

Is there a case for regulating executive pay in the financial services industry?

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Abstract

Since at least as early as the 1950s, the press, general public, politicians, and academic researchers have remarked on the high levels of US CEO pay and questioned whether these levels are fair and appropriate, as well as whether executive compensation provides proper incentives. Undoubtedly, executive compensation and incentives will continue to be a hotly debated issue for years to come and we do not contend to settle these disputes in this article. Rather, we begin by highlighting some basic descriptive analysis of CEO pay levels and incentives, in general, as well as a comparative analysis of CEO pay and incentives in the financial services industry. We then describe recent proposals to regulate executive pay in the financial services industry (and more generally), and discuss the merits of such regulation. In summary, although we agree broadly with regulators' views on the principles that should guide executive compensation practices, we believe that many of these principles are already engrained in the typical executive compensation plan. We also have serious reservations about whether several of the regulatory proposals would achieve their stated objectives.

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1. Introduction: The long-standing debate over executive pay and incentives

Since at least as early as the 1950s, the press, general public, politicians, and academic researchers have remarked on the high levels of US CEO pay and questioned whether these levels are fair and appropriate [e.g., Murphy (1999)]. Thus, there has been a long and popular tradition of assailing top management pay as “excessive” as well as claiming that it provides improper incentives. As an example of this view, shortly after his election in 1992, President Bill Clinton signed Internal Revenue Code section 162(m) that limits tax deductibility of executive compensation to \$1 million per covered executive, with an exception for performance-based compensation. This law promised to reign in “excessive” executive compensation (ironically, many have argued that this bill may have instead had the unintended consequence of increasing equity pay, equity incentives, and total compensation). Similarly, in a widely-cited book, Bebchuk and Fried (2004) argue that flawed compensation arrangements have been widespread, persistent and systemic. Moreover, they claim that these deficiencies are symptomatic of defects in the underlying governance structures that allow executives to wield considerable influence over boards. More recently, then senator Barack Obama introduced “say on pay” legislation in 2007 intended to allow shareholders greater ability to influence executive pay (Brush and O’Brien, 2009).

This popular resentment of executive compensation appears to at least partly stem from a perception of growing income inequality. Frydman and Saks (2007) use the ratio of CEO pay to worker pay as a measure of income inequality noting: “A comparison of executive pay to the earnings of a typical worker provides insight into the evolution of earnings inequality at the top of the income distribution (p. 7).” Figure 1, reproduced

from their paper, shows that CEO pay relative to that of average worker pay has increased sharply after 1970 (from a level of about 30:1), rising to approximately 120:1 by 2000. In a similar vein, Piketty and Saez (2003) provide data on the fraction of taxable income earned by the highest 10% of taxpayers. Their data, reproduced in Figure 2, shows an increase in the share of income earned by the top 10% of taxpayers from about 33% in mid-1970s to almost 50% in 2006 (although interestingly, this percentage in 2006 is roughly the same as in the late 1920s and early 1930s). Finally, and more to our focus on financial industry executives, Kaplan and Rauh (2009) examine the proportion of 2004 taxable income earned by various groups of high income individuals (specifically individuals in the top 0.1% tax bracket). They find that CEOs and other highly compensated executives of nonfinancial companies comprise 3.9% of this high income bracket. In contrast, investment bankers and fund managers (hedge fund, venture capital, and private equity) comprise 5.2% and 4.8% of this bracket, respectively. Thus, the financial services industry has a substantial share of very highly compensated individuals in the United States.

In addition to arguing that executive pay levels are too high, critics of current executive compensation practices also argue that pay-for-performance is largely absent in executive compensation plans. These arguments appear to stem in part from the observation that executives typically receive a substantial amount of annual pay even in years when earnings and stock returns are poor, as well as a belief that executives have too much freedom to unwind their equity incentives (i.e., to exercise stock options and sell stock).

The debate over executive compensation, however, is not one-sided. For example, Core, Guay and Thomas (2005) and Kaplan (2008) examine several of the frequent complaints about executive compensation, and argue that many of these concerns are either incorrect or overstated. These authors point out that market forces heavily influence executive compensation, that US executives have substantial pay-for-performance as a result of their holdings of stock and options, and that pay-for-performance for US executives is typically much larger than for executives in any other country. Finally, they point out that contracts with executives in many cases anticipate and try to minimize costs stemming from managerial power and other agency conflicts.

Undoubtedly, executive compensation and incentives will continue to be a hotly debated issue for years to come and we do not contend to settle these disputes in this article. Rather, we begin by highlighting some basic descriptive analysis of CEO pay levels and incentives, in general, as well as a comparative analysis of CEO pay and incentives in the financial services industry. We then describe recent proposals to regulate executive pay in the financial services industry (and more generally), and discuss the merits of such regulation. In summary, although we agree broadly with regulators' views on the principles that should guide executive compensation practices, we believe that many of these principles are already engrained in the typical executive compensation plan. We also have serious reservations about whether several of the regulatory proposals would achieve their stated objectives.

2. Is CEO pay excessive?

In absolute terms, US CEOs are highly paid. However, many types of individuals are highly paid: e.g., hedge fund managers, doctors, lawyers, athletes, musicians, actors, etc. Thus, one needs to provide more than just dollar amounts of pay to make a convincing argument against existing pay practices. We observe two general approaches to explore the issue of whether US CEO pay is “too high.” One approach argues that the pay-setting process for CEOs is flawed due to various problems with corporate governance. And, if the pay-setting process is flawed, one can readily extrapolate that CEO pay levels and incentives are also expected to be flawed. Another approach is to abstract away from the details of the pay-setting process, and to compare CEO pay levels with various benchmarks. We briefly discuss this latter approach in the next section, and discuss the former approach later in the article when we address recent regulatory proposals to “fix” executive pay.

To begin, we note that much of the angst about CEO pay is targeted at CEOs of large corporations (CEOs at small corporations are not the ones attracting attention for multi-million dollar bonuses, large severance packages and pension plan payouts, etc.). While CEO pay at large firms has grown considerably over time, so has the size of the large firms that these CEOs manage. Figure 4, reproduced from Frydman and Saks (2007), compares the growth in compensation of S&P 500 CEOs with the growth in the S&P 500 firm index over time. It can be seen that the sharp growth in executive compensation after the 1970s is accompanied by a similar growth in the stock market value of firms. Economic theory predicts that larger firms are more difficult to manage and will demand more talented CEOs (Gabaix and Landier, 2008). Thus, growth in executive compensation may, at least in part, stem from the fact that, not surprisingly,

large US corporations are much larger (and arguably more complex) today than they were thirty years ago. Gabaix and Landier (2008) provide some empirical evidence consistent with this hypothesis that when the average firm is larger, executive pay is higher.

Another benchmark for the compensation of top US executives might be fees earned by managers that run businesses other than publicly-traded corporations, such as managers of hedge funds or private equity firms. In 2005, aggregate total pay received by the top-five executives across all exchange-traded firms in the US was approximately \$50 billion. These firms had a total market capitalization of roughly \$20 trillion. Therefore, total pay as a proportion of market value is about 0.25%, which suggests an “asset management fee” of 0.25% for the top-five executives. By way of comparison, this percentage is significantly smaller than the 2% of assets managed and 20% of the profits commonly charged by hedge funds and private equity firms (it is also smaller than fees charged by almost all actively managed mutual funds). To be fair, this comparison is clearly not “apples-to-apples,” in the sense that hedge fund, private equity, and mutual fund fees may include compensation for more than just five executives, as well as administrative costs. At the same time, one might argue that a multi-national corporation is a considerably more complex organization to manage than many of these other types of firms. Regardless, asset management fees provide an interesting comparison to US executive pay.

Still another benchmark might be CEO pay in countries outside of the US. Conyon, Core and Guay (2009) use the United Kingdom as a benchmark against which to examine whether CEO pay in the United States appears unusually high (in supplemental

analysis, they also compare US CEO pay with CEO pay in other, non-UK, European countries). They note (p. 2): “[The US and UK] economies share important governance features, but the UK is generally considered to be less afflicted by problems of excessive executive compensation.” Conyon et al. find that median US CEO Pay in 2003 (defined as the sum of salary, bonus, grant date value of restricted stock and options, and benefits and other compensation) was about 40% greater than for UK CEOs (see Figure 5). They note, however, that executives are expected to demand greater pay when their compensation is subjected to greater risk through greater equity performance incentives. They go on to show that US CEOs bear substantially greater equity risk than UK CEOs (or equivalently hold much more equity performance incentives), where equity risk in the Figure is measured as the sensitivity of the value of the CEO’s stock and option portfolio to a 10% change in stock price. Specifically, US CEOs bore more than five times the equity incentive risk of UK CEOs (see Figure 5). Further, Conyon et al. (2009) find that after making a risk adjustment to total pay for differences in equity incentives (and for a range of assumptions about CEO wealth and risk aversion), there is no evidence that US CEOs’ risk-adjusted pay is significantly greater than that of UK CEOs.

In summary, we do not expect the debate over excessive executive pay in the US to end soon. But, it is important to recognize the difference between a two-sided social and economic debate, and policy-setting based on only one side of the debate. It appears to us that current regulations are based on arguments from the side of the debate that asserts US CEO pay is too high and US CEO performance incentives are too low. However, as we have begun to discuss above and will more clearly illustrate below, these assertions do not appear well-supported by evidence.

3. Are CEO pay and incentives in the financial industry unusual?

We turn now to consider CEO pay in the financial services industry. Although one might explore many aspects of financial executives' pay, we begin by exploring whether there are differences in the compensation structure for financial industry CEOs vis-à-vis CEOs of non-financial firms (as we discuss briefly below, one might also consider whether there *should* be differences in CEO pay across these industries). We focus our analysis on 2006, the year before the credit crisis began. For this analysis we rely on CEO compensation as reported by Standard and Poor's Execucomp database. We first identify "banks" as financial firms with SIC codes between 6000 and 6300. Following Fahlenbrach and Stulz (2009), we then exclude firms in this industry group that are mostly concerned with investment advice, pure brokerage business, or wire transferring and do not match well with the definition of lending institutions. The resulting sample of 92 firms in 2006 includes both banks and investment banks. We then define "non-financial" firms as those firms not having a one-digit SIC code that begins with six. Each year, we match each financial firm to a similar non-financial firm using a propensity score procedure that controls for beginning of year market value, stock-return performance, stock-return volatility, and CEO tenure. These characteristics have been shown in prior research to explain CEO pay and incentives. By matching firms on determinants of CEO pay and incentives, any observed differences in pay and incentives between financial and non-financial firms are expected to be attributable to differing compensation practices across these industries.

We begin in Figure 6 by showing a comparison of median total CEO pay over the period 1992 to 2006 for the banks and matched sample of non-financial firms. Total annual pay for the firm's CEO is defined as the sum of salary, bonus, grant date value of restricted stock and options, and benefits and other compensation. It can be seen that the trends in median total CEO pay for banks and non-financial firms are fairly highly correlated, with no persistent difference in pay levels across the two groups (bank CEO pay is somewhat higher in the 1992-2002 period, but is somewhat lower in the 2003-2006 period).

Next, Figure 7 compares the total annual pay and the equity incentive structure of CEOs of banks and non-financial firms in 2006, the year before the credit crisis began. CEO performance incentives are measured as the change in the value of the CEO's stock and option portfolio for a 10% change in the stock price. Risk-taking incentives are measured as the change in the dollar value of the CEO's option holdings for a 10% change in the volatility of the stock price.¹

Figure 7 shows that bank CEOs received about 35% less annual pay in 2006 than CEOs of matched non-financial firms. Further, bank CEO performance and risk-taking incentives are slightly smaller than that of the matched non-financial firm CEOs. Figure 8 replicates this analysis after restricting the sample to the 24 largest banks and their corresponding matched non-financial firms. In this subsample, the results flip. The CEOs of these large banks received 24% greater pay in 2006, but also have greater performance

¹ Note that CEO stock holdings are not included in the computation of risk-taking incentives. Empirical evidence in Guay (1999) and Parrino and Weisbach (1999) illustrates that risk-taking incentives stemming from stock holdings are typically small, except in firms with a high probability of financial distress. Although most of the sample firms examined here were healthy in 2006, clearly many of the banks are now suffering financial difficulty. Given this fact, we return to this issue of risk-taking incentives stemming from CEO stock holdings below.

and risk-taking incentives. Thus, it may be important to distinguish between executives of smaller banks vs. executives of larger banks when drawing inferences or making recommendations regarding executive pay.

Note that a key feature of the incentive measures in Figures 7 and 8 is their focus on incentives stemming from holdings of stock and options, as opposed to incentives stemming from year-to-year changes in annual pay. It is frequently (but incorrectly) believed that many top executives have weak performance incentives because their annual pay is not highly sensitive to recent firm performance (i.e., that annual pay for many executives is still quite substantial even in years where earnings or stock-price performance is poor). It is well documented, however, that the majority of the typical CEO's performance incentives comes from significant holdings of stock and options, as opposed to changes in annual pay (see Jensen and Murphy, 1990; Hall and Liebman, 1998; Core, Guay and Verrecchia, 2003; Core, Guay, and Thomas, 2005). For example, consider the case of the large banks shown in Figure 8, which shows that for the median large bank CEO, the value of his or her stock and option portfolio will change by about \$13.4 million for a 10% change in the stock price. If the stock price drops by 20%, the value of the CEO's equity portfolio will fall by about \$26.8 million.² Regardless of whether annual pay declines as well, the CEO has been strongly punished for a declining stock price.

We also compare the structure of annual pay for bank CEOs and non-financial firm CEOs. Figures 9 and 10 break down CEO pay into cash pay (salary and bonus),

² Note that the incentives reported in Figures 7 and 8 reflect the change in stock and option portfolio values for a marginal change in stock price and volatility. For discreet changes, such as a 10% or 20% change in stock price, the marginal sensitivities are only rough approximations because the payoffs from stock options are a nonlinear function of the stock price.

equity based pay (restricted stock and option grants), and other pay in year 2006 for the full bank sample and the large bank samples, respectively. The figures also present the pay breakdown for the matched non-financial firm CEOs. For the full sample of banks, Figure 9 shows that bank CEOs receive a greater proportion of their pay in the form of cash, and that CEOs of non-financial firms receive a greater percentage of pay in the form of equity. For the sample of large banks, Figure 10 shows just the opposite, with large bank CEOs receiving a greater proportion of pay in the form of equity (and a somewhat smaller proportion of pay in cash). Importantly, Figures 9 and 10 illustrate that equity pay is the single largest component of CEO compensation (for both banks and non-financial firms), with the proportion of equity being greatest among large banks. Overall, the analysis suggests that the compensation and incentive structures of bank CEOs are similar to that of CEOs of non-financial firms.

As a final point, we note that critics of US CEO compensation and incentives frequently argue that equity pay has a limited effect on building CEO incentives because of too short vesting requirements as well as the relative ease with which CEOs can “unwind” their equity incentives through option exercises and stock sales (e.g., Bebchuk and Fried, 2009). Such arguments, however, are not consistent with the empirical evidence. First, as noted above, US CEOs hold substantially more equity than CEOs in any other country. Second, US CEOs hold substantial amounts of equity well after vesting requirements have lapsed. For example, Core, Guay and Thomas (2005, Table 3) illustrate that vested stock and options account for more than half of all equity holdings by S&P500 US CEOs from 1993-2003.

Finally, Fahlenbrach and Stulz (2009) examine the possibility that bank CEOs cashed out of their equity positions in advance of the recent financial crisis. They investigate the insider trading of bank CEOs in 2007-2008 and find no evidence that CEOs attempted to liquidate their equity positions in the period leading up to the credit crisis. Instead, on average, CEOs in their sample lost \$30 million in stock and option value, and the median CEO lost over \$5 million.

5. Is there a case for regulating executive compensation?

5.1 Recent regulation and proposals?

The credit crisis has triggered a flood of proposals from various sources to regulate executive compensation, particularly within the financial services industry. In his statement on June 10, 2009, Treasury secretary Timothy Geithner proposed five principles that he intended to (1) to better align compensation practices with the interests of shareholders, and (2) promote the stability of firms and the financial system: The principles are as follows: First, compensation plans should properly measure and reward performance. Second, compensation should be structured to account for the time horizon of risks. Third, compensation practices should be aligned with sound risk management. Fourth, golden parachutes and supplemental retirement packages should be reexamined to determine whether they align the interests of executives and shareholders. Fifth, transparency and accountability are encouraged in the process of setting compensation.

Mr. Geithner's proposed executive compensation principles seem quite straight forward and non-controversial, so much so in fact, that it seems plausible that existing compensation practices already largely conform to such principles. These principles all

appear to be consistent with compensation practices that would serve to maximize shareholder value, which is essentially the objective for executive compensation stated by every corporate board for every publicly-traded corporation in the US. Further, over the last two decades, great strides have been taken by firms and regulators toward improvements in executive compensation disclosure and transparency, as well as the independence of directors sitting on compensation committees.

In general, it appears to us that most rhetoric favoring additional executive compensation regulation does not rely on evidence or careful analysis as to why existing compensation practices are flawed (since there is little clear evidence that arrangements are systematically flawed). Rather it seems to rely on arguing backward from the observation that an unfortunate state of affairs is plaguing the banking industry (i.e., when a crisis is observed, one then navigates backwards to find a culprit). Then, based on the long-standing, preferred political idea that certain individuals are paid too much or improperly, one uses the argument that flawed compensation practices must have been partly responsible for the financial crisis. This specious logic is then harnessed to impose a preferred political change.

Bhagat and Romano (2009, p.2), in their proposal to regulate bankers' pay, provide an example of this type of argument:

In particular, the best available evidence suggests that the more questioned forms of incentive compensation did not affect financial institutions' performance during the financial crisis and therefore it is improbable that they were key contributing factors to the global credit crisis. That being said, executive compensation is a perennial media flash point in democratic politics that lends itself easily to political grandstanding, and the current financial crisis is no exception, as it is self evident that there were egregious instances where financial institutions' executives and traders did extremely well for themselves while taxpayers have or will be picking up the check. Given an environment in which

there is widespread political unease over executive compensation, we advance in this article what we consider to be a superior regulatory approach ...

In essence, they agree that there is no relation between pay and the financial crisis, but note that pay bothers a lot of people and politicians, and that therefore they will propose a way of regulating it.

We would also suggest that if one believes that executive compensation practices are flawed, a natural first step would be to direct attention toward those responsible for the pay-setting process, i.e., the board of directors and its compensation committee, rather than to indirectly attack the problem by regulating the outcomes of the board's decision-making process. And, further to this point, if one were to determine that the decision-makers in the compensation setting process were competent and aligned with shareholders, this would tend to call into question whether, in fact, executive compensation practices were indeed flawed (unless one takes issue with the premise that boards should be aligned with shareholders, which may be reasonable in settings where taxpayers' or the general public's interests conflict with those of shareholders).

On June 10, 2009, the Treasury Department issued an interim final rule on the Troubled Asset Relief Program (TARP) establishing standards for regulating compensation practices at firms receiving government assistance (where the number of employees subject to the regulations depends on the amount of TARP assistance received). Broadly speaking, the new rules require the following:

- 1) salary payments are not restricted, but salary payments above \$500,000 are encouraged to be in the form of vested stock with sales restrictions.
- 2) bonuses are limited to 1/3 of total compensation and must be paid in restricted stock.

- 3) clawback provisions on any bonus subsequently determined to have been earned based on materially inaccurate financial statements or performance metrics.
- 4) severance and change in control payments are prohibited for the most highly compensated executives.
- 5) increase disclosure on perquisite consumption, and require firms to adopt a luxury expenditure policy.
- 6) tax gross-ups are prohibited on all forms of compensation.
- 7) must permit an annual non-binding “say on pay” shareholder vote.
- 8) compensation committees must be comprised of independent directors.
- 9) periodic assessment of risk-taking and earnings management incentives.
- 10) appointment of a special master to oversee compensation for the top 100 executives at firms receiving “exceptional financial assistance” from the TARP.

In June, 2009, Kenneth R. Feinberg was appointed as the Treasury Department’s “special master” for overseeing compensation of the five most senior executives and the next ninety-five highest paid employees at the seven firms receiving “exceptional financial assistance” under the TARP (AIG, Bank of America, Citigroup, General Motors Co., GMAC Inc., Chrysler Group LLC and Chrysler Financial). In October, 2009, Mr. Feinberg released proposed compensation arrangements for the five most senior executives and the next twenty highest paid employees of these firms.³ The arrangements closely followed the Treasury Department’s interim final rules (Mr. Feinberg recently

³ In December, 2009, Bank of America arranged to repurchase all of the \$45 billion in preferred shares issued under the TARP program, and was thereby released from Mr. Feinberg’s proposed compensation arrangements.

continued his charge by proposing compensation structures for the next seventy-five highest paid employees at these firms). Upon releasing these proposed arrangements, Mr. Feinberg went further to say, “I’m hoping that the methodology we developed to determine compensation for these individuals might be voluntarily adopted elsewhere,” raising the question of whether and how his compensation plan adjustments might be applied to a broader array of corporations.

5.2 Assessment of recent and proposed regulation

In this section, we assess and critique the recent regulation that has been adopted for firms receiving TARP assistance (and which has been encouraged, at least by Mr. Feinberg, to be adopted by a wider range of firms).

5.2.1 Compensation committee independence

The Treasury Departments’ interim final rules and Mr. Feinberg’s proposed compensation arrangements require the compensation committee that sets executive pay to be comprised solely of independent directors. The firms are also required to disclose details related to advice received by compensation consultants. These requirements certainly seem reasonable, but are already required by stock exchange listing standards, and have been in place at most corporations for several years or more. The relatively minor differences between the existing requirements and the proposed requirements seem unlikely to carry any meaningful significance for most firms.

5.2.2 Restrictions on salary, bonus, and option payments

The TARP restrictions do not appear to place strict limits on the overall level of executive pay (which is an important degree of freedom to maintain if these institutions

are to compete in the market for executive talent).⁴ Rather, the majority of compensation is encouraged to be conveyed through salary paid in the form of restricted stock (which is vested at grant date, but cannot be sold for several years). The movement toward “stock” salary (cash salary is limited to \$500k or less for most executives) is largely created by the additional restriction on bonus/incentive payments to no more than 1/3 of total pay (or equivalently to 50% of salary), which also must be paid in restricted stock. Further, stock options are noticeably absent from the list of acceptable forms of compensation.

The main thrust of these restrictions appears to be an explicit requirement that all aspects of top executive pay be closely tied to future stock price performance; that is, to promote greater equity performance incentives (or at the least to require payments in stock instead of cash). On October 22, 2009, when Mr. Feinberg released his proposed compensation arrangements for the seven exceptional assistance TARP firms, the Treasury Department’s press release attributed the push toward equity compensation as an attempt to, “**Reform** Pay Practices for Top Executives to Align Compensation with Long-Term Value Creation and Financial Stability (emphasis added).” Mr. Feinberg stated, “There is entirely too much reliance on cash and there’s got to be a better way to tie corporate performance to long-term growth.” Further, in his October 22, 2009 letters to each of the exceptional TARP assistance firms proposing compensation payments, Mr. Feinberg repeatedly emphasizes compensation that is explicitly tied to future corporate

⁴ However, TARP participants, as well as market analysts appear to view these proposed compensation restrictions as onerous. For example, on December 2nd, 2009, Bank of America announced it had reached an agreement with the Treasury Department to repurchase all of the \$45 billion in preferred shares issued under the TARP program. In response to their announcement, many press reports and analysts indicated that the early repayment of TARP funds was likely, in part, due to a desire to stave off the pay restrictions imposed by Mr. Feinberg. For example, a Morgan Stanley analyst wrote: “We believe TARP repayment is a significant positive for BAC as it eliminates the competitive disadvantage relative to peers who had already repaid TARP in terms of new business generation, talent retention/attraction and compensation. External CEO candidates may be more likely to talk now that BAC is no longer restricted by the pay czar.” (emphasis added)

performance, and discourages (or prohibits) compensation that is not explicitly performance based.

This push toward greater equity incentives, however, is quite puzzling given the evidence presented above that top US executives hold much more equity performance incentives than top executives in any other country. The majority of top US executives already receive the majority of annual pay in the form of stock, options, or other performance-based pay that carry substantial multi-year vesting restrictions. Further, most top US executives hold large amounts of restricted stock and options well after those equity grants have become vested. Thus, it seems rather implausible that most US executive compensation arrangements suffer from insufficient equity performance incentives. Or said a different way, it is difficult to see how regulators can so confidently infer that US top executives do not already have sufficient equity performance incentives.⁵

Further to this point, we illustrate in Figure 11 how Mr. Feinberg's proposed compensation changes are expected to have a rather small effect in augmenting equity performance incentives for most CEOs in the banking industry. Here we use 2008 data, so that we can see the effect of the proposals using the most current data available (although a drawback is that we only have 2008 compensation data available for 68 banks). We compare banking CEOs' equity incentives at the beginning of 2008 with the incremental equity incentives that these CEOs would receive during that year if they had followed Mr. Feinberg's recommendations during 2008. For this analysis, we assume that

⁵ It is also worth pointing out that extensive theory and empirical evidence emphasizes that executives (or any employee) must be compensated for bearing equity incentive risk. So if more equity ownership is imposed on executives, they must receive higher compensation. If executives are required to hold large amounts of risky equity without compensation, their tendency is to find ways to reduce the risk of their equity, for example, as discussed below, to reject risky projects that even if they are good for shareholders.

total CEO compensation would be held constant under Mr. Feinberg's proposals, but that cash pay is limited to \$500k, with all remaining pay being in the form of stock. We then compare the projected equity pay under Mr. Feinberg's proposal with the equity pay that the banking CEOs actually received during 2008 to gauge the magnitude of incremental equity incentives that the proposal would impose on the CEOs. Finally, we compute the CEOs' existing equity incentives due to their beginning-of-year holdings of stock and options as a multiple of the incremental incentives stemming from Mr. Feinberg's proposal.

Figure 11 shows existing incentives as a multiple of incremental incentives at the 25th, 50th, and 75th percentiles for the banking CEOs. Figure 11 illustrates that the median CEO already has 25 times the incentives that Mr. Feinberg's proposal would have added in 2008 had it been implemented at these banks. At the 75th percentile, this ratio is greater than 80, and even at the 25th percentile, the ratio is 12. Further, these ratios are similar across the 25th, 50th, and 75th percentiles if the analysis is alternatively conducted on the sample of large banks examined in Figures 8 and 10. Overall, Figure 11 suggests that Mr. Feinberg's proposals may have little economically significant effect on overall CEO equity performance incentives.

Further, we note that because Mr. Feinberg's proposals do not appear to address restrictions on executives' ability to rebalance these equity incentives, it is difficult to know how much, if any, incremental equity performance incentives would be imposed by the Feinberg plan (even if one were to consider the effects of the plan after it is adopted for multiple years). For example, consider an executive who holds a large existing portfolio of vested stock and options. If such an executive's compensation is tilted toward

greater equity pay, it is not hard to imagine that the executive might just sell off a portion of his or her existing equity portfolio to maintain the same equity risk that was borne prior to the Feinberg plan (which may well be an acceptable response by executives if equity incentives are already at appropriate levels). For an executive who holds no vested stock or options (or holds out-of-the-money options), the additional equity risk imposed by the Feinberg plan might be more difficult for the executive to avoid. The analysis in Figure 11, however, shows that this scenario applies to relatively few CEOs.

As a final point, and related to the foregoing, note that in this paper we focus on CEOs and CEO incentives. We do this under the assumption that if the CEO has the right incentives, he or she will ensure that his or her subordinates also have the right incentives. This is in fact the way most public corporations operate: the board sets CEO compensation, but delegates to the CEO the operating decision of how to compensate his or her subordinates (with approval by the board). In contrast, the Feinberg approach “micro-manages” compensation. It not only sets CEO pay, but sets pay for ninety-nine of the CEO’s subordinates. This approach likely imposes costs on the subordinates and on the firm. While being forced to hold more stock may have little effect on the CEO (as the above analysis suggests), it may have large effects on lower-level employees who do not own much stock and are now forced to hold it. It may not be in the interests of the firm for these employees to own much stock (if it were, one could argue that they would already hold it). It is optimal for the CEO to have a large ownership stake because he or she is typically the employee with the greatest control and impact on firm performance. In contrast, a lower level executive (e.g., a division president) has substantial control over division performance, but may have very little impact on or control over firm-wide

performance. Increasing this manager's incentives tied to overall firm performance, and likely lowering the relative weight on division performance, quite conceivably will lead the manager to make worse decisions about the division, and lower division and firm profit. An odd feature of Mr. Feinberg's proposal is that he presumes that even if the CEO's compensation and incentives are properly structured, further regulatory action is required to ensure that lower-lever employees have appropriate compensation and incentives.

5.2.3 Clawback provisions

The Treasury Departments' interim final rules and Mr. Feinberg's proposed compensation arrangements require firms to adopt clawback provisions that recoup bonuses paid to executives based on financial statements or performance metrics that turn out to be materially inaccurate (these clawback provisions are somewhat more expansive than the provisions under the Sarbanes-Oxley Act of 2002). It seems difficult to oppose the concept of clawback provisions on principle. At the same time, one might question how significant would be the incremental incentives provided by clawback provisions. Public disclosure of materially inaccurate financial statements is a "big deal" for most corporations, and attracts substantial negative publicity, regulatory scrutiny and legal liability. These egregious infractions typically result in CEOs being substantially penalized both monetarily and by the labor market (e.g., high probability of being fired, substantial loss of reputation, and large wealth declines through stock price effects on stock and option portfolio). As a result of these existing penalties, it is difficult to envision that clawback provisions will provide significant incremental incentives to top

executives that prevent fraudulent financial reporting by top executives (however, clawbacks may be important with respect to lower-level employees where manipulation of performance measures is less likely to garner public scrutiny).⁶

5.2.4 Severance and change in control payments

The Treasury Department's interim final rules prohibit severance and change-in-control payments to top-five executives of all TARP firms during the TARP period. Mr. Feinberg's proposals go further to prohibit additional accruals into these plans for many lower-level executives. As stated in the Treasury Department's October 22, 2009 press release, the concern over these payments is that they, "often serve to enrich executives rather than provide reasonable compensation during unemployment, and often do not enhance the long-term value of a company." This criticism, although likely applicable to some extreme cases, such as Disney's \$130 million severance payment to Michael S. Ovitz, seems unlikely to apply more broadly and is also not supported by theoretical or empirical evidence. Severance agreements can provide needed insurance to attract talented executives that are leaving a successful career at one firm to embark on a new, and potentially risky, career at another firm (although in such cases, a phase out of the severance agreement over time might be appropriate). Severance agreements can also induce executives to be forthcoming in disclosing bad news (e.g. Eissfeldt and Rampini (2004), Inderst and Mueller (2005), and Laux (2005)) and can provide useful risk-taking incentives (Ju, Leland and Senbet, 2002). Further, change-in-control agreements can

⁶ From a practical perspective, clawbacks may also sometimes be difficult to operationalize. Many performance measures used in executive compensation plans are based on financial accounting numbers, and are often tied to multi-year accounting measures. Mechanically, misstated financial accounting performance measures in one period influence financial accounting measures in future periods (e.g., overstated earnings in one period must eventually reverse in a future period). Thus, it can be non-trivial to determine the effect of the misstated performance measures on bonus payouts.

provide incentives for executives to forfeit their own job in the event that selling the company is beneficial to shareholders.

Although the risk-taking incentive benefits of severance agreements may not be appealing to regulators of TARP firms, the benefits related to attracting talented executives and encouraging disclosure of bad news seem particularly important for TARP firms. Given the financial hardship of many TARP firms (as well as the restrictions on compensation plans), attracting high quality executives to TARP firms is likely to be quite difficult. Timely and transparent disclosure of bad news is also critical for TARP firms to allow regulators and investors the greatest amount of time to take action in the event of a firm's collapse. Finally, regarding restrictions on change-in-control arrangements, it is hard to see why the Treasury Department would wish to discourage the sale of distressed firms to other, more healthy corporations (to the contrary, in January Fall of 2008, the Treasury Department and IRS attempted to promote the sale of distressed firms by allowing acquirers to more easily utilize the net operating losses of distressed target firms in the banking industry).⁷

5.2.5 Perquisites and tax gross-ups

The Treasury Departments' interim final rules and Mr. Feinberg's proposed compensation arrangements require firms to adopt an "excessive or luxury expenditures policy," as well as to prohibit tax gross-ups on any forms of compensation for employees covered by Mr. Feinberg's proposals. Further, perquisites exceeding \$25,000 to any covered employee requires extensive disclosure and justification.

⁷ See Internal Revenue Bulletin, 2009-42: I.R.S. Revenue Procedure 2009-52, December 7, 2009. Application of Section 382 to Corporations Whose Instruments are Acquired and Disposed of by the Treasury Department Under Certain Programs Pursuant to the Emergency Economic Stabilization Act of 2008 Notice 2010-2

Perquisites (and to some extent tax gross-ups) are often a lightning rod for negative press coverage and public outrage. High profile cases of expensive office furnishings, complementary company jet travel, and luxurious conferences have attracted significant negative publicity and public outrage. Although such payments rarely have a significant impact on the company's bottom-line profitability (and company payment of certain personal expenditures can sometimes be advantageous from a tax perspective), it seems reasonable for regulators to ensure that firms receiving taxpayer assistance do not attract additional public outrage unnecessarily. Further, to the extent that such perquisites and tax payments are an important compensation component in the competitive market for executive labor, paying the executive additional amounts of compensation, and then allowing the executive to purchase these perquisites privately would seem to be much more discreet and effective.

5.2.6 Non-binding say-on-pay shareholder vote

A common proposal put forward by critics of US executive compensation is the requirement that shareholders be allowed to vote annually on executive compensation plans. And, although the vote would be non-binding, the belief (or hope) is that directors would adhere to shareholders' preferences.⁸ In 2007, President Obama (then senator) sponsored "say on pay" legislation, but the proposal did not pass. The Treasury Departments' interim final rules and Mr. Feinberg's proposed compensation

⁸ Since 2002, shareholders of corporations in the United Kingdom have voted annually on executive compensation packages. The outcome of this voting mechanism has frequently been negative, and although the vote is not binding, companies do often adhere to them (recent examples where a majority of shareholders have voted against management remuneration plans include Royal Dutch Shell PLC, Royal Bank of Scotland Group, Bellway PLC, and Provident Financial PLC). At the same time, there is no evidence that say-on-pay proposals change the level or growth of CEO pay (e.g., Ferri and Maber, 2008).

arrangements require firms to permit a shareholder vote to approve compensation of executives.

Although shareholder “say on pay” voting might on the surface appear to be a valuable corporate governance mechanism, it seems difficult to envision a shareholder vote on pay leading to more efficient executive compensation packages (except in particularly egregious cases). There are very good reasons why shareholders allocate most decision rights to a board of directors (e.g., Jensen and Meckling, 1976). To make efficient decisions about most complex corporate activities requires considerable expertise, time, and company-specific information. As researchers who have devoted many hours to understanding corporate executive compensation practices, we can personally attest to the time it would take an outsider using public disclosures to assess whether or not a specific compensation plan was appropriate for a specific firm at a specific point in time. Corporate directors, on the other hand, not only have expertise that most shareholders do not have, but also have a wealth of company-specific information that is used in decision-making. In light of these issues, it seems unlikely that most individual, or even institutional, shareholders would take the time to become sufficiently well informed to identify deviations between a firm’s existing compensation plan and the optimal compensation plan.

5.2.7 Periodic assessment of risk-taking incentives

The Treasury Departments’ interim final rules and Mr. Feinberg’s proposed compensation arrangements require firms to review employee compensation plans with “senior risk officers” to ensure that such plans are aligned with sound risk management

practices and limit features that might lead senior executive officers to take “unnecessary and excessive risks.”

This emphasis on risk-taking incentives seems reasonable given the weak financial health of the exceptional assistance TARP firms, the significant financial leverage of these firms, and the taxpayers’ debt-like interest in these institutions. It is well-known that shareholders can have incentives to take risks at the expense of creditors, particularly when the corporation is financially distressed (e.g., see Jensen and Meckling, 1976; Myers, 1977; and Parrino and Weisbach, 1999). These risk-taking incentives derive from the limited liability feature of shareholders’ interests, effectively making common stock an option on the value of the firm (i.e., limited downside risk and unlimited upside potential). Further, significant leverage, which is common in nearly all financial institutions, can exacerbate these risk-taking incentives. In most cases, TARP assistance came in the form of credit-like capital (either debt or preferred stock), thereby giving taxpayers a vested interest in mitigating the risk-taking incentives of stockholders in these firms. Taxpayers are also the indirect providers of FDIC insurance on certain bank deposits and retirement accounts, and insurance providers obviously have a vested interest in mitigating the risk-taking behavior of the insured.

It is important to remember, however, that taking on the right amount of investment and operating risk is essential to successfully compete within any industry, and that even creditors want firms to prudently take on some risk. Remember also that senior executives are generally undiversified with respect to firm-specific wealth, thereby requiring boards to carefully consider the appropriate level of both performance incentives as well as risk-taking incentives. As explained by Coles, Daniel, and Naveen

(2006), equity performance incentives expose executives to personal risk and can cause executives to forgo positive net present value investments if those projects are risky. Those authors go on to note that risk-taking incentives, in the form of stock options or other compensation with convex payoffs, can serve to offset some of this reluctance by executives to take on risk. The main point here is simply that too much or too little risk-taking incentives can cause incentive problems, as can too much or too little equity performance incentives.

To determine what constitutes “excessive” risk-taking incentives requires one to first determine what constitutes “appropriate” risk-taking incentives. Risk-taking incentives generally stem from non-linearities in compensation payoffs whereby the sensitivity of payoffs on the downside is lower than the sensitivity of payoffs to the upside. The Treasury Departments’ interim final rules and Mr. Feinberg’s proposed compensation arrangements offer little in the way of specific details on risk-taking incentives, although one can presumably infer from statements by regulators that their underlying assumption is that executives currently have too much risk-taking incentives and too little performance incentives (we are unaware, however, of any empirical evidence supporting this assumption).

The main thrust of Mr. Feinberg’s proposals is to eliminate most cash (and other non-performance-related) pay in favor of stock-based pay. As noted above, depending on the firm’s financial situation, stock-based pay can either increase or decrease risk-taking incentives. In general, greater stock-based pay can potentially either mitigate or exacerbate any existing incentive alignment problems, depending on whether the executive had the right amount, too much, or too little equity incentives to begin. Given

that US senior executives already hold substantial amounts of equity, and receive most of their pay in equity, and given that it is difficult to argue that US executives' incentives are too low, it seems unlikely that requiring greater equity holdings will improve incentives and shareholder outcomes. If requiring greater equity holdings have any substantial incremental incentive effects (which is questionable given the evidence in Figure 11), the most likely outcome is that executives will be encouraged to take on less risk (potentially to the detriment of equity investors).

We also note that Mr. Feinberg's proposals do not include stock options in any of the compensation plans. This is presumably due to a concern that the non-linear payoffs of stock options would promote "excessive" risk-taking incentives. Such a concern may or may not have merit, however, depending on how the option grants and other elements of the compensation plan are structured (for example, see Lambert, Larcker, and Verrecchia, 1991, for arguments that option holdings can frequently result in *lower* risk-taking incentives). Some of the other elements of the Treasury Department's and Mr. Feinberg's proposals, such as clawbacks, say-on-pay proposals, tax gross-ups, and perquisites, appear to have little to do with risk-taking incentives. Rather, these restrictions appear to be aiming at limiting or preventing negative or embarrassing publicity about executive compensation at TARP firms, as well as possibly to encourage pro-active changes to corporate governance (or at least to create such a perception).

5.2.7 Better disclosure of executive incentives

One difficulty in determining the merits of the proposals from the Treasury Department and Mr. Feinberg is the lack of transparent proxy statement disclosure regarding the performance and risk-taking incentives of senior executives. In recent

years, the SEC expended considerable effort in augmenting required disclosure of compensation arrangements. This disclosure, however, has largely emphasized the *level* of executive pay rather than the *incentives* embedded in executive pay. For example, existing disclosures do not allow one to easily determine the overall sensitivity of executive compensation to firm performance. For example, although firms are required to disclose the general form of bonus and equity incentive plans, some rough details about the types of performance measures included in those plans, and data on stock and option holdings, it would likely be informative to many shareholders if the firm to provided quantitative details (possibly in tabular format) of the overall sensitivity of the executives' wealth to various performance measures (e.g., stock price, earnings, etc.). These details could also include quantitative disclosure about the extent of non-linearities in executive compensation plans and equity holdings so that the investing public can better understand executives' risk-taking incentives. As a template for such disclosures, we note that many firms currently provide similar tabular disclosures for the risks underlying financial instruments.

6. *Conclusion*

In this paper, we review and critique recent regulation of TARP recipients proposed by Treasury Secretary Geithner and implemented by Special Master Feinberg. Before doing this, we review the long-standing debate over executive pay and incentives, and the concern among some that US CEO pay is excessive and that US CEOs have too little performance incentives. We explain how US CEOs do, in fact, bear substantial equity performance incentives (and much more than CEOs in other countries, such as the UK). We also explain why greater performance incentives are expected to give rise to

greater pay. Further, we discuss how Conyon et al. (2009) find after making a risk adjustment to total pay for equity incentives, there is no clear evidence that US CEOs receive significantly more risk-adjusted pay than UK CEOs.

It appears to us that most of the recent regulations and proposals regarding executive compensation are based on arguments from only one side of the debate; the one that asserts US pay is too high and US performance incentives are too low. As we note above, however, these arguments have little empirical support. Mr. Geithner's proposed principles to guide executive compensation seem non-controversial, in the sense that it is difficult to argue with the principles as stated, and also that many or most firms already appear to design compensation practices to conform to such principles.

Of more concern, however, are the rules for implementing the principles, as proposed by Special Master, Kenneth Feinberg. Some of the requirements are reasonable in that most firms already follow them, or that it is sensible or not costly to adopt them. These requirements include compensation committee independence, clawbacks, reduced perquisites and tax gross-ups. More concerning are restrictions on severance and change-in-control payments, as well as on the level and composition of executive compensation and incentives. Evidence suggests that the typical firm uses severance and change-in-control payments efficiently; removing them from the risky and financially unhealthy TARP firms seems only to make it more difficult for these firms to attract and retain good talent. The same is true for restrictions on the levels of executive pay and incentives. US executives hold much more equity performance incentives than executives in any other country, so it is difficult to see that they have too little incentives. Further, and particularly in light of these incentives, there is no evidence that US executives are

systematically overpaid. Finally, although it is reasonable for regulators to be concerned about risk-taking incentives of executives, there is often confusion over what constitutes risk-taking incentives as well as a failure to recognize that some risk-taking is necessary to compete effectively within any industry.

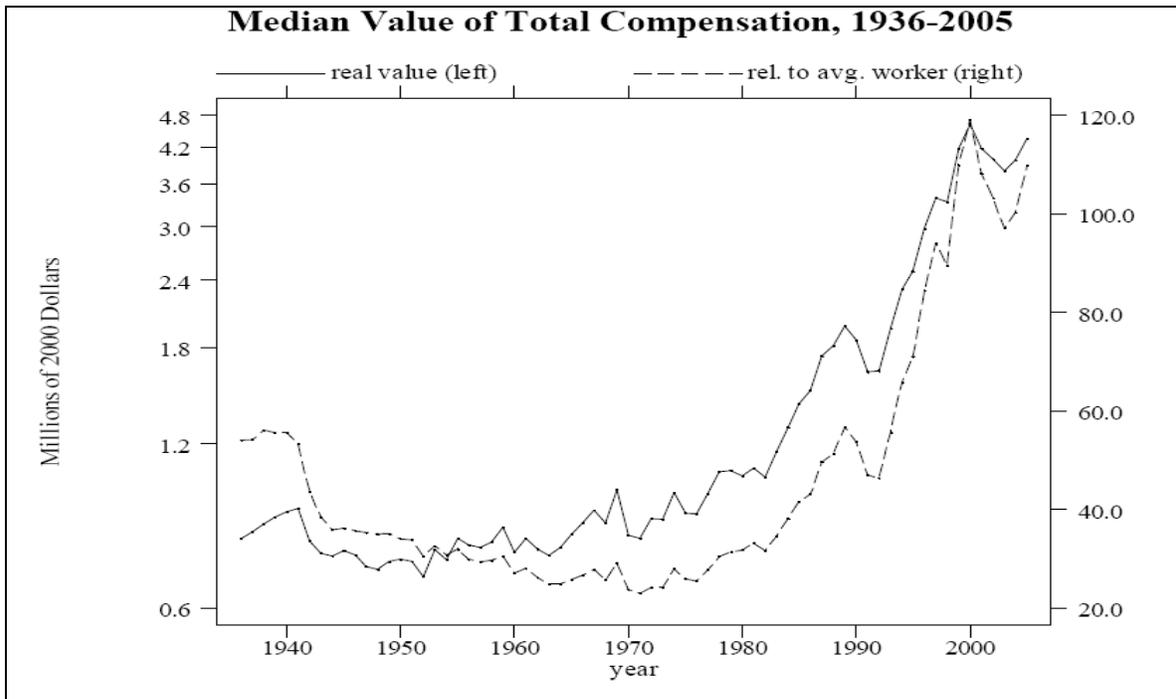
Although the language of regulators nearly always states that there is a dual goal (1) to better align compensation practices with the interests of shareholders and (2) to promote the financial stability of firms (for example, the statements by Mr. Geithner above), how regulators prefer to implement these goals can differ from shareholders' preferences. And, it may be that the final implementation emphasizes the stability and low risk-taking favored by government claimholders over the value creation favored by stockholders.

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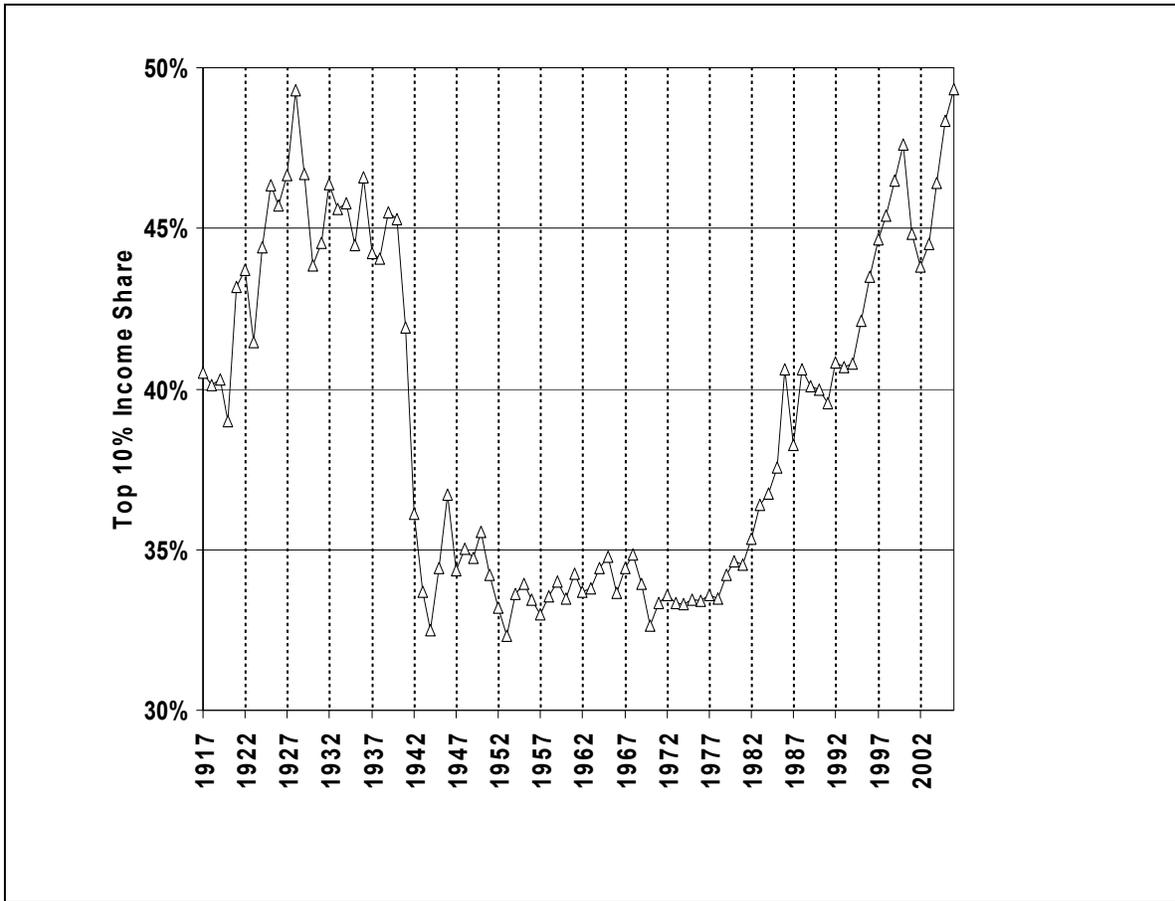
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Figure 1: CEO pay as a percentage of worker pay 1936-2005



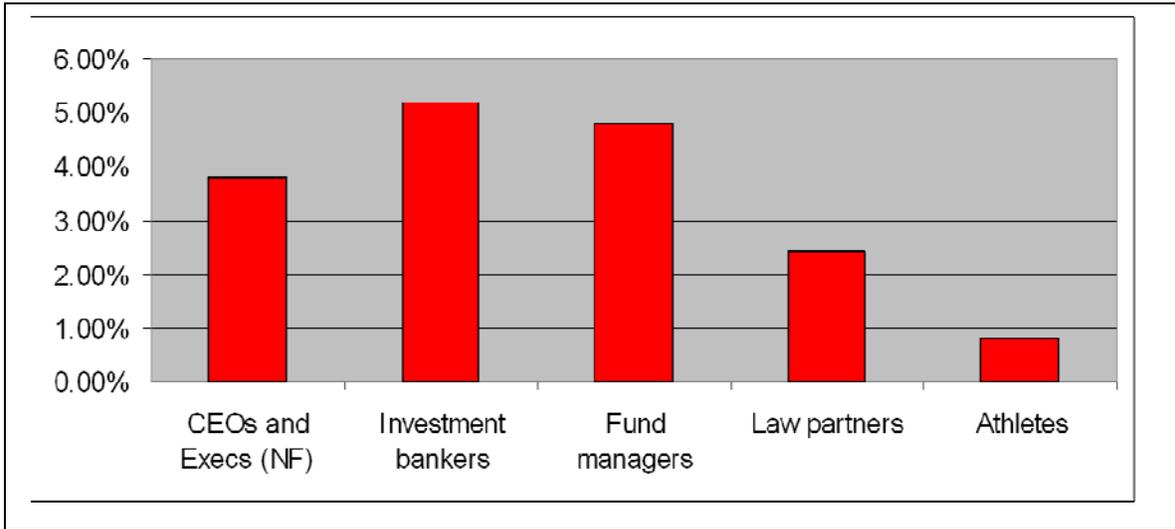
Source: Frydman and Saks (2007)

Figure 2: Top 10% earners share of US taxable income: 1917-2006



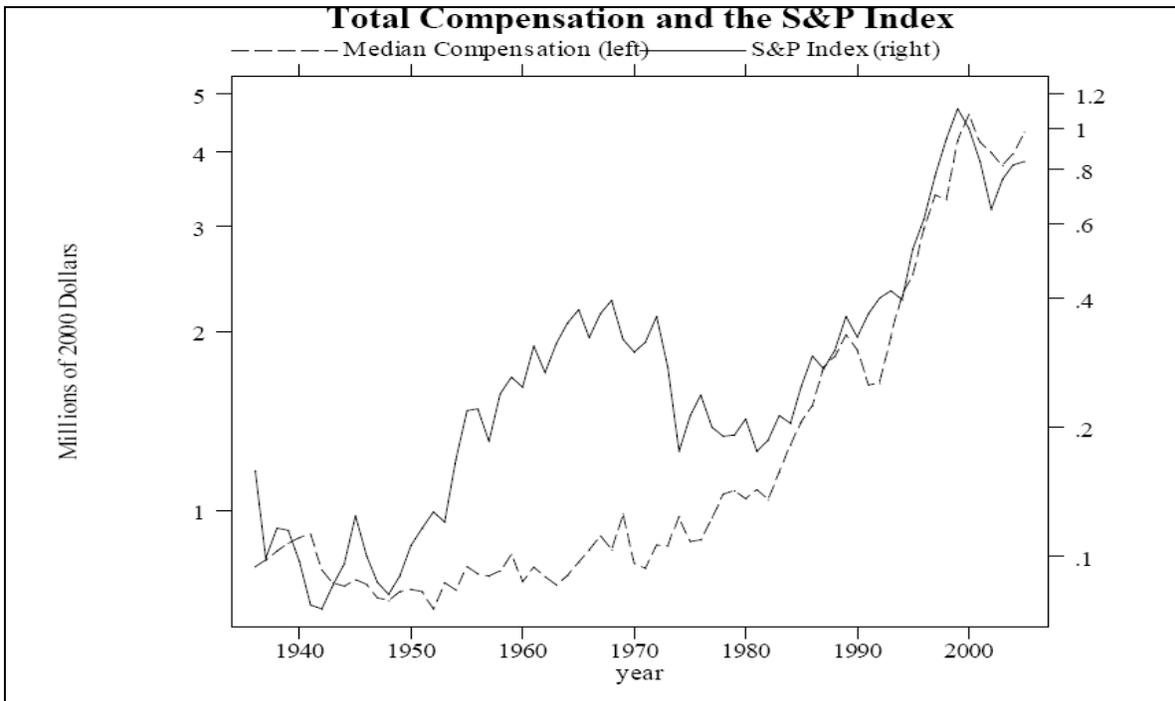
Source: Piketty and Saez (2003)

Figure 3: Share of top 0.1% earners - 2005



Source: Kaplan and Rauh, Table 14

Figure 4: CEO pay and S&P 500 Index: 1936-2005



Source: Frydman and Saks (2007)

Figure 5: US vs. UK pay and incentives (Year: 2003)

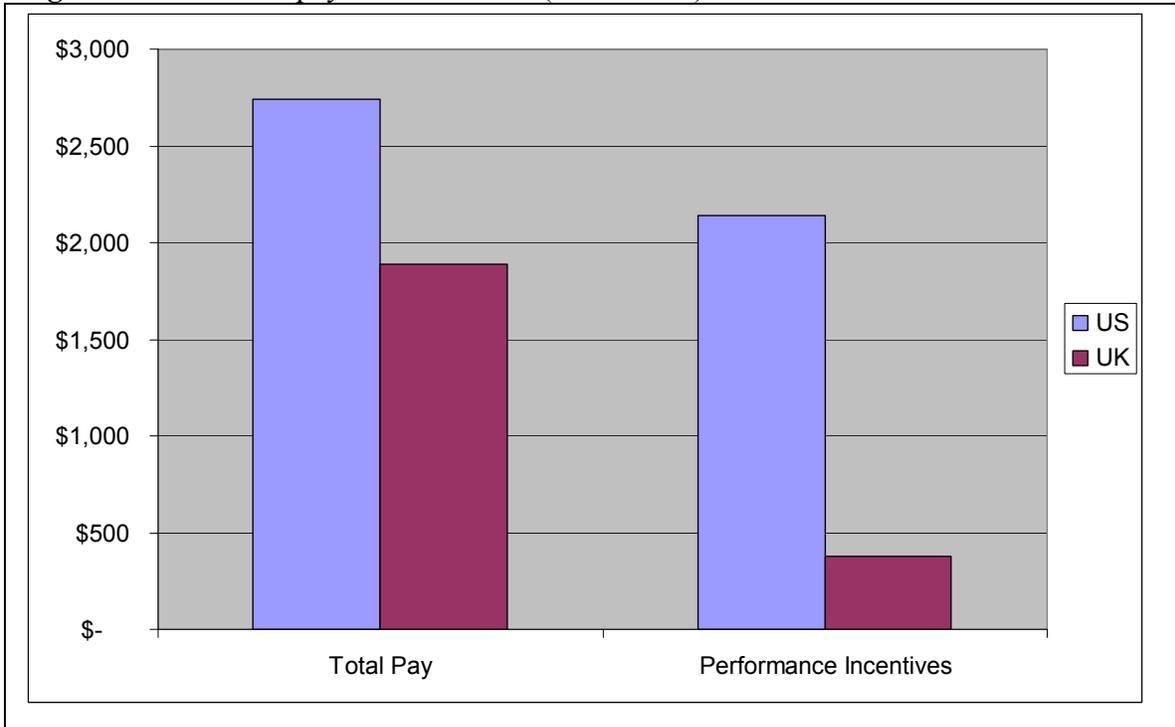


Figure 6: CEO pay in banks vs. non-financial firms: 1992-2006

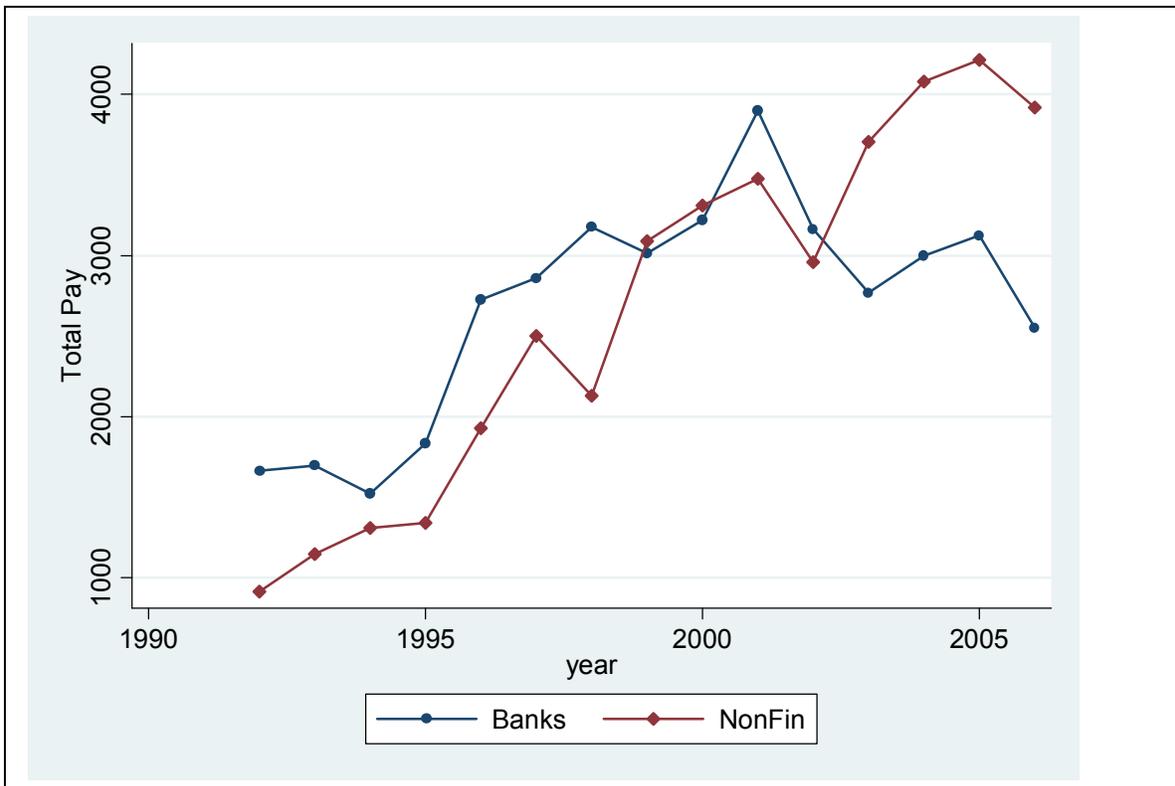
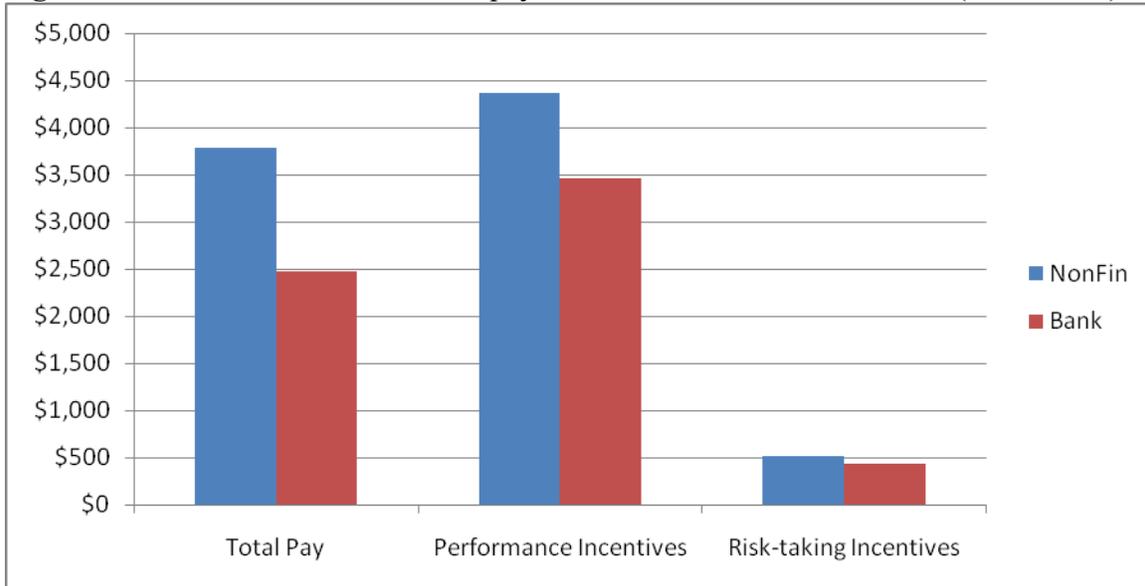
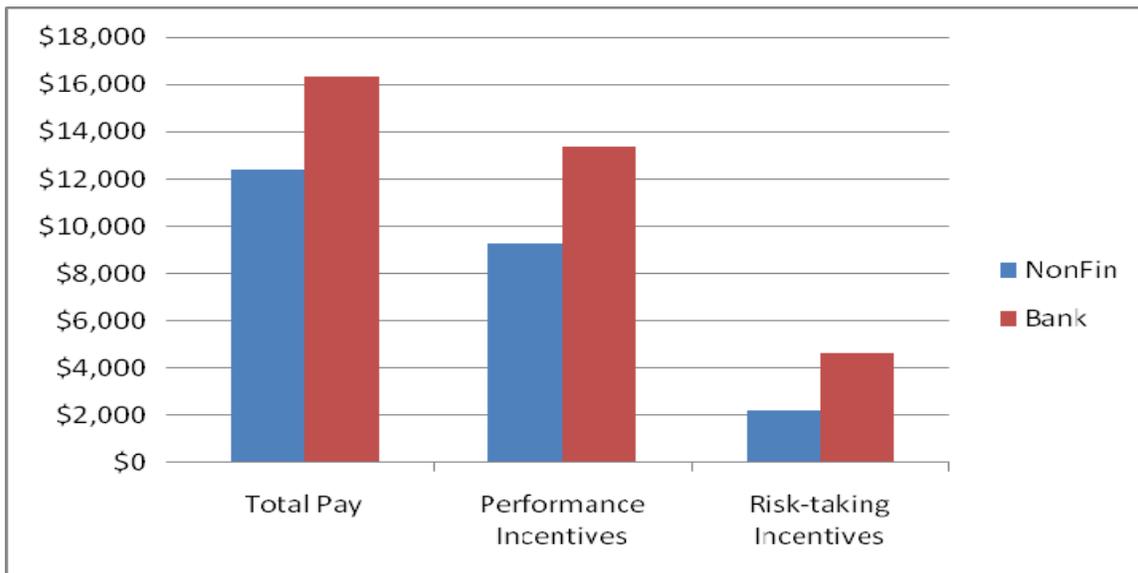


Figure 7: CEO incentives and annual pay in banks vs. non-financial firms (Year: 2006)



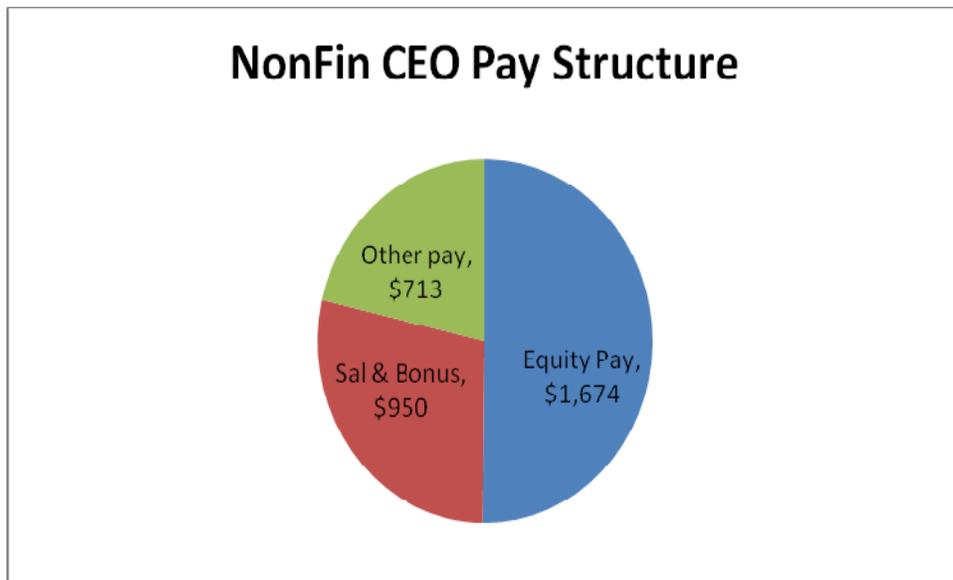
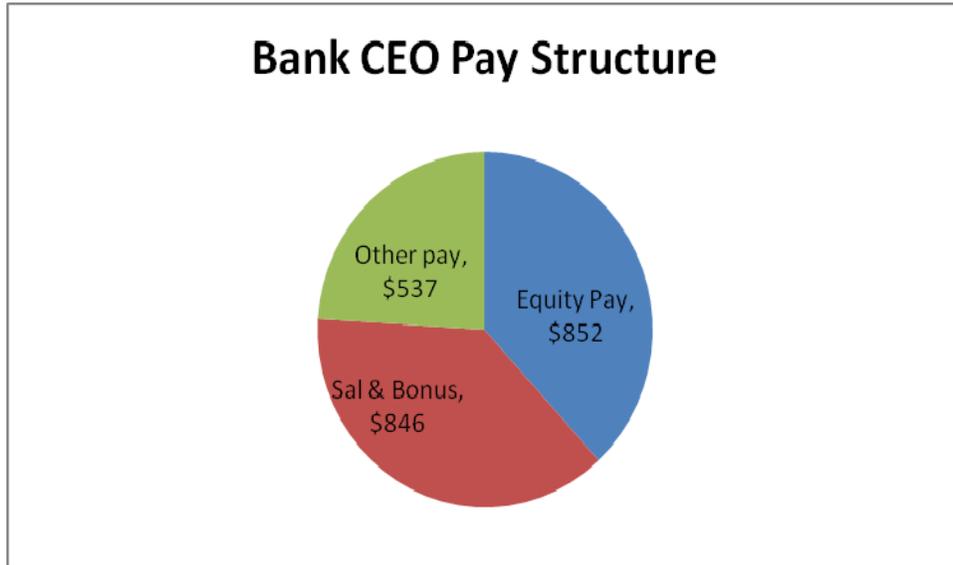
Total pay is defined as the sum of salary, bonus, grant date value of restricted stock and options, and benefits and other compensation. CEO performance incentives are measured as the change in the value of the CEO's stock and option portfolio for a 10% change in the stock price. Risk-taking incentives are measured as the change in the dollar value of the CEO's option holdings for a 10% change in the volatility of the stock price.

Figure 8: CEO incentives and annual pay in 24 largest banks vs. non-financial firms (Year: 2006)



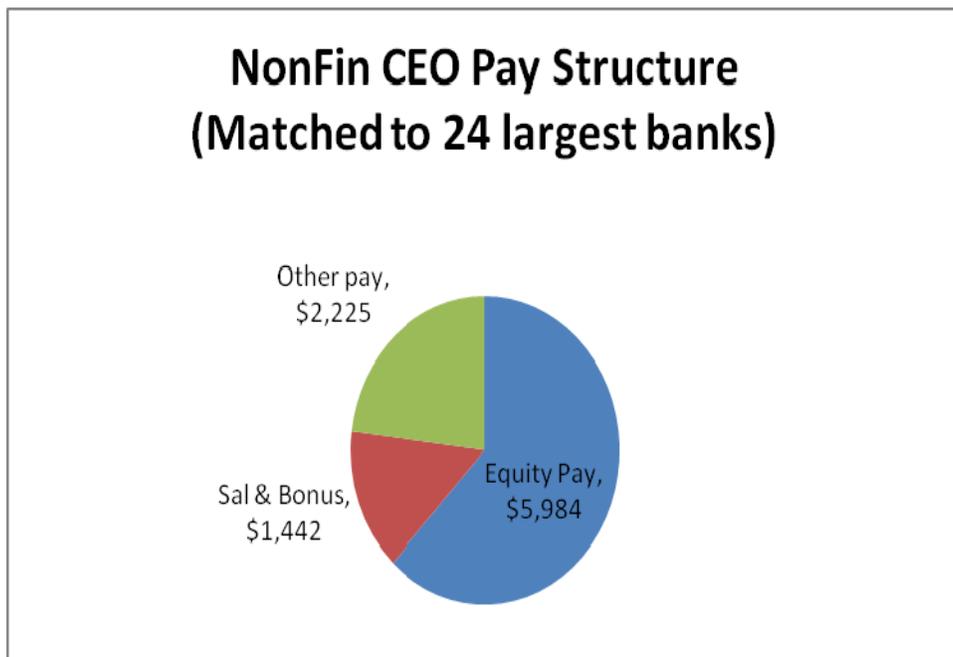
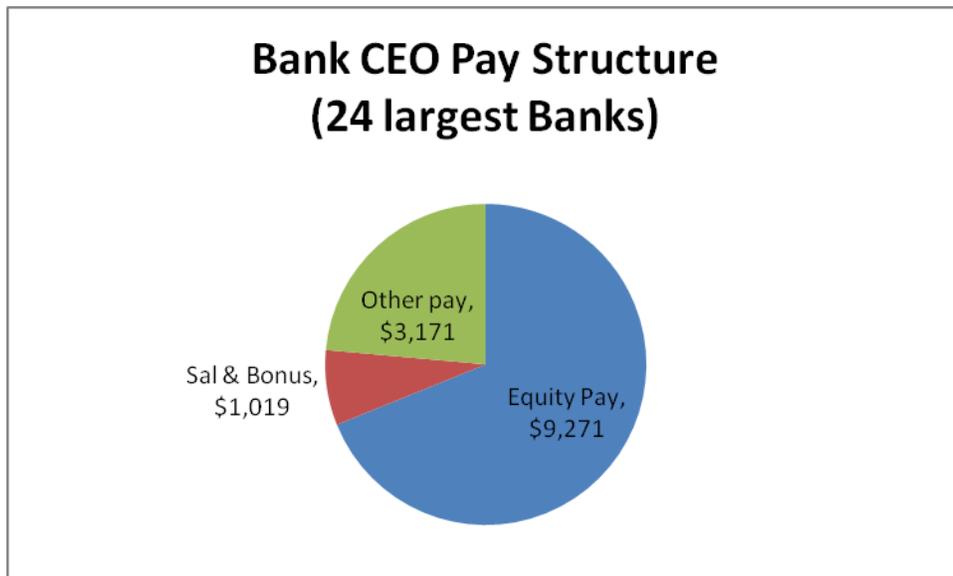
Total pay is defined as the sum of salary, bonus, grant date value of restricted stock and options, and benefits and other compensation. CEO performance incentives are measured as the change in the value of the CEO's stock and option portfolio for a 10% change in the stock price. Risk-taking incentives are measured as the change in the dollar value of the CEO's option holdings for a 10% change in the volatility of the stock price.

Figure 9: CEO pay components: Banks vs. non-financial firms (Year: 2006)



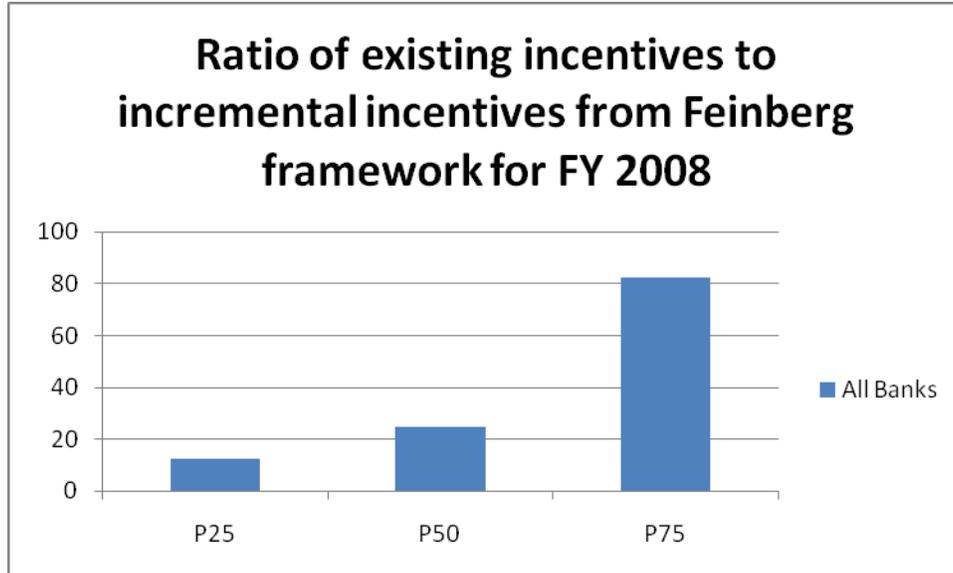
CEO pay is defined as the sum of salary, bonus, grant date value of restricted stock and options, and benefits and other compensation.

Figure 10: CEO pay components: 24 Largest Banks vs. non-financial firms (Year: 2006)



CEO pay is defined as the sum of salary, bonus, grant date value of restricted stock and options, and benefits and other compensation.

Figure 11: Ratio of existing CEO equity incentives to incremental CEO incentives if Feinberg pay proposals were adopted (Year: 2008)



For this analysis, we assume that total CEO compensation would be held constant under Mr. Feinberg’s proposals, but that cash pay is limited to \$500k, with all remaining pay being in the form of stock. We then compare the projected equity pay under Mr. Feinberg’s proposal with the equity pay that the banking CEOs actually received during 2008 to gauge the magnitude of incremental equity incentives that the proposal would impose on the CEOs. Finally, we compare the CEOs’ existing equity incentives due to their beginning-of-year holdings of stock and options to the incremental incentives stemming from Mr. Feinberg’s proposal. Beginning incentives are used to compute the 25th, 50th, and 75th percentiles.