versus 14% in the U.S. (Mercer).

If Public Company CEOs Are So Overpaid, Why Do They Leave Public Companies?

At this point, I have presented the following facts:

- Average CEO pay has declined or been flat since 2000/2001.
- While CEO pay has gone up a great deal since 1994, CEOs occupy roughly the same place in the overall income distribution as in 1994. Pay of other similarly fortunate and talented individuals has gone up at least as much since 1994.
- Actual CEO pay is strongly related to stock performance.
- CEO turnover is up substantially. The CEO job is less secure than it has been since at least 1970.
- CEOs face more performance pressure from

their boards than they have in any period since 1970.

- U.S. CEO pay appears to have gone up by less than pay for U.K. CEOs since 1997.
- At the same time, CEOs and boards have had to implement the new Sarbanes-Oxley regulations. A number of CEOs and directors have complained that the costs involved in some aspects of Sarbanes-Oxley exceed the benefits. According to some, Sarbanes-Oxley has led to more bureaucracy and compliance at the expense of strategy and value creation.

All of these factors suggest that the CEO job has become increasingly difficult and less pleasant. One might be tempted to argue that good CEOs are not overpaid, but underpaid. In fact, the *New York Times* presented exactly this argument. In January 2007, Andrew Ross Sorkin and Eric Dash reported:

Flush with hundreds of billions of dollars, private equity firms are beginning to offer compensation on a previously unimaginable scale to the chief executives who run the once-public companies that the firms have bought out. . . . This willingness to pay big money may bolster the argument of defenders of corporate pay practices who have contended that

⁷ White and Patrick (2007).

companies have simply been paying the going rate in the market to attract top talent.⁸

And 2006 and 2007 saw an unprecedented volume of private equity activity. While liquid (perhaps overly liquid) financial markets played an important role (see Kaplan and Stromberg, 2008), this activity would not have occurred without the participation of public company CEOs. If they were so overpaid as public company CEOs, it is hard to explain why so many CEOs chose to work for private equity-funded companies—either by taking their own companies private or by leaving their companies to work for others. As mentioned earlier, while private equity activity has slowed as this paper is written amid the credit woes of 2008, it seems likely that CEOs will again be attracted to private equity when debt markets recover.

It also is worth pointing out that in hiring the CEOs at higher pay, the private equity investors cannot have felt that the CEOs were overpaid. Private equity investors are strongly motivated to make profits, and any extra compensation to a CEO reduces the investor's profit. In addition, private equity investors control the boards of their firms, so the negotiations are arm's-length.

An interesting example is David Calhoun, a well-regarded vice chairman at General Electric (GE). He ran a unit that generated \$47 billion in sales—about one quarter of GE's sales. Undoubtedly, he would have been an attractive candidate to become the CEO of GE or a host of other public companies. Instead, he agreed to become the CEO of a private equity-funded company with only \$5 billion in sales, VNU Group (which owns A.C. Nielsen). If good public company CEOs were overpaid, it is difficult to explain why he would choose to run a much smaller private equity-funded company.

In addition to going to work for private equity-funded companies, some of the more successful public company CEOs have gone to work for the private equity firms as investors or advisers. These include Lou Gerstner of IBM at Carlyle, Ed Artzt

of P&G at KKR, Jack Welch of GE at Clayton Dubilier, Larry Bossidy of Honeywell at Aurora, and Jim Kilts of Gillette at Centerview. There is no doubt that many of these CEOs would be welcome as CEO by many public companies, yet they are choosing not to work for public companies.

In other words, the criticism of public company CEOs may have a cost. CEOs can and will leave public companies to do something else. And it is the better CEOs who will tend to do so. This leaves more private companies with less transparency and leaves public companies with less able CEOs.

Is More Regulation of CEO Pay a Good Idea?

The facts above call into question the claims that CEOs are overpaid, that CEOs are not paid for performance, and that boards are dominated by their CEOs. In fact, the evidence indicates that good CEOs in U.S. companies may be underpaid at this point. Furthermore, the performance of the U.S. economy is consistent with a system that has performed well, not one that has performed badly.

As mentioned earlier, three other recent changes in the current corporate governance system are likely to exert pressure to reduce any remaining inappropriate pay practices: the SEC's new disclosure rules, the increased pressure from hedge funds, and the prevalence of majority voting for directors.

Given all of the above, it is difficult to understand why increased regulation of CEO pay is warranted or desirable at this time. This is particularly true of the "Say on Pay" bill passed by the House of Representatives in 2007, which would mandate an advisory shareholder vote on executive compensation for every U.S. company every year. If passed, this bill would impose costs on companies with little additional benefit.

Let's look at the current rules and what the proposed law would change. Under current rules, all companies must provide detailed disclosures of top executive compensation. This is like sending all companies through the X-ray machine at the airport. When shareholders believe a company has CEO pay problems (i.e., the X-ray identifies a

⁸ *New York Times*, January 8, 2007. "Private Firms Lure Chief Executives with Top Pay," by Andrew Ross Sorkin and Eric Dash. Available at <http://www.nytimes.com/2007/01/08/business/08private.html?emc=eta1>.

potential problem), shareholders can ask a company to have a nonbinding shareholder vote on executive compensation in its annual proxy. The shareholder vote tells the board whether there really is an important problem (just as a physical search determines whether there is a real problem at the airport). On the other hand, when a company has no problems (nothing appears on the X-ray), nothing happens. It is worth pointing out that the vast majority of "Say on Pay" votes have failed to garner a majority of shareholder votes. In other words, even companies that had a problem in the "X-ray machine" did not have a problem in the "physical search."

Under the "Say on Pay" bill, all companies would have a shareholder vote. So companies with potential problems would be identified and would have a vote. That is effectively what happens today. However, companies with no problems would be forced to have a vote as well. Despite the fact that there are no problems, shareholders of these companies (which include the vast majority of companies) would have to spend time and effort to determine their votes. Similarly, boards of these companies would have to spend time and effort managing the process. This is equivalent to forcing all passengers at the airport to go through the X-ray machine and then submit to a physical search even if the X-ray showed nothing. Imagine the lines at the airport, the extra TSA employees who would have to be hired, and the unnecessary costs. In a similar way, the "Say on Pay" bill, if passed, would absorb time and attention and impose unnecessary costs on good companies. If Congress persists in pursuing the "Say on Pay" bill, it would make sense for the bill to allow shareholders to opt out of an annual shareholder vote on pay. One suspects that at many companies, a majority of shareholders would vote to do so.

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