Clawing Back Executive Compensation

James Ang

Yingmei Cheng

Sarah Fulmer *

Florida State University

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^{*} James Ang: Florida State University, 821 Academic Way, 529 RBA, Tallahassee, FL 32306, (850) 644-8208, jang@cob.fsu.edu; Yingmei Cheng: Florida State University, 821 Academic Way, 422 RBA, Tallahassee, FL 32306, (850) 644-7869, <u>ycheng@cob.fsu.edu</u>; Sarah Fulmer: Florida State University, 821 Academic Way, 126C RBB, Tallahassee, FL 32306, <u>smf05e@my.fsu.edu</u>

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Abstract

We explore whether clawback provisions (i.e. Dodd-Frank and SOX) can mitigate agency problems by deterring the executives frommanipulating earnings in an effort to boost their incentive compensation. We estimate the direct and indirect gains executives receive as a result of manipulating earnings and compare the amount potentially recoverable under each clawback provision. We show that the Dodd-Frank Clawbackcan potentially recover a large portion of the direct gains from misreporting (i.e., "excess incentive compensation" as defined by Dodd-Frank); however, significantly largerindirect gains (e.g. profits from the sale of stock and option exercise, gains from delayed termination) are not subject to clawback under Dodd-Frank.Neither the Dodd Frank nor the SOXclawback provision captures the benefits CEOs obtain from delayed termination. Our results suggest existing clawback legislation may not be sufficient to reduce agency problems and curb earnings manipulations.

Keywords: Clawback, Executive Compensation, Dodd-Frank, SOX **JEL Classification:** G38, K2, K4 "[A] tough clawback policy is an essential element of a meaningful 'pay for performance' philosophy. If executives are rewarded for 'hitting their numbers'—and it turns out that they failed to do so—they should not profit."

Source: Prepared Testimony of Ann Yerger, before the Senate Committee on Banking, Housing, and Urban Affairs, 07/29/2009

"Imposing claw-back provisions is a mistake because they are unworkable."

Source: Testimony by Martin Baily, before the House Financial Services Committee, 09/24/2010

Agency problems exist wheneverthere is a separation of ownership and control. Many researchers suggest using incentive compensation to align management interest with shareholders (see Mehran, 1995; Jensen and Murphy, 1990). However, such compensation structures can encourage aggressive earnings managementand manipulation. It has been documented that "CEO pay packages – bloated by stock options – led to ever more aggressive accounting techniques, making many company's earnings statements works of fiction masquerading as fact." [Klinger et al. (2002), p. 3].

Through earnings manipulation and incentive compensation schemes, executives are able to transfer wealth from shareholders to themselves. Fama and Jensen (1983) suggest that monitoring by the Board of Directors can mitigate these agency problems; however prior research shows the Board is generally ineffective in controlling executives (see, e.g., Bebchuck and Fried, 2003).Empirical evidence also suggests that shareholder activism and shareholder litigation are likewise ineffective in mitigating agency problems (see, e.g., Romano, 2000). We therefore focus on a third potential solution to agency problems: government intervention. Can government intervention (via statutory provisions)accomplish what shareholders and the Boardcannot?

We examine whether statutory "clawback" provisions can help solve agency problems by deterring executives from manipulating earnings in an effort to increase their own incentive compensation. Using a sample of firms that issued "high concern" earnings restatements (Patterson and Valencia, 2011), we begin by quantifying the amount of gains accruing to the executives as a result of inflated (manipulated) earnings. We measure both direct and indirect gains. The direct gains include the increases in bonuses, stock grants, and option awards resulting from higher reported earnings, i.e. the "excess incentive-based compensation" as defined by the Dodd-Frank clawback provision. The indirect gains include the profits from the sale of previously awarded stock and optionsand additional compensation resulting from delayed termination. We then apply the two clawback provisions (SOX and Dodd-Frank) to identify how much of the direct gains (i.e. "excess incentive-based compensation")could besubject to recovery, assuming full enforcement of clawbackprovisions. ¹Although Dodd-Frank was not enacted until 2010 and our sample includes fiscal years 1998 to 2009, we apply the clawback rule as if it had been in force at the time.

One may expect, ex ante, that the lengthened time period and broadened reach of the Dodd-Frank Clawback will prove more effective in recovering unearned gains than SOX. However, one important difference is that SOX captures the profits from the sale/exercise of previously awarded stock and options (indirect gains), while Dodd-Frank does not require recovery of these indirect gains. While the grant-date value of stock and option grants is included

¹ We apply the statutory language of Section 954 (the Dodd-Frank Clawback), which lists *minimum* standards a firm must adopt. Firms are free to adopt more stringent clawback provisions; however, a brief survey of clawback provisions adopted by firms in our sample following the passage of Dodd-Frank indicates that most firms adhere to the minimum standards when crafting their provisions. Further, most firms adopt clawback provisions that give the Board broad discretion in enforcement.

as compensation in the year awarded, profits from the sale of stock / exercise of options awarded prior to the restatement period are not subject to recovery under Dodd-Frank.²

We find that Dodd-Frank could reach over 90% of the CEOs in our sample torecover 73.4% of the direct gains. The remaining 26.6% of direct gains, awarded more than three years prior to the restatement, escapes clawback entirely. Despite the high potential recovery percentage of direct gains, the average *dollar amount*per executive is relatively small – \$153,000 per year during the misreported period (\$359,740 per CEO over the entire misreported period). By contrast, a much larger source of unearned gains is from stock sales and option exercises. This amount is substantial:the average CEO in our sample earns nearly \$18 million in stock and option profitsduring the misreported period.

The SOX Clawbackonly applies restatements due to "material misconduct" (i.e. fraud) and only reaches 16% of the CEOs in our sample. For the subset of the CEOs, the average *dollar amount* of direct gains is substantially larger. The average "fraud" CEO earned \$433,000 per year in direct gains (\$982,000 per CEO over the misreported period).³However, contrary to Dodd-Frank, at least some of the indirect gains are subject to recovery under SOX. The average profit from the sale of stock and option exercises for this subset of executives is substantially larger: over \$28 million per CEO over the misreported period.

² Prior literature has indicated that CEOs exercise a large portion of options and sell stock during misreported periods. See, for example, Summers and Sweeney (1998); Beneish (1999); Bergstresser and Philippon (2006), among others. As we note below, the Dodd-Frank Clawback seeks to recover excess current incentive compensation, including restricted stock and option grants awarded during the three-year recovery period. The statute, however, is silent as to the profits realized from the sale of previously awarded stock and options (i.e. stock and options awarded in prior years but sold or exercised during the misreported period). Given that SOX Section 304 explicitly addresses these profits (requires recovery of "any bonus or incentive-based or equity-based compensation" *as well as* "any profits realized from the sale of securities"), yet Dodd-Frank is silent on the matter, it appears that Congressional intent was to exclude these profits. Fried and Shilon (2011) support our position, noting that that "proceeds of a stock sale are not 'paid' by the firm" and therefore not likely to be subjected to recovery under Dodd-Frank.

³ The actual language of SOX Section 304 requires recovery of *all* incentive-based compensation rather than just "excess incentive-based compensation". For comparison purposes we examine only the amount of "excess" incentive-based compensation, as defined under Dodd-Frank.

We also examine the indirectgains executives earn from delaying or avoiding termination via earnings manipulation. Using the sample of 576 firm-year observations during misreported periods, we calculatehow much each CEO is able to reduce his risk of termination as a result of reporting the inflated earnings. We find that approximately one-fifth of CEOs in the sample areable to reduce their probability of termination by at least10% and one-tenth of the CEOs are able to reduce their probability of termination by more than 50% as a result of manipulating earnings. For the subset of CEOs who were able to avoid or delay termination by inflating earnings we estimate amount of additional income they received from the time of the manipulation until the restatement. By avoiding/delaying termination, this subset of CEOs is able to obtain an additional \$1.55 billion (aggregate) in future income. Neither the Dodd Frank nor the SOXclawback provision captures the benefits CEOs obtain from delayed termination.

Prior to Dodd-Frank, firms were not required to adopt clawback provisions. While manystudies have examined the effect of firm-initiated (voluntary)clawbackadoption, ours is the first to examine *mandatory* clawback adoption under Dodd-Frank. Most studies examiningvoluntary clawback adoption find a decrease in theprobability of restatement following clawback adoption. Because there is a self-selection bias in which firms less likely to manipulate earnings may be more likely tovoluntarily adoptclawback provisions, it is unclear whether the same conclusion could be reached following mandatoryclawback adoptions for all firms, as Dodd-Frank requires. It also remains to be seen whether firms that adopt clawback provisions will actually enforce these provisions. Several studies find boards make little effort to recover unearned compensation following restatements. As the Dodd-Frank Clawbackis relatively new, we do not yet know whether mandatory clawback adoption will reduce the likelihood to misreport or simply encourage firms to delay issuing restatements. Our preliminary

analysis of the restatements issued in the post Dodd-Frank period suggests that firms are likely to delay issuing larger restatements following Dodd-Frank.

The low potential recovery amount reported in this paper represents the maximum amount recoverable, as our results assume 100% enforcement. In practice, enforcement by the SEC (under SOXclawback) and the Board (under voluntary clawback adoption) has been few and spotty. The SEC has pursued clawbacks against less than 20% of the CEOs in our sample identified with "fraud" restatements. Other research suggests the boards are even less aggressive in pursuing executives (see Babenko et al., 2012; Glater, 2005).Further, litigation costs are likely to exceed the amount recoverable, reducing the Board's incentive to seek recovery and further lessening the impact of the legislation. Our study suggests that in order for a clawback provision to mitigate agency problems, it must include the most significant gains to CEOs as a result of manipulating earnings: profits from the sale of stock and exercise of options.

The remainder of the paper is organized as follows. Section I discusses potential solutions to agency problems, including government intervention. We provide a background on clawback provisions in Section II. Our hypotheses are outlined in Section III. Section IVdescribes the data and sample selection. Primary results are reported in Section V.In Section VIwe provide robustness testing. Section VII concludes.

I. Executive Compensation and Agency Problems

Although equity-based compensation has been touted as a solution to agency problems, such plans can encourage executives to manipulate earnings in an effort to boost their own pay, creating a new set of agency issues. By manipulating earnings, executives are able to transfer wealth from the shareholders to themselves. Many studies have examined the effectiveness of the Board of Directors in its monitoring capacity.Hermalin and Weisbach (1998) show that as CEO

power increases, the effectiveness of Board monitoring decreases. Moreover, Ryan, Wang, and Wiggins (2009) show that Board composition changes over the tenure of the CEO, resulting in weaker monitoring. Bebchuck and Fried (2003) note that directors have an incentive to appease management in order to be re-nominated to the board.Based on the current literature, it appears that monitoring by the boards is not always an effective solution to agency problems.

Empirical evidence suggests that a second solution to agency problems, i.e., shareholder activism and shareholder litigation,may likewise be ineffective. Romano (2000) surveys financial literature on shareholder activism, and notes that most empirical evidence indicates shareholder activism has little effect on firm performance. Klein and Zur (2009) show that most activist groups are unsuccessful in changing corporate policy. Admati and Pfleiderer (2009) show that the effectiveness of shareholder activism depends on the nature of the agency problem. ⁴Shareholder litigation is likewise limited under the Business Judgment Rule, which states that the court will not second-guess the decisions of management or the Board (thus denying shareholders a private right of action) unless there is clear evidence of abuse of discretion.⁵

We therefore focus on a third potential solution to agency problems: government intervention. Where board monitoring and shareholder activism are ineffective, can government intervention (via statutory provisions) work to accomplish what shareholders and the Board cannot? In particular, we examine whether legislation which requires firms to recover ("clawback")unearned paycan serve as an effective solution to agency problems. For a clawback provision to act as an effective deterrent to the earnings manipulation, the provision has to reach the most of the potential gains accrued to the executives from manipulating earnings. Therefore

⁴See also Gillian and Starks (2007) and Karpoff (2001).

⁵See *In re* Walt Disney Co. Derivative Litigation, 907 A.2d 693 [Del. Ch. 2005] (holding that directors must be grossly negligent in order to overcome the Business Judgment Rule presumption).

we explore the gains from multiple sources: bonus, stock and option grants, stock sale and option exercise, and accumulated wealth from delayed termination.

II. Background on Clawback Provisions

A clawback is a statutory or contractual provision that allows the firm and its shareholdersto recover erroneously (or fraudulently) awarded compensation paid as a result of inflated earnings. In 2002, Congress enacted the first clawback provision as Section 304 of the Sarbanes Oxley Act (theSOX Clawback).⁶This clawback provision applies only to the CEO and CFOfollowing a restatement due to "material non-compliance" as a result of "misconduct". It requires the CEO and CFO to reimburse the firm for all incentive-based compensation, as well as all profits from the sale of securities during the 12 month period following the first issuance of the incorrectfinancial statement. Under SOX, only the government can bring suit to recover compensation from the executives.⁷ As a result, the SOX Clawbackhas only been enforceda handful of times over the last decade. We provide a list of cases brought by the SEC against CEOs and CFOs under Sox Section 304 in Appendix B. Of the 40 CEOs in our sample identified with "fraud" restatements, the SEC has only sought recovery against 7, or approximately 18%.

Following the financial crisis of 2008, shareholdershave demanded better corporate governance and more accountability from executives in regards to financial reporting.⁸On July 15, 2010, Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act

shareholders, had standing to bring action against executive to recoup unearned bonuses under SOX. See also *In re* BISYS Group Inc., 396 F.Supp.2d 463 [S.D.N.Y. 2005]; *Kogan v. Robinson*, 432 F.Supp.2d 1075 [S.D. Cal. 2006].

⁶ Public Company Accounting Reform and Investor Protection Act, Pub. L. 107-204, §304 116 Stat. 745 (2002). ⁷ See *Neer v. Perlino*, 389 F. Supp. 2d 648 [E.D. Pa. 2005], in which court held that only government, and not

⁸ Gregory Smith, General Counsel to the Colorado Public Employees' Retirement Association, testified before Congress on the need for strengthened clawback legislation "to give shareholders a voice in the boardroom" (House Hearing, 2010). In a Senate hearing on corporate governance and shareholder protection, Richard C. Ferlauto, Director of the American Federation of State, County, and Municipal Employees, testified before Congress that "[1]egislation should be adopted to allow for the 'clawing back' of incentive compensation and bonuses paid to corporate executives based on fraudulent corporate results . . . There is no reason why directors and executives should not give back ill-gotten gains when innocent shareowners are victimized by crippling losses." (Senate Hearing, 2009).

inresponse to the financial crisis and subsequent bailouts. In addition to financial overhaul, the Act purports to significantly reform corporate governance and executive compensation. Section 954 (the Dodd-Frank Clawback) mandates that all exchange-listed firmsestablish a clawback policy to recover incentive compensation "in excess of what would have been paid to the executive officer under the accounting restatement" (hereafter referred to as "excess incentive-based compensation" or "direct gains") for the three years prior to the restatement announcement. It is important to note that Dodd-Frank Section 954 is not intended to replace SOX Section 304. Rather, each provision serves a separate purpose. The SOX Clawback is designed as a punishment mechanism for executives who commit fraud ("misconduct"), whereas the Dodd-Frank Clawback is designed as a deterrence mechanism to hold executives financially responsible for misreported financial statements.

[Insert Table I Here]

The objective of the Dodd-Frank Clawback is similar to that of the SOX Clawback: to recover unearned compensation from executives. The two statutes, however, have several significant differences. The distinctions between the two clawback provisions are outlined in Table I. At first glance, the Dodd-Frank Clawback appears to be more comprehensive than its predecessor under SOX. However, SOX specifically requires recovery of "any bonus or other incentive-based or equity-based compensation" as well as "any profits realized from the sale of securities". By contrast, Dodd-Frank does not require firms to seek recovery of profits from the sale of previously awarded stock and option grants (i.e. stock and option grants awarded prior to the three-year recovery periodwhich are sold/exercised during the three year recovery period). Dodd-Frank only requires recovery of direct gains (i.e., bonus, stock and option grants), which

we show is relatively small compared to the indirect gains (profits from stock sale and option exercise; additional compensation from delayed termination).

Prior to 2010, firms were not required to adopt or implement clawback policies. In 2006 the SEC implemented a rule requiring firms to disclose voluntarily adopted clawback provisions.⁹Several studies have examined the effect of firm-initiated clawback adoptions following the 2006 rule change. deHaan et al. (2012) show firms that voluntarily adopt clawback provisions have an increase in financial reporting quality compared to firms that do not voluntarily adopt clawback provisions. Chan et al. (2011) find a decrease in the probability of restatement following voluntary clawback adoption. Chen et al. (2012) reach a similar conclusion – firms are less likely to restate earnings in the 1-5 years following voluntary adoption of a clawback policy. Due to the self-selection bias (in which firms that are least likely to resort to earnings manipulation are more likely to voluntarily adopt clawback provisions), it is unclear whether the same conclusion can be reached following mandatory clawback adoptions for all firms, as Dodd-Frank requires. It is also unclear whether the presence of a clawback provision will decrease restatements over a longer horizon, or whether firms will try to delay issuing restatements. We conduct preliminary analysis of post-Dodd-Frank restatements in Section VI.

Dodd-Frank requires firms to adopt policies to recover compensation, but leaves the terms of enforcement entirely within the discretion of the Board.¹⁰Thus the amount potentially recovered is conditioned on the Board vigorously pursuing the executive in question.Addy et al. (2011) examine voluntary adoptions of clawback provisions and find no evidence that firms actually enforce clawback provisions following subsequent restatements. They conclude that

⁹See Regulation S-K, 17 CFR 229.402(s)(3). Reg S-K does not require firms to adopt clawback policies. However, if a firm voluntarily adopts a clawback policy Reg S-K requires the firm disclose the policy to shareholders.

¹⁰ See example clawback provisions in Appendix C.

firms voluntarily adopt clawback provisions in order to increase the appearance of better governance without actually imposing costs on management.¹¹Glater (2005) surveys firms that issued restatements and finds very few firms (via the Board or shareholders) actually seek recovery of compensation following restatements. Babenko et al. (2012) examine 232 firms that restated earnings following voluntary clawback adoption. They find no evidence that the Board attempted to recover compensation from the executive(s) in any of the 232 firms.Further, as Addy et al. (2011) note, where there is CEO/Chairman duality, there is typically a "powerful" CEO who can prevent actual enforcement of a clawback.

III. Hypothesis Development

Burgstahler and Dichev (1997) find that executives manage earnings to avoid reporting a decline in net income, missing earnings forecasts, or reporting negative earnings. Efendi et al. (2007) find that executives manage earnings in order to keep stock prices high.Bergstresser and Philippon(2006) document higher levels of earnings management in firms where theCEO's compensation is more sensitive to stock price, such as in the case where anexecutive receives a large portion of his compensation as equity. Erickson et al. (2006) find a positive relationship between the amount of stock-based compensation paid to executives and the likelihood of being accused of fraud. Additionally, they find that CEOs tend to exercise "unusually large" amounts of options and sell large amounts of stock during years of increased discretionary accrual use. The results from these studies are consistent with the notion that CEOs manipulate earnings for

¹¹The appearance of better corporate governance is supported by the market's reaction to firm-initiated clawback adoption. Gao et al. (2011) finds positive abnormal returns of 0.95% for the 7-day window (-5, +2) surrounding the proxy date of first voluntary clawback adoption. Chen et al. (2012) find positive abnormal returns of 0.91% in the (-2, +2) window surrounding the clawback adoption. Babenko et al. (2012) find similar results with a positive abnormal return of 0.73% (-5, +5) for firms voluntarily adopting clawback provisions pre-Dodd-Frank. They find a much smaller market response of 0.22% (-5, +5) when mandatory clawbacks (following the enactment of Dodd-Frank) are included.

personal gain – to inflate or maintain stock price in order to increase their direct gains from current incentive compensation or their indirect gains from exercisingoptions and selling stock.

We begin by examining the effectiveness of each clawback provision in recovering these direct gains to executives at restating firms. Given that the Dodd-Frank Clawback provisions only require that firms seek to recover the direct gains, or the amount of "excess incentive compensation" paid to the executive in the three years prior to the restatement, our hypothesis is that the amount recoverable under Dodd-Frank Clawback will not be economically significant, relative to the total gains realized during the misreported period.

Hypothesis 1:*The amount of direct gains subject to recovery under Dodd-Frank will not be economically significant.*

Wethen examine the indirect gains accruing to the CEOs as a result of the manipulation: profits from the sale of stock and option exercises. Beneish (1999) finds that management manipulates earnings in order to drive stock prices up and profit on the sale of stock and exercise of options.Agrawal and Cooper (2008) find evidence that insiders engage in more trading during misreported periods. Burns and Kedia (2008) find that executives at restating firms exercise more options during misreported years than in non-misreported years.¹²We calculate profits based on insider trading during the restated years to test our second hypothesis:

Hypothesis 2: CEOs realize economically significant indirect gains from manipulating earnings through sales of previously awarded stock and options.

An alternative motivation for earnings manipulation is survival. When CEOs face the risk of losing their jobs as a result of reporting poor performance, the perceived benefits may

¹²Beneish and Vargus (2002) find consistent results – insiders sell large amounts of stock during periods of high accruals; Summers and Sweeney (1998) find insiders sell significant amounts of stock during periods the firm engaged in fraudulent activity; Bergstresser and Philippon (2006) find that firms engage in greater earnings management in years when CEO exercises options.

outweigh the cost of manipulation.Prior research finds that poor performance is a good indicator of termination, thus executives haveincentives to manage earnings in order to keep their jobs.¹³Moststudies focus on what happens to executives *after* a firm announces a restatement.Desai, Hogan, and Wilkins (2006) find "abnormally large turnover" of executives following restatements. Typically at least one member of top management is replaced within two years following the restatements with the CEO and CFO being twice as likely to be terminated as other executives. Karpoff, Lee and Martin (2008) find that 93% of executives are terminated following SEC investigations for fraud. Persons (2006) finds significantly higher turnover for CEOs at firms with fraud / lawsuit revelations compared to matched non-fraud firms. These studies raise the question as to why rational executives would engage in accounting manipulations, given the large career risks.

We examine what *would have happened* during the restatement period, had the firm not inflated earnings. Specifically, we examine how CEOs benefit from manipulating earnings by reducing their risk of termination and calculate the indirect gains from delayed termination. This is specified in our third hypothesis:

Hypothesis 3: CEOs receive indirect benefit from manipulating earnings by reducing theirrisk of being terminated.

IV. Data and Sample Selection

A. Sample Selection

We collect one of the largest samples of high severity restatements.¹⁴We begin by identifying firms that announced a restatement between January 2000 and September 2010. We

¹³Maksimovic and Titman (1991) argue that the costs of fraud (manipulation) are lower for financially distressed firms.See also Warner, Watts, and Wruck (1988); Arthaud-Day et al. (2006).

¹⁴ Other studies that have used restatements generally have small samples. Some studies use a sample of *all* restatements, including restatement due to clerical errors. We eliminate less severe restatements. See, for example, Elayam, Li, and Meyer (2008) use a sample of 152 restatement firms for the period January 1, 1980 to December 31, 2004; Johnson et al.

use September 2010 as the cut-off period in order to differentiate between restatements pre- and post-Dodd-Frank. These restatements cover misreported periods for fiscal years 1998 through 2009. Most prior studies on restatements use the Government Accountability Office (GAO) reports to identify restatements. We use Audit Analytics rather than the GAO reports for two reasons: first, the GAO reports identify only the date of restatement and not the period that was restated ("restatement period"). Because the Dodd-Frank Clawbackapplies to the incentive compensation paid in the three years prior to the restatement announcement, we need to know which years were restated in order to calculate the amount of compensation subject to clawback. Second, the GAO reports contain all types of restatements, including those due to clerical errors. Audit Analytics clearly identifies the reason(s) for the restatements, such as fraud, revenue recognition issues, reclassification, mergers, clerical error, etc.

There are over 9,300 restatements listed in Audit Analytics during our sample period. The Dodd-Frank Clawback requires "material non-compliance of the issuer with any financial reporting requirement" to trigger the clawback provision. We therefore limit our sample to material restatements using Patterson and Valencia's (2011) classification of "high concern" restatements.¹⁵ This classification reduces the sample to 2,461 "high concern" restatements. To be included in our sample, we require that the restatement period must cover at least a full fiscal year. Restatements covering less than one full fiscal year are generally corrected before year-end compensation decisions are made, thus lessening the impact of the misreported information on

(2009) have a sample of 87 unique fraud events between 1992 and 2005. Other studies use slightly larger samples; however these studies are not limited by the same data restrictions as our study. See, for example, Dechow et al. (2010) examine earnings management using a sample of 230 firms for which the SEC issued AAERs (not limited by Execucomp); Burns and Kedia (2006) use 215 restatements announced over the period 1995–2002 (includes all types of restatements, including less severe restatements); Kedia and Philippon (2009) use a sample of 919 restatements from 845 firms for January 1997 to June 2002 (not restricted by Execucomp).

¹⁵ "High concern" restatements include restatements due to fraud, revenue recognition problems, and liabilities or accruals failures. We compare total decrease in net income over the misreported period for our sample of "high concern" restatements against all other restatements with data availability in Execucomp. We find the average decrease in net income for our "high concern" sample is more than four times larger than the average decrease in net income for "moderate concern" restatements. See Table AI in Appendix A.

executive compensation. Duplicate restatements are removed from the sample. Overlapping restatements are handled in a slightly different manner. If a firm issues a restatement covering fiscal years 2002 to 2004 then later issues a restatement covering fiscal years 2003 to 2006, we attach the first restatement announcement date to the earlier years (2002 to 2004) and the second restatement announcement date to the later years (2005 and 2006). These restrictions prevent the same firm-year observation from being used more than once. These two requirements reduce the sample size to 1,372 unique (non-overlapping) restatements. A further restriction requires that the firms must also appear in Compustat, CRSP, and Execucomp. Because Execucomp only covers the S&P 1500, we lose many of the smaller firms and end up with 282 restatements from 249 firms, covering more than 700 firm-year observations. We address the potential firm size bias in Section VI.

In order to estimate the amount of direct gains, we need both the originally reported ("unrestated") and the corrected ("restated") accounting data. There is no readily available data set containing restated financial data. Therefore, we hand-collect both the unrestated and restated financial data from SEC EDGAR.¹⁶ For the unrestated data we use the original 10-k report and for the restated data we use the first 10-k issued following the restatement announcement.

We require both the original and the restated data to be available in SEC EDGAR. This restriction causes us to lose an additional 7 firms (corresponding to 15 firm-year observations) that do not appear in the SEC database, 19 firms that acknowledged the restatement in the annual report but did not issue restated earnings data (65 firm-year observations), and 28 firms in which

¹⁶ While Compustat contains only one value for accounting variables such as net income, we find (at least for our sample) that the accounting data reported in Compustat generally corresponds to the original (unrestated) accounting data; however, we find that the data in Compustat corresponds to the updated (restated) accounting data for approximately 15% of our firm-year observations. Since we cannot rely on Compustat for either the restated or unrestated data, we hand-collect both the restated and unrestated data from the 10-k forms filed with the SEC.

the original filings predate electronic filing for that firm (68 firm-year observations).¹⁷In total, we have 576 firm-year observations covering 195 firms with 245 CEOs. The sample selection criteria are displayed in Table II.

[Insert Table IIHere]

B. Firm Characteristics, Stock Returns, and CEO Compensation

We obtain the Center for Research in Security Prices (CRSP). We use Execucomp to identify CEO age, bonus, long-term incentive compensation, and equity (restricted stock and option grants). Tenure is the number of years the individual is listed as the CEO in Execucomp. Table III reports summary statistics of the firm characteristics and CEO compensation, along with characteristics of industry and size matched firms that have no restatements. These control firms are matched on: fiscal year, 4-digit SIC, and total assets (within 30%). On average, restatement firms have \$14.8 billion in total assets and matched firms have total assets of \$13.5 billion. Although restatement firms have significantly larger unrestated sales (\$5 billion) than matched firms (\$4.3 billion), they have significantly lower unrestated net income (\$216 million unrestated vs. \$303 million for matched firms). Table IIIalso shows the magnitude of the restatement. While the average firm initially reported inflated net income of \$216.6 million, the correct (restated) amount was a mere \$36 million. This is consistent with the conjecture that executives are aware of earnings shortfall without inflating earnings. There is no significant difference in CEO age, tenure, salary, or bonus between the two groups. Because LTIP is reported pre-2006 and non-equity incentive is reported post-2006 to replace LTIP, we report them as a single compensation component (i.e., LTIP orNon-Equity

¹⁷ Although our restatement period begins in 1998, several firms did not begin electronically filing annual reports until much later. For example, Teradata Corp. (CIK 0000816761) restated the period January 1, 2006 to March 31, 2007 but did not begin electronically filing with the SEC until 2009. Time Warner Cable (CIK 0001377013) restated the period January 1, 2000 to June 30, 2006 but did not begin electronically filing until 2007. Foster Wheeler (CIK 0001130385) restated January 1, 2004 to December 31, 2004 but did not begin electronically filing until fiscal year 2005. Since we are unable to obtain both the restated and unrestated data, we exclude these firms from our sample.

Compensation). On average CEOs at restatement firms earn significantly greater long-term incentive (non-equity incentives), equity compensation (stock and option awards), and total compensation than their non-restating counterparts. The higher compensation is consistent with executives inflating earnings to increase realized compensation.

[Insert Table III Here]

C. Stock Sale and Option Exercise Data

We obtain stock sale and option exercise data from Thomson Reuters Insider Filing database. Gain from the sale of stock is calculated as the difference between the reported sale price and the CEO's estimated basis for each transaction, multiplied by the number of shares sold. Gain on option exercise is calculated as the difference between the reported exercise price and the closing price on the transaction day, multiplied by the number of options exercised. Stock and option gains are calculated per transaction and aggregated by fiscal year for each CEO.¹⁸ Because CEO turnover may occur during the fiscal year, we hand-match compensation data from Execucomp with insider transaction data from Thomson Reuters to ensure that gains are attributed to the correct CEO. Approximately 70% of the CEOs in our sample engaged in stock sales and/or option exercises in at least one year during the restatement period.¹⁹The remaining 30% of CEOs did not sell stock or exercise options in any year during the restatement period. There are several possible explanations why these 30% did not sell stock or exercise

¹⁸The presumption under SOX, for the purpose of calculating the amount subject to clawback, is that the *entire* gain from stock and option exercises is due to the manipulation, not just that portion which exceeds normal stock sales or option exercises. For this reason we include the total gain from the sale of stock and option exercises, rather than attempting to estimate the gain from abnormal transactions. There may be some cases in which the unobserved ("restated") stock price would still exceed the option exercise price, even absent the misreporting. Thus our approach may lead to overestimation of gains. However, this bias is at least partially offset by CEOs who inflate earnings in order to exercise expiring options (which would otherwise be worthless). In our sample we find the majority of the CEOs who sell stock or exercise options during the misreported period do not have a history of stock sales or option exercises prior to the misreported period. For this reason, we believe the entire profit is representative of the gains due to the manipulation.

¹⁹Insider filings in Thomson Reuters indicate that 178 of the 245 CEOs in our sample (70%) and 354 of the 576 firm-year observations (61%) sold stock or exercised options during the misreported periods. Due to data limitations (missing price or share information) we are only able to calculate profits for 136 of the CEOs (covering 217 firm-years). Thus the profits we calculate from the sale of stock and option exercise are likely understated.

options: they may not have had any vested stock or options; their manipulations may not have been sufficient to increase stock price; or they may have engaged in stock sales or option exercises but failed to report their transactions to the SEC.

D. Termination Data

To estimate the probability of dismissal, we identify all instances in Execucompwhere firms changed CEOs and we denote the last year of the outgoing CEO as the year of turnover. We identify 1,025 instances of CEO turnovers during fiscal years 1998 to 2009. In order to determine whether a turnover was voluntary or not (i.e. "Fired"), we employ a method similar to Parrino (1997). We search Lexis Nexis for news articles announcing the old CEO's departure or the appointment of a new CEO. We classify a turnover as "Fired" if the article specifically mentions involuntary termination as the reason. Otherwise, we look for words such as "ousted" or other such phrases as indicators of involuntary turnovers. We identify retirements with succession plans or announced at least 6 months in advance as voluntary turnovers. Unexpected retirements are researched more carefully to identify whether such retirement was voluntary or not. Additionally, we identify turnovers due to health reasons or death as voluntary. Our purpose is to identify terminations due to poor performance. If we are unable to identify a reason, we leave it as missing. Approximately 18.9% of turnovers are involuntary. This is in linewith prior findings (Parrino (1997) finds 13% forced turnover rate; Huson et al. (2001) find forced turnover rates of 16.2%; Brookman and Thistle (2009) find an involuntary turnover rate of 19.2%).

V. Empirical Results

A. Direct Gains and the Dodd-Frank Clawback

In the first part of the analysis we focus on direct gains: both cash-based and equity-based gains. In later analysis we also look at indirect gains: realized profits from the sale or exercise of

previously awarded stock and options, as well as additional compensation from delayed termination. Since earnings manipulation results in higher reported net earnings, incentive compensation based on reported (unrestated) earnings should exceed incentive compensation based on the correct (later restated) earnings, i.e., direct gains are positive. We model direct gains as the difference between the compensation based on the originally reported (unrestated) earnings and the compensation based on the correct (restated) earnings. We measurecash-based direct gains (the sum of excess bonus and long-term incentive (pre-2006), or the sum of excess bonus and non-equity incentive (post-2006)) and equity-based direct gains (the sum of excess restricted stock grants, unrestricted stock grants, and option grants) separately.²⁰ We test Hypothesis 1 by aggregating the total amount of direct gains paid to the CEOs during the misreported periods and compute the dollar amount of the direct gains that could potentially be recovered under the Dodd-Frank Clawback provision.²¹ We then compare the amount recoverable under Dodd-Frank against the amount recoverable under SOX.

Bonus and other cash-based compensation is generally awarded annually for positive firm performance. Gaver and Gaver (1998) find that CEOs are rewarded for positive net income, yet shielded from losses. For this reason, we examine the effects of positive net income and negative net income separately. *NI_Pos* is equal to net income if it is positive and zero otherwise. Likewise, *NI_Neg* is equal to net income if negative and zero otherwise. Because *NI_Neg* is by construction strictly negative, a positive coefficient would indicate a decrease in compensation.

²⁰ On July 26, 2006 the SEC adopted new regulations related to the disclosure of executive compensation. See 17 CFR 229.402(c)(2)(vii). Prior to 2006 firms reported long-term incentive compensation (LTIP), which in some cases was a mix of cash and equity compensation. The new regulations require firms to report separately the amount of equity and non-equity incentive compensation. We make adjustments to calculate Cash-Based Incentive as the sum of bonus and long-term incentive (pre-2006), or the sum of bonus and non-equity incentive (post-2006). Although long-term incentive and non-equity incentive compensation are not exact substitutes, given the change in the data reporting we believe this method is the most logical.

²¹ Although SOX applies to both the CEO and CFO, and Dodd-Frank applies to all "executives", due to data limitations and for comparability we focus on the gains to the CEOs. Execucomp has data on compensation for nearly 30,000 CEOs during our sample period; by comparison there is compensation data available for only 7,000 CFOs during the same period. Compensation data for "other executives" is even more sparse.

We also control for firm size using the log of total assets. The model for cash-based incentive compensation is displayed below in Equation 1:

Cash Incentive =
$$\alpha + \beta_1 \text{Log}(\text{Assets}) + \beta_2 \text{NI}_{\text{Pos}} + \beta_3 \text{NI}_{\text{Neg}} + \epsilon$$
 (1)

Most equity-based compensation packages consist of restricted stock, unrestricted stock grants, and option grants. The value of equity-based compensation is closely tied to stock price and executives are rewarded based on stock returns over the prior year. Therefore we include the one-year buy-and-hold stock return in estimating equity-based incentive compensation in Equation 2:

Equity Incentive =
$$\alpha + \beta_1 \text{Log}(\text{Assets}) + \beta_2 \text{Ret}_{\text{Pos}} + \beta_3 \text{Ret}_{\text{Neg}} + \epsilon$$
 (2)

To estimate Equations (1)-(2), we use all CEOs in Execucomp for fiscal years 1998 to 2009, which includes over 20,900 firm-year observations. The results are reported in Table IV. The first two columns estimate cash-based compensation, with and without year and industry fixed effects. The results are as expected. The coefficients on *NI_Pos* and *NI_Neg* are both positive and significant; as *NI_Neg* consists of strictly negative variables, the positive coefficient indicates that negative net income decreases cash-based compensation. When we add industry and year fixed effects the coefficient on *NI_Pos* is nearly double the coefficient on *NI_Neg*, confirming that pay for performance is not symmetric.

[Insert Table IVHere]

The last two columns display the results of the regression on equity-based compensation. Column 4 shows the coefficient on *Ret_Pos* is positive and significant, indicating that CEOs are rewarded for positive stock returns. However, the coefficient on *Ret_Neg* is approximately onethird the magnitude of the coefficient on *Ret_Pos*, further confirming asymmetric pay for performance. We are interested in finding the amount of direct gains awarded to CEOs as a result of financial misreporting. We therefore apply the coefficients from Equations (1) and (2) to both the restated and unrestated accounting data to derive "Restated" and "Unrestated" compensation. In Equation (2) we estimate equity-based compensation as a function of stock returns. We do notobserve the counterfactual – what the stock returns would have been absent the manipulation. Several studies have examined stock price reaction upon announcement of a restatement, with findings that the stock price drops anywhere from 5.5% to 15%.²² We estimate the lower bound by assuming that stock prices would have dropped 5% had the firm not misreported its financials. In unreported results we repeat the analysis assuming the upper bound (i.e., a price drop of 15%). It increases the estimation of direct gains but does not significantly alter the overall conclusion.

We apply the coefficients from Table IV to both the original (unrestated) performance measures and the correct (restated) performance measures. Our purpose is to compare executive compensation under the two earnings scenarios and to minimize the influence of other factors.

[Insert Table V Here]

Panel A of Table V reports the average change in net income (per firm, per year) and the amount of direct gains (per CEO, per year) for all firms in our sample. Direct Cash Gain is the difference between the estimated cash-based incentive compensation based on the misreported (unrestated) performance variables and the estimated cash-based incentive compensation based on the correct (restated) performance variables. Direct Equity Gain is calculated in the same manner. Total Direct Gain is the sum of Direct Cash Gain and Direct Equity Gain. For both

 $^{^{22}}$ Johnson et al. (2009) find a one-day stock price decline of 14.9% upon disclosure of fraud; Burks (2010) finds a oneday stock price decline of 5.5% following restatement announcements; Kedia and Philippon (2009) find a market reaction of -10% in the three days surrounding restatement announcements; Desai et al. (2006) find 3-day market-adjusted return of -11.07%; Palmrose et al. (2004) documents a decline of 10% following restatement announcements; Efendi et al. (2007) finds negative abnormal returns of 7.2% for firms with severe restatements.

direct cash gain and direct equity gain neither the average nor the median is economically significant. The average (median) direct cash gain due to the manipulation is only \$85,030(\$2,240). As shown in Table IV, the pay-to-performance sensitivity is small. For each additional \$1 million the firm earns in net income, the average CEO cash-based incentive increases by only \$361; for every \$1 million the firm loses, CEO cash-based incentive decreases by only \$182.The results for direct equity gain is similar. The mean (median) is \$67,980(\$2,050). The economically small gain has two implications. First, increasing directcompensation may not be the primary motivation for earnings manipulation. As we show later in the paper, CEOs see a much greater benefit from indirect gains by reducing their termination risk and profiting from the sale of stock and the exercise of options. Second, recovery under clawback legislation such as Dodd-Frank will be limited to only a small amount of the total gain acquired as a result of the manipulation.

Panel B repeats the analysis for only the subset of executives who restated due to fraud or misconduct and are therefore subject to recovery under SOX. For this subset, the average change in net income is much larger (\$846 million). Additionally, the average increase in Total Direct Gainper year is \$433,000 – nearly three times larger than the full sample.

Now that we have documented the amount of direct gains, we are ready to test the effectiveness of each clawback provision at recovering these gains. Our hypothesis is that the effectiveness of Dodd-Frank as a deterrent will be limited, as the amount of recovery under the Dodd-Frank Clawback will not be economically significant. To test this, we aggregate the total direct gains for all CEOs and measure how much could potentially be recoverable under each clawback provision. Table VI displays the results. The top three rows show the total number of firm-year observations, firms, and CEOs in our sample. There are 576 firm-year observations for

195 firms and 245 CEOs. The fourth row shows the aggregate direct gains for all CEOs across all firm-years is \$88.1 million.

[Insert Table VI Here]

The second column reports the total amount subject to clawback under Dodd-Frank(if the law had been enacted at the time). As expected, the Dodd-Frank Clawback coverage is broad. It could have been applied to recover at least some direct gains from 93% of the CEOs in the sample and 69% of the firm-year observations. CEOs who left the firm more than three years prior to the restatement date escape clawback entirely. Further, if the restatement occurred more than three years following the end of a fiscal year then the clawback would not be effective at recovering compensation for that year. Thus less than 100% of firm-years are subject to clawback. Of the over \$88 million in aggregate direct gain, \$64.6 million (73.38%) could be recoverable under Dodd-Frank. The average (median) direct gain per CEO over the misreported period is \$359,740 (\$99,900). Of this, Dodd-Frank could be used to recover \$281,190 (\$74,620) per CEO. It is important to note that these amounts rely on the assumption that (a) firms will vigorously pursue their executives, (b) firms will be successful in recovering these gains, and (c) firms do not attempt to minimize the impact of Dodd-Frank by delaying the restatement by more than three years. Further, this calculation does not take into account costs of recovery, including litigation. All of these factors could significantly reduce the recoverability of direct gains. Thus what we measure represents the upper bound on what could be recovered under Dodd-Frank.

After establishing the broad reach, yet limited effectiveness of Dodd-Frank, we compare itagainst the SOX Clawback. The results are displayed in the third column. Only 16% of the CEOs, and firm-year observations would be subject to clawback under SOX. It is because SOX requires fraud or "misconduct" on the part of the executive to trigger a clawback. The fourth row

shows that of the \$88.1 million in aggregate direct gains SOX could recover \$40.2 million (45.6%). Thusnearly two thirds of the recoverable gains come from executives at firms that fraudulently inflated earnings and are therefore subject to SOX. This amount also represents an upper bound, as the SEC has not pursuedclawbacks in every instance of fraudulent restatements. In Appendix B, we list the clawback actions taken by SEC under SOX, which shows that the SEC has pursued less than 20% of the "fraud" CEOs.

B. Indirect Gains Not Subject to Recovery under Dodd-Frank Clawback

In this subsection we examine indirect gains accruing to the executive as a result of earnings manipulation. The first type of indirect gain we examine is the profit from the sale/exercise of previously awarded stock and option grants. Stock and option grants are included as compensation in the year awarded; however later gains from the sale of stock or exercise of options are treated as capital gains rather than compensation and therefore not recoverable under Dodd-Frank. The second type of indirect gain we examine is additional compensation earned due to delayed termination. Prior studies have shown executives have a strong motive to manage earnings in order to avoid termination, thus extending their tenure and compensation.

B.1 Profits from the Sale of Stock and Option Exercise

Our second hypothesis predicts that CEOs benefit from manipulating earnings by taking advantage of the artificially inflated stock prices to exercise expiring options or sell stock. Several studies have documented a positive relationship between earnings management and insider trading activity. Although some studies focus on stock sales while others focus on option exercises, the results are consistent: insiders can profit during periods of misreporting.²³

²³ Burns and Kedia (2006) find that CEOs sell more stock and options during the misreported periods; Kedia and Philippon (2009) find that CEOs of restatement firms exercise "significantly higher" fraction of their options than non-restatement CEOs. These studies are consistent with CEOs having the knowledge that prices are artificially inflated due to manipulation, and that subsequent revelation of the manipulation will cause a correction. Thus, options exercise or stock

To measure the extent of gains from insider trading during the misreported period, we collect insider transactions from Thomson Reuters Insider Filing database. We exclude stock and options which are disposed of by means other than sale.²⁴ We then calculate the gain on stock sales ("Stock Gain") as the difference between the reported sale price and the CEO's estimated basis, multiplied by the number of shares sold. Although there is no direct tracing of shares, we estimate the CEO's basis as the average price paid for all stock purchases over the prior five years.²⁵ Gain on option exercise ("Option Gain") is calculated as the difference between the exercise price and the closing price on the transaction day, multiplied by the number of options exercised. Stock and option gains are calculated per transaction and then aggregated by fiscal year for each CEO. The average gains by fiscal year are shown in Table VII.

[Insert Table VII Here]

Panel A shows that on average, CEOs earnmore than \$3.7 million from the sale of stock and \$3.8 million from exercising options (per CEO, per year). Panel B shows that for the subset of restatements due to fraud the stock and option gains are \$6.24 and 6.25 million, respectively. These numbers are comparable to prior literature. Johnson et al. (2009) find that during fraud years, the median fraud CEO sells approximately \$6.5 million of stock (compared to \$2.8 million for CEOs of matched non-fraud firms). Efendiet al. (2007) finds CEOs of high-severity restatement firms exercise, on average, \$7.7 million in options. The difference between these two studies and ours is that they report the dollar value sold / exercised, whereas we look at the net gain in excess of exercise price.

sales that could normally be postponed until closer to expiration or a more tax advantageous time must be exercised, lest they expire worthless.

²⁴This includes stock disposed of by gift, will, into trust, pursuant to a domestic order, or forfeited stock.

²⁵ The SEC filings (10-k, DEF 14A, or Form 4) do not identify the executive's basis in shares sold. We therefore estimate each CEO's basis using the average price of all shares purchased over the prior five years. We recognize that at least some of the shares sold during the misreported period may have been acquired as prior compensation (i.e. restricted stock), in which the CEO has no basis. Thus the amount of stock gain we calculate is likely understated.

Table VII shows that CEOs clearly benefit from exercising options and selling stock during the misreported periods. We expect that CEOs manipulate earnings to salvage their expiring options, which would otherwise become worthless. Using the option exercise data from Thomson Reuters, we find that had the executive not inflated earnings, 37.14% of options would likely have expired and becomeworthless.²⁶ This translates to \$661 million (in aggregate) that these CEOs would not have received absent the manipulation.

B.2Indirect Gains from Delayed Termination / Termination Avoidance

Our thirdhypothesis examines the career benefit of earnings manipulation: executives are likely to inflate earnings in order to avoid or delay termination. We examine by how much each CEO is able to reduce his probability of termination viaearnings manipulation. We examine the probability of termination during the misreported years, rather than the year in which the restatement is announced. We are interested in the difference in the probability of termination based on the reported earnings and the probability of termination had the firm not misreported.

Using our hand-collected turnover data as described in Section IV, we model the probability of termination using a probit model with *Fired*as the dependent variable. We include all firm-year observations from Execucompfor the period 1998 to 2009 (20,029 firm-years) in our model. Approximately 1.8% of all CEOs are fired during the sample period. We estimate Equation 3:

Fired =
$$\alpha + \beta_1 \text{Log}(\text{Assets}) + \beta_2 \text{Tenure} + \beta_3 \text{NI} + \beta_4 \text{Neg}_\text{NI} + \beta_5 \text{NI}_\text{Down} + \beta_6 \text{Loss}2 + \epsilon$$
 (3)

²⁶See Table AII in Appendix A.

We include *Tenure* as an explanatory variable because Goyal and Park (2002) find that CEOs with longer tenure are less likely to be fired. We control for firm size by including log of total assets. Several studies have found size to be important.²⁷

We also include several performance measures. Desai et al. (2006) find that higher net income and stock price decrease the probability of turnover. We use net income as our first performance variable. We expect that net income will be negatively related to the probability of termination. However, we anticipate that a CEO is more likely to be fired following a particularly bad year, or following a string of bad years. For this reason, we include three performance indicator variables to capture the effect of unfavorable earnings patterns:*Neg_NI* is equalto one if the firm has negative net income in the current year and zero otherwise; *NI_Down* is equalto one if the firm's net income decreases from the prior year; and*Loss2* is equal to one if the firm has had consecutivenegative net income (losses) in the prior two fiscal years. We expect that negative earnings, or a recent string of negative earnings, will be positively related to termination probability.

[Insert Table VIIIHere]

The results from the probitregression are displayed in Table VIII. Model 1 uses net income as the only performance measure. As predicted, net income is negatively related to *Fired*. However, the magnitude is quite small. In Model 2 we add dummy variable *Neg_NI*, which equals one if the firm had negative net income in the current year. The coefficient on *Neg_NI* is 0.528 and is significant at the 1% level. Thus CEOs at firms with negative net income have an increased probability of termination. In Model 3 we add *NI_Down*, which is equal to one if the firm's net income decreased from the prior year. The coefficient on *NI_Down* is 0.227, indicating

²⁷See Parrino et al. (1997), Warner et al. (1988), and Burks (2010) who find a positive relationship between firm size and turnover.

that CEOs face an increase in termination risk when net income decreases from the prior year. The coefficient on *Neg_NI*decreases slightly, but is still positive and highly significant. In Model 4 we include all three indicator variables. *Loss2* is equal to one if the firm reportednegative net income for the two prior fiscal years. Its coefficient is 0.267 and highly significant. All three performance indicator variables remain highly significant at the 1% level.

To gauge by how much firm performance increases the probability of termination, we calculate the marginal effects, which are reported in brackets in Table VIII. Reporting a negative net income ($Neg_NI=1$) increases the CEO's chance of being fired by 1.9 percentage points (Model 4). Likewise, reporting a decrease in net income ($NI_Down=1$) increases the termination risk by 1.2 percentage points and reporting a loss two years in a row (Loss2=1) increases termination risk by 1.4 percentage points. Given that the observed termination rate for all CEOs is only 1.8%, the results in Table VIIIclearly show that unfavorableearnings significantly affect the survival of CEOs; thus earnings manipulation provides career-related benefits to CEOs. The magnitude of the coefficient on negative current earnings(Neg_NI) is larger than that of the other performance indicators. This suggests that CEOs have strong incentives to avoid reporting negative earnings. In our sample of 576 firm-year observations, absent manipulation, CEOs would have reportednegative net income for 169 of the firm-year observations (29.3%). Further, over 50% (304 of 576) would have reported a decrease in net income from the prior year.

We are interested not in the probability of termination, per se, but the *difference* inprobabilities based on misreported and restated earnings, i.e. by how much the inflated earnings reduce the CEOs' risk of termination. We first compute the probability of termination by applying the coefficients from Table VIIIto the original (unrestated) accounting data and the correct (restated) accounting data. The difference in the two probabilities, scaled by the restated

probability, represents the *decreased* probability of termination. We find the average reduction in the probability of termination (by year) is 12.763%, which is significantly different from zero.

[Insert Table IX Here]

Table IXshows the number and percent of CEOs in our sample that reduce their probability of termination by a particular threshold as a result of misreporting.²⁸ Sixty one CEOs, or nearly eleven percent of the sample are able to reduce their probability of termination by at least 50%. Clearly at least some executives are able to avoid or delay termination by manipulating earnings. By avoiding or delaying termination, these executives are able to increase their lifetime compensation.

Although only the direct gains could be subject to clawback under Dodd-Frank, the total foregone pay may be a better measure of the CEOs' survival motive to manipulate earnings. Using the average decrease in the probability of termination (12.763%) as a cut-off point in defining "Termination Avoidance CEOs", we do a back of the envelope calculation to estimate the magnitude of compensation saved from reducing the risk of termination:

 $(\Delta Termination Risk for CEO_k) \times (CEO_k Compensation_{t-1}) \times N$ (4) where t-1 represents the year prior to the first year of manipulation and N represents the number of years from the first year of manipulation until a restatement is issued.

We sum this amount over all Termination Avoidance CEOs in our sample to get the aggregate (\$1.55 billion) and average (\$22.47 million) future benefit of termination avoidance. This outweighs both the average direct gains to this group (\$488,200) as well as the aggregate direct gains (\$44.4 million). Based on these calculations, it is clear that at least some executives have motives for misreporting beyond increasing current incentive compensation.

²⁸We are unable to compute probabilities for 12 of the observations that did not have two prior years of earnings data.

VI. Robustness Tests

Our sample consists of firms with compensation data available in Execucomp, which is comprised of firms in the S&P 1500. Thus many smaller firms that issued restatements are excluded. To see whether there is any sample-selection bias, we re-examine our main findings separately for the S&P 500, Mid-Cap 400, and Small-Cap 600 firms. We concentrate on the Small-Cap sample, as any excluded firms willlikely be more similar in magnitude of the restatement and unearned gainsto firms in the S&P Small-Cap 600 than to firms in S&P 500 and Mid-Cap 400. Table X provides descriptive statistics by S&P index. The average change in net income (restated less unrestated) is more than 17 times larger for the S&P 500 firms than for either the Mid-Cap 400 or Small-Cap 600. In addition, the average direct gains for CEOs in the S&P 500 are three to five times greater than the average direct gains for those in the smaller indices and the average stock and option gains are between four to ten times larger for S&P 500 firms than either of the smaller indexes. Thus we can see that the vast majority gains are accumulated by CEOs in the larger firms. Therefore the excluded firms arenot likely to bias the total dollar amount we report.

[Insert Table X Here]

We further investigate whether the percentage recoverable differs by firm size for the two clawback provisions. We repeat our main analysis by calculating the amounts potentially recoverable under each clawback provision separately for each size index. The results are reported in Table XI. The overall result is unchanged. The number of firms that Dodd-Frank reaches is roughly the same but the number of CEOs that would be subject to clawback decreases slightly from 93% for the full sample to 91% of the S&P 500 firms. The aggregate amount recoverable under Dodd-Frank for the full sample (Table VI) was 73.4%; the amount recoverable

for S&P 500 firms is similar at 81.8%. By comparison, the amount recoverable for small firms is 55.5%. Thus any size bias due to excluding smaller firms (those not in S&P 1500) is likely minimal.

[Insert Table XI Here]

As the Dodd-Frank Clawbackis relatively new, we do not have a large post Dodd-Frank sample to test whether the mandatory clawback adoption reduces the likelihood to misreport or simply encourage firms to delay issuing restatements. Nevertheless, we conduct preliminary analysis of restatements that are issued following the enactment of Dodd-Frank. We compile all "high concern" restatements issued from S&P 1500 firms after October 2010 (the effective date of Dodd-Frank)through August 2012. There are 23 of them. Even though the restatement dates are post Dodd-Frank, the misreported periods implied in those 23 restatements all began before the effective date of Dodd-Frank. In 11 of them, the misreported period ended before the effective date of Dodd-Frank.We compare the average length of time from the end of the misreported period to the restatement date pre- and post-Dodd-Frank. We find there is no significant difference in the average length of time. The average magnitude of the restatement issued after Dodd-Frank is significantly less. Prior to Dodd-Frank, the average (median) amount of restatement in net income was \$180 million (\$11.9 million); following Dodd-Frank the average (median) is only \$12.17 million (\$2.6 million). One may infer that Dodd-Frank is effective in reducing earnings manipulations; thus explaining the smaller restatement amount. However, it is unlikely that the legislation becoming effective in October2010 could have affected firms' behavior in years prior to October 2010. Given that all the misreported periods in the post Dodd-Frank restatements actually started before the effective date of Dodd-Frank, the more likely explanation is that firms with larger changes in net income are delaying issuing

restatements in order to avoid the reach of the Dodd-Frank clawback.²⁹As the clawback period is limited to the three years prior to restatement, current executives can avoid clawback entirely simply by delaying issuing a restatement until the clawback window has passed. Thus in addition to requiring recovery of stock and option profits, an effective clawback provision must be able to reach back more than three years. Limiting the recovery period to three years prior to the restatement creates a large loophole in the legislation that executives can exploit.

VIII. Conclusion

We examine whether statutory clawback provisions can provide an effective mechanism in mitigating agency problems related to executive compensation. Compensation that is tied to short-term firm performance encourages executives to inflate earnings in order to boost their own compensation, often to the detriment of shareholders when earnings are later restated. If a firm reports earnings that later turn out to be false, the Dodd-Frank Clawbackrequiresthe Boardto recover the amount of direct gains attributable to the restatement. Unlike its predecessor in SOX, whichlimited recovery to instances of "material misconduct" (i.e. fraud), the Dodd-Frank Clawback applies to all material restatements.

We test the effectiveness of the Dodd-Frank Clawbackusing a sample of "high concern" restatements and find that Dodd-Frank falls short of expectations. While the clawback could potentially recover most of the direct gains, there are other more significant gains which are not subject to clawback under Dodd-Frank. While we find that CEOs increase their personal wealth by an average of nearly \$18 million during the misreported period, the majority of this comes from indirect gains which firms are not required to recover under Dodd-Frank. Thus shareholders

²⁹The average change in net income for the 12 restatements with misreported period ending after Oct 2010 is \$10.14 million, and the average change in net income for the 11 restatements with misreported period ending before Oct 2010 is \$10.63 million. There is no significant difference between the two groups in terms of their revision in net income.

expecting Dodd-Frank to discourage executives from manipulating earnings will be sorely disappointed at how little may actually be recovered.

Aside from the low recovery rate, the deterrent effect is likely small forfouradditional reasons. First, Dodd-Frank requires firms to adopt policies to recover compensation, but leaves the terms of enforcement entirely within the discretion of the Board.Where there is a powerful CEO, it is unlikely that the Board will enforce the clawback provision. Second, given the small amount of direct gainsthat we have computed, the costs of litigation will likely exceed the amounts recoverable. Third, the Dodd-Frank Clawback does not capture the benefits CEOs obtain as a result of delayed termination.By manipulating earnings, a subset of CEOs received additional compensation and perks for years beyond the date at which the CEO should havebeen fired. We find approximately one-tenth of the CEOs in the sample were able to reduce their risk of termination by at least 50% by inflating earnings. Finally, as the clawback period is limited to the three years prior to restatement, current executives can avoid clawback entirely simply by delaying issuing a restatement until the clawback window has passed.

Although our sample predates the enactment of the Dodd-Frank Clawback, given the negligible recovery as estimated in our sample, it is unlikely the Dodd-Frank Clawback will effectively deter earnings manipulation. Based on the results in this study, we strongly recommend that a clawback provision need to reach the most significant gains of CEO from manipulating earnings: profits from the sale of stock and exercise of options, and it should be able to reach back more than three years.

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Table IComparison of Dodd-Frank and SOX Clawback Provisions

	Dodd-Frank (2010)	Sarbanes Oxley (2002)			
	 (b) RECOVERY OF FUNDS – The rules of the Commission under subsection (a) shall require each issuer to develop and implement a policy providing (1) for the disclosure of the policy of the issuer on incentive based compensation and 	(a) If an issuer is required to prepare an accounting restatement due to the material noncompliance of the issuer, as a result of misconduct the chief executive officer and chief financial officer of the issuer shall reimburse the issuer for-			
Statute (2) that, in the event that the issuer is required to prepare an accounting restatement due to material noncompliance of the issuer the issuer will recover from any current or former executive officer of the issuer who received incentive based compensation (including stock options awarded as compensation) during the 3-year period preceding the date on which the issuer is required to prepare an accounting restatement, based on erroneous data, in excess of what would have been paid to the executive under the accounting restatement.		 (1) any bonus or other incentive-based or equity-based compensation received by that person from the issuer during the 12-month period following the first public issuance and (2) any profits realized from the sale of securities of the issuer during that 12-month period. 			
Legislative Objective	To recover "excess" incentive compensation in the event of a "material" restatement (no requirement of "misconduct")	To recover total incentive compensation and profits from the sale of securities in the event of "material" restatement due to "misconduct"			
Firms Covered	All exchange-listed firms that issue material restatements	All firms (public and private) that restate earnings due to misconduct (i.e. fraud)			
Who is Covered?	All Current and Former "Executives"	CEO and CFO			
Who Initiates Clawback?	The Board	The SEC			
Recovery Period	Three years <i>prior to</i> the date of restatement	12 months <i>following</i> the date the misreporting is first issued			
Amount Recoverable	 Incentive Compensation <i>Excess</i> incentive compensation, including cash-based (Bonus, LTIP, Non-Equity) and equity-based (Stock and Option Grants) Profit from the Sale of Securities Does not recapture profits from the sale of previously awarded stock and option grants which are exercised during the recovery period 	 Incentive Compensation All incentive-based compensation, including all cash-based (Bonus, LTIP, and Non-Equity) and all equity-based (Stock and Option Grants) Profits from the Sale of Securities Recaptures all profits from the sale of previously awarded stock and option grants which are exercised during the recovery period 			

Table II

Restatements for the Period 1998 to 2009	Restatements	Firms	Obs.
1. Restatements identified in Audit Analytics	9,385		
2. Limit to "High Concern" Restatements	-6,924		
	2,461		
3. Restatement Period Is At Least One Full Fiscal Year	-990		
	1,471		
4. Non-Duplicate / Non-Overlapping	-99		
	1,372		
5. Compustat, CRSP, and Execucomp	-1,121		
	282	249	724
6. SEC Edgar			
Firms not in EDGAR		-7	-15
Firms that did not file amended 10-k		-19	-65
Firms without original 10-k in EDGAR		-28	-68
7. Final Sample			
Restatements	213		
Firms	195		
Firm-Years	576		
CEOs	245		

Table III

Summary Statistics

This table reports summary statistics of firm financial and CEO compensation data for the period 1998 to 2009. The sample consists of 195 firms (576 firm-year observations) that filed high concern restatements due to fraud, revenue recognition problems, or liabilities and accruals failures. For comparison purposes, the table also includes statistics for control firms matched on fiscal year, 4-digit SIC, and total assets. For restatement firms, both the original (unrestated) and the corrected (restated) values for net income and sales are reported. All values are reported in thousands of dollars. ***, **, and * denote significant differences between the restatement and matched firm.

Variable N Mean Median Minimum Maximum Std. Dev. Total Assets Restatement Firms 576 14,819,132 1,323,456 24,564 1,009,569,000 84,745,505 Matched Firms 576 13,587,631 1,262,718 20,630 1,484,101,000 84,874,022 Sales Restatement Firms Unrestated 576 5,057,002 *** 990,010 *** 30,103 98,615,000 10,882,077 Restated 576 4,655,684 987,793 *** 16,816 97,666,000 10,281,315 Matched Firms 576 4,383,850 1,022,686 1,857 133,585,000 12,082,016 Net Income Restatement Firms 576 36,314 *** 23,683 ** -4,023,000 24,730,000 1,490,035 Restatement Firms 576 303,042 49,591 -2,142,800 17,046,000 1,373,860 CEO Age Restatement Firms 576 54.80 54.00 28.00 79,90 7.94 Matched Firms 576 <	between the restateme						
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Unrestated 576 5,057,002*** 990,010*** 30,103 98,615,000 10,882,077 Restated 576 4,655,684 987,793*** 16,816 97,666,000 10,281,315 Matched Firms 576 4,383,850 1,022,686 1,857 133,585,000 12,082,016 Net Income E E E E E E Restatement Firms 576 216,686*** 35,668** -4,023,000 24,730,000 1,490,035 Restated 576 36,314*** 23,683** -48,909,000 24,728,000 2,589,670 Matched Firms 576 303,042 49,591 -2,142,800 17,046,000 1,373,860 CEO Age E E E E E E E Restatement Firms 576 54.80 54.00 28.00 79.00 7.94 Matched Firms 576 4.61 4.00 1.00 17.00 3.17 Matched Firms 576 654.02 581.42 </td <td>Sales</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Sales						
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Restatement Firms576654.02581.420.003,961.17391.48Matched Firms576639.70600.000.003,000.00338.87BonusRestatement Firms573715.81366.280.0010,000.001,226.27Matched Firms576763.29351.000.0031,000.001,793.59LTIP / Non-EquityRestatement Firms573378.26***0.00***0.0029,254.41191.58Matched Firms576126.750.000.009,410.10643.04Equity (stock and options)Restatement Firms5735,147.66***1,262.620.00290,594.8618,358.09Matched Firms5713,530.341,371.390.0082,372.697,192.57Total Comp.Restatement Firms5766,830.19**2,618.510.00293,097.3318,873.36	Matched Firms	576	4.73	4.00	1.00	14.00	3.21
Matched Firms576639.70600.000.003,000.00338.87BonusRestatement Firms573715.81366.280.0010,000.001,226.27Matched Firms576763.29351.000.0031,000.001,793.59LTIP / Non-EquityRestatement Firms573378.26***0.00***0.0029,254.41191.58Matched Firms576126.750.000.009,410.10643.04Equity (stock and options)Restatement Firms5735,147.66***1,262.620.00290,594.8618,358.09Matched Firms5713,530.341,371.390.0082,372.697,192.57Total Comp.Restatement Firms5766,830.19**2,618.510.00293,097.3318,873.36	Salary						
BonusRestatement Firms573715.81366.280.0010,000.001,226.27Matched Firms576763.29351.000.0031,000.001,793.59LTIP / Non-EquityRestatement Firms573378.26***0.00***0.0029,254.41191.58Matched Firms576126.750.000.009,410.10643.04Equity (stock and options)Restatement Firms5735,147.66***1,262.620.00290,594.8618,358.09Matched Firms5713,530.341,371.390.0082,372.697,192.57Total Comp.Restatement Firms5766,830.19**2,618.510.00293,097.3318,873.36	Restatement Firms	576	654.02	581.42	0.00	3,961.17	391.48
Restatement Firms573715.81366.280.0010,000.001,226.27Matched Firms576763.29351.000.0031,000.001,793.59LTIP / Non-EquityRestatement Firms573378.26***0.00***0.0029,254.41191.58Matched Firms576126.750.000.009,410.10643.04Equity (stock and options)Restatement Firms5735,147.66***1,262.620.00290,594.8618,358.09Matched Firms5713,530.341,371.390.0082,372.697,192.57Total Comp.Restatement Firms5766,830.19**2,618.510.00293,097.3318,873.36	Matched Firms	576	639.70	600.00	0.00	3,000.00	338.87
Matched Firms576763.29351.000.0031,000.001,793.59LTIP / Non-EquityRestatement Firms573378.26***0.00***0.0029,254.41191.58Matched Firms576126.750.000.009,410.10643.04Equity (stock and options)Restatement Firms5735,147.66***1,262.620.00290,594.8618,358.09Matched Firms5713,530.341,371.390.0082,372.697,192.57Total Comp.Restatement Firms5766,830.19**2,618.510.00293,097.3318,873.36	Bonus						
LTIP / Non-Equity Restatement Firms 573 378.26*** 0.00*** 0.00 29,254.41 191.58 Matched Firms 576 126.75 0.00 0.00 9,410.10 643.04 Equity (stock and options) Restatement Firms 573 5,147.66*** 1,262.62 0.00 290,594.86 18,358.09 Matched Firms 571 3,530.34 1,371.39 0.00 82,372.69 7,192.57 Total Comp. Restatement Firms 576 6,830.19** 2,618.51 0.00 293,097.33 18,873.36	Restatement Firms	573	715.81	366.28	0.00	10,000.00	1,226.27
Restatement Firms573378.26***0.00***0.0029,254.41191.58Matched Firms576126.750.000.009,410.10643.04Equity (stock and options)Restatement Firms5735,147.66***1,262.620.00290,594.8618,358.09Matched Firms5713,530.341,371.390.0082,372.697,192.57Total Comp.Restatement Firms5766,830.19**2,618.510.00293,097.3318,873.36	Matched Firms	576	763.29	351.00	0.00	31,000.00	1,793.59
Matched Firms576126.750.000.009,410.10643.04Equity (stock and options)Restatement Firms5735,147.66***1,262.620.00290,594.8618,358.09Matched Firms5713,530.341,371.390.0082,372.697,192.57Total Comp.Restatement Firms5766,830.19**2,618.510.00293,097.3318,873.36	LTIP / Non-Equity						
Equity (stock and options) Restatement Firms 573 5,147.66*** 1,262.62 0.00 290,594.86 18,358.09 Matched Firms 571 3,530.34 1,371.39 0.00 82,372.69 7,192.57 Total Comp. Restatement Firms 576 6,830.19** 2,618.51 0.00 293,097.33 18,873.36	Restatement Firms	573	378.26***	0.00 ***	0.00	29,254.41	191.58
Restatement Firms 573 5,147.66*** 1,262.62 0.00 290,594.86 18,358.09 Matched Firms 571 3,530.34 1,371.39 0.00 82,372.69 7,192.57 Total Comp. Restatement Firms 576 6,830.19** 2,618.51 0.00 293,097.33 18,873.36	Matched Firms	576	126.75	0.00	0.00	9,410.10	643.04
Matched Firms 571 3,530.34 1,371.39 0.00 82,372.69 7,192.57 Total Comp. Restatement Firms 576 6,830.19** 2,618.51 0.00 293,097.33 18,873.36	Equity (stock and op	tions)					
Total Comp. Restatement Firms 576 6,830.19** 2,618.51 0.00 293,097.33 18,873.36	Restatement Firms	573	5,147.66***	1,262.62	0.00	290,594.86	18,358.09
Restatement Firms 576 6,830.19** 2,618.51 0.00 293,097.33 18,873.36	Matched Firms	571	3,530.34	1,371.39	0.00	82,372.69	7,192.57
Restatement Firms 576 6,830.19** 2,618.51 0.00 293,097.33 18,873.36	Total Comp.						
Matched Firms 571 5,065.41 2,892.81 0.00 83,660.71 7,743.58	=	576	6,830.19**	2,618.51	0.00	293,097.33	18,873.36
	Matched Firms	<u>5</u> 71	5,065.41	2,892.81	0.00	83,660.71	7,743.58

Table IV

Executive Compensation Regression Models

This table reports the coefficients for the regressions of CEO incentive compensation on firm size and performance variables. We estimate compensation using the entire sample of CEOs in Execucomp for fiscal years 1998 to 2009. Cash Incentive Compensation (Bonus + LTIP (pre-2006) or Bonus + Non-Equity Incentive (post-2006)) and Equity Incentive Compensation (Restricted Stock + Unrestricted Stock Grants + Option Grants) are estimated separately. The equations are displayed below:

Cash Incentive = $\alpha + \beta 1 \text{Log}(\text{Assets}) + \beta 2 \text{NI}_{Pos} + \beta 3 \text{NI}_{Neg} + \epsilon$

Equity Incentive = $\alpha + \beta 1 \text{Log}(\text{Assets}) + \beta 2 \text{Ret}_{\text{Pos}} + \beta 3 \text{Ret}_{\text{Neg}} + \epsilon$

NI_Pos equals net income if positive and zero otherwise. NI_Neg equals net income if negative and zero otherwise. The coefficients on these variables are scaled by 103. Ret_Pos and Ret_Neg represent the one-year buy-and-hold stock returns. For each pay component we include the regression with and without year and industry fixed effects. Industries are classified using the Fama French 17-Industry classification. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. T-stats are shown in parenthesis (clustered at firm-level).

	Cash Ince	entive	Equity Incentive			
Column	(1)	(2)	(3)	(4)		
Intercept	-2082.952 ***	-2121.138***	-7076.540 ***	-8626.300 ***		
	(-13.96)	(-12.22)	(-22.13)	(-23.06)		
Log(Assets)	183.126***	195.572***	569.140 ***	615.850***		
	(16.28)	(16.86)	(24.51)	(25.12)		
NI_Pos	0.365 ***	0.361 ***				
	(8.32)	(8.41)				
NI_Neg	0.292 ***	0.182***				
C	(3.84)	(2.58)				
Ret_Pos			57.470**	78.980***		
			(2.41)	(3.02)		
Ret_Neg			-478.540 ***	26.670		
-			(-5.84)	(0.32)		
Fixed Effects						
Year	No	Yes	No	Yes		
Industry	No	Yes	No	Yes		
N	21,021	21,021	19,481	19,481		
R^2	0.2048	0.3078	0.1462	0.2962		

Table V

Direct Gain from Misreporting

This table reports the amount of direct gainpaid to CEOs as a result of inflated net income. Panel A shows the change in net income and direct gains (i.e. excess incentive compensation) for all firm-year observations. Panel B shows the change in net income and direct gains for firm-year observations for restatements due to fraud (and thus subject to clawback under SOX). Δ Net Income is the difference between restated and unrestated net income. Direct Gain is defined as the difference between the estimated compensation based on the unrestated performance variables and the estimated compensation based on the restated performance variables. Compensation is estimated separately for Direct Cash Gain (Bonus + LTIP (pre-2006) or Bonus + Non-equity Incentive (post-2006)) and Direct Equity Gain (Restricted and Unrestricted Stock Grants + Option Grants). Total Direct Gain is the sum of Direct Cash Gain and Direct Equity Gain. All values are in thousands of dollars. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

T unei A. Ali Kesiulemeni I	cim rears					
Variable	Ν	Mean	Median	Min	Max	Std. Dev.
∆Net Income	576	-180,370 ***	-11,985 ***	-52,997,000	215,000	2,329,513
Direct Cash Gain	576	85.03 **	2.24 ***	0.00	23,504.48	1,035.16
Direct Equity Gain	576	67.98 ***	2.05 ***	0.00	3,028.46	236.07
Total Direct Gain	576	153.02***	49.82***	0.00	23,504.48	1,057.46

Panel A: All Restatement Firm Years

Panel B: Fraud Restatement Firm Years

Variable	Ν	Mean	Median	Min	Max	Std. Dev.
ΔNet Income	93	-846,438 ***	-7,209 ***	-52,997,000	215,000	5,745,809
Direct Cash Gain	93	389.80	4.29	0.00	23,504.48	2,548.33
Direct Equity Gain	93	43.26	0.00	0.00	860.97	100.58
Total Direct Gain	93	433.07	57.49	0.00	23,504.48	2,544.67

Table VI

Direct Gain Subject to Clawback

This table compares the total amount of direct gain (excess incentive compensation) and indirect gain (profits from the sale of securities) to how much would be recoverable under each clawback provision. The top three rows in each panel report the total number of firm-years, firms, and CEOs. The first column displays the aggregategain, as well as the mean and median gainper CEO. Direct Gain is calculated as the difference between the estimated compensation based on unrestated performance variables and the estimated compensation based on the restated performance variables. Indirect Gain is the sum of stock gains and option gains. Stock gain is calculated as the difference between the transaction price and the estimated basis for each transaction, multiplied by the number of shares sold. Option gain is calculated as the difference between the closing market price on the transaction day andthe exercise price, multiplied by the number of options exercised. Both stock and option gain are aggregated by fiscal year for each CEO. The second column reports how many of the firm-years, firms, and CEOs are reachable under Dodd-Frank Section 954, as well as how much of the gain would be recoverable under Dodd-Frank. Next to the second column is the percentage of the sample subject to Dodd-Frank as well as the percentage. The third column reports how many of the firm-years, firms, and CEOs are reachable under Sarbanes Oxley Section 304, as well as how much of the total gain would be recoverable under SOX. Next to the third column is the percentage of the sample subject to SOX as well as the percentage of the Aggregate Total Gain subject to clawback. All numbers are reported in thousands of dollars (except firm-year observations, number of firms, and number of CEOs).

	(1)	(2))	(3)		
	Gain	Subject to D	odd-Frank	Subject to SOX		
	Galli	Clawb	ack ^a	Clawback ^b		
Firm-year observations	576	400	69.44%	93	16.15%	
Number of Firms	195	193	98.97%	32	16.41%	
Number of CEOs	245	228	93.06%	40	16.33%	
Direct Gain						
Aggregate	88,135.29	64,674.32	73.38%	40,272.66	45.69%	
Mean (per CEO)	359.74	281.19	78.17%	164.05	45.60%	
Median (per CEO)	99.90	74.62	74.69%	96.34	96.43%	
Indirect Gain						
Aggregate	4,386,021.30	0.00		1,152,915.55		
Mean (per CEO)	17,902.13	0.00		4,705.78		
Median (per CEO)	0.00	0.00		35.54		

^aThe Dodd-Frank Clawback applies to all types of "material noncompliance" restatements to recover the unearned portion of incentive based compensation awarded in the three year period prior to the issuance of a restatement. ^bThe SOX clawback is only applicable to restatements due to "material misconduct" and only applies to the gains received by the CEO in the first 12 months after the original misstatement. However, the SOX Clawback does include all profit from the sale of securities during this window. The primary differences between the two provisions are (1) SOX applies only to restatements due to fraud, while Dodd-Frank applies to all material restatements, regardless of fault; (2) SOX applies to the 12-month period following the end of the *restated fiscal year* whereas Dodd-Frank applies to the 3 year period prior to the *restatement announcement*; and (3) SOX allows recovery of profits from the sale of securities in addition to excess compensation, whereas Dodd-Frank applies only to excess compensation.

Table VIITotal Gain to CEOs from Misreporting

Panel A shows the total gain (by firm-year) for all high concern restatements. Panel B shows the total gain (by firm year) for restatements due to fraud. Total Gain is the sum of Direct Gain (excess bonus, long-term incentive, restricted stock, and option grants) and Indirect Gain (profits from the sale of stock and option exercises). Direct Gainis calculated as the difference between estimated compensation based on unrestated performance variables and estimated compensation based on restated performance variables. Stock gains are calculated as the difference between the sale price and the average 5-year basis, multiplied by the number of shares sold. Option gains are calculated as the difference between the closing stock price on the transaction date and the exercise price, multiplied by the number of options exercised. Insider trading data is from Thomson Reuters Insider Transactions. Stocks and options disposed of by gift, will, into a trust, pursuant to domestic order, or as payment of a tax liability are excluded. Transactions identified as expiration of long or short position or dispositions to the issuer when the CEO left the firm are also excluded. All values are in thousands of dollars. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

Variable	Ν	Mean	Median	Min	Max	Std. Dev.
Direct Gain	576	153.02***	49.82***	0.00	23,504.48	1,057.46
Indirect Gain						
Stock Gain	576	3,766.21 ***	0.00 ***	0.00	397,841.78	22,406.74
Option Gain	576	3,848.41 ***	0.00 ***	0.00	322,263.81	21,083.01
Total Gain	576	7,767.64 ***	84.96***	0.00	572,261.07	38,429.05
Panel B: Fraud H Variable	Restatement Fi	<i>irm Years</i> Mean	Median	Min	Max	Std. Dev.
Direct Gain	93	433.06	57.49	0.00	23,504.48	2,544.67
Indirect Gain						
Stock Gain	93	6,240.22	0.00	0.00	130,060.00	23,210.58
Option Gain	93	6,225.50	0.00	0.00	125,220.63	23,263.01
Total Gain	93	12,898.80	94.73	0.00	242,327.13	46,275.65

Panel A: All Restatement Firm-Years

Table VIII

Probability of Termination

This table reports coefficients from probit regressions of being Fired on firm size, tenure, and performance variables for all CEOs in Execucomp for the period 1998 to 2009. We estimate the probability of being fired as:

 $Pr(Fired) = \alpha + \beta_1 Log_AT + \beta_2 Tenure + \beta_3 NI + \beta_i (Performance) + \varepsilon$

The dependent variable, Fired, is obtained by searching Lexis-Nexis news articles to determine whether CEO turnover was voluntary or involuntary. Involuntary departures are coded as Fired = 1 while voluntary departures (primarily retirement, change of jobs, or death) are coded as Fired = 0. If there was not sufficient information to make a determination then Fired was coded as missing. If there was no turnover then Fired = 0. Log_AT is the log of total assets. Tenure is calculated by counting the number of years the individual is listed as CEO in Execucomp. NI is the amount of net income (loss) for the firm in the given year, scaled in thousands of dollars. The coefficients on NI are scaled by 10^5 .Neg_NI is an indicator variable equal to one if the net income is negative in the current year and zero otherwise. NI_Down is an indicator variable equal to one if the net income in the prior two years and zero otherwise. Industries are classified using the Fama French 17-Industry classifications. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. T-stats are shown in parenthesis (clustered at firm-level). Marginal probabilities are displayed in brackets.

	Model 1		Model 2	2	Model 3		Model 4	
Intercept	-2.836***	-3.201 ***	-2.983 ***	-3.294 ***	-2.916***	-3.224 ***	-3.117 ***	-3.384 ***
	(-12.55)	(-10.21)	(-14.75)	(11.08)	(-13.83)	(-10.57)	(-13.99)	(-10.55)
Log_AT	0.055 ***	0.077 ***	0.053 ***	0.067 ***	0.046 ***	0.059 ***	0.058 ***	0.070***
	(3.50)	(4.41)	(3.85)	(4.36)	(3.25)	(3.74)	(3.92)	(4.27)
	[0.003]	[0.003]	[0.002]	[0.003]	[0.002]	[0.002]	[0.003]	[0.003]
Tenure	0.000	-0.002	0.001	0.000	-0.005	-0.006	-0.004	-0.005
	(0.01)	(-0.36)	(0.14)	(-0.07)	(-0.69)	(-0.93)	(-0.65)	(-0.75)
	[0.000]	[-0.000]	[-0.000]	[-0.000]	[-0.000]	[-0.000]	[-0.000]	[-0.000]
NI	-0.118**	-0.143 ***	-0.013	-0.032	0.004	-0.015	-0.003	-0.019
	(-2.54)	(-3.15)	(-0.38)	(-0.96)	(0.13)	(-0.44)	(-0.08)	(-0.55)
	[-0.001]	[-0.001]	[-0.000]	[-0.000]	[-0.000]	[-0.000]	[-0.000]	[-0.000]
Neg_NI			0.498 ***	0.528 ***	0.424 ***	0.449 ***	0.343 ***	0.370 ***
			(10.11)	(10.16)	(7.84)	(7.98)	(5.61)	(5.85)
			[0.030]	[0.031]	[0.025]	[0.025]	[0.019]	[0.019]
NI Down					0.198 ***	0.227 ***	0.246 ***	0.270 ***
					(4.13)	(4.66)	(5.00)	(5.42)
					[0.009]	[0.010]	[0.011]	[0.012]
Loss2							0.275 ***	0.267 ***
							(3.56)	(3.43)
							[0.015]	[0.014]
Year FE	No	Yes	No	Yes	No	Yes	No	Yes
Ind. FE	No	Yes	No	Yes	No	Yes	No	Yes
Ν	20,029	20,029	20,029	20,029	18,815	18,815	17,507	17,507
LR Chi2	21.70	71.65	122.14	176.17	133.14	191.93	139.82	195.69
Prob> Chi2	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Pseudo R2	0.0057	0.0188	0.0320	0.0462	0.0357	0.0515	0.0398	0.0558

Table IX

Change in Estimated Probability of Termination

This table reports the number of CEOs with a decreased probability of termination within each range of reduced probability. The decrease in probability is calculated as the difference between the estimated probability of termination based on restated performance variables, less the estimated probability of termination based on the unrestated performance variables, scaled by the estimated probability of termination based on the restated performance variables. Estimated probabilities are calculated by applying the probit coefficients from Table IV to the restated and unrestated performance data in our sample of firms that misreported financial statements for fiscal years 1998 to 2009.

	Percent Decrease in Probability of Termination							
	> 10%	> 20%	> 30%	> 40%	> 50%	> 60%	> 70%	> 80%
Number of CEOs	100	89	86	81	61	21	16	2
Percent of Sample	17.73%	15.78%	15.25%	14.36%	10.82%	3.72%	2.84%	0.35%

* Note: some observations did not have sufficient data to compute probabilities.

Table X

Total Gain by Firm Size

We repeat our analysis from Table VII separately for the S&P 500, Mid-Cap 400, and Small-Cap 600. Direct Gain is calculated as the difference between estimated cash and equity compensation based on unrestated performance variables and estimated cash and equity compensation based on restated performance variables. Indirect Gain is composed of stock and option profits. Gains on stock sales are calculated as the difference between the transaction price and the CEO's basis, multiplied by the number of shares sold. Basis is estimated as the average purchase price of all shares over the prior 5 years. Gain on option exercise is calculated as the difference between the exercise price and the closing price for the transaction day, multiplied by the number of options exercised. Total Gain is the sum of Direct Gain (increase in compensation due to misreported earnings) and Indirect Gain (profits from stock sales and option exercises). All stock and option gains are aggregated by fiscal year for each CEO. Panel A displays the gains for CEOs from S&P 500 firms. Panel B shows the gains for CEOs from the S&P Mid-Cap 400 firms. Panel C shows the gains for CEOs from the S&P Small-Cap 600 firms. All values are in thousands of dollars. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively. T-stats are reported in parenthesis.

Panel A: S&P 500 Firms Variable Ν Mean Median Min Max Std. Dev. -18,780 *** Δ Net Income 191 -490,285.87 ** -52,997,000 215,000 4,024,320.09 305.91 ** 55.85 *** 23,504.48 Direct Gain 191 0.00 1,802.20 Indirect Gain Stock Gain 191 0.00 *** 0.00 397,841.77 8,105.29 *** 38,009.54 **Option Gain** 191 9.382.29 *** 0.00 *** 0.00 322,263.81 35,414.68 17,792.96 *** 94.12 *** 572,261.07 **Total Gains** 191 0.00 64,683.49

Panel B: S&P Mid-Cap 400 Firms

Variable	Ν	Mean	Median	Min	Max	Std. Dev.
Δ Net Income	169	-28,765.82 ***	-4,088 ***	-632,631	26,072	86,455.52
Direct Gain	169	68.81 ***	42.22 ***	0.00	893.12	126.21
Indirect Gain						
Stock Gain	169	2,028.29 ***	0.00 ***	0.00	41,260.030	5,768.91
Option Gain	169	1,380.30 ***	0.00 ***	0.00	65,617.820	5,852.13
Total Gains	169	3,477.40 ***	79.22 ***	0.00	76,416.40	9,504.08

Panel C: S&P Small-Cap 600 Firms

Variable	Ν	Mean	Median	Min	Max	Std. Dev.
Δ Net Income	216	-24,943.54	-1,922.50 ***	-3,818,000	55,436	259,990.84
Direct Gain	216	83.70 ***	13.37 ***	0.00	3028.79	276.99
Indirect Gain						
Stock Gain	216	1,289.11 ***	0.00 ***	0.00	30,754.91	3,836.72
Option Gain	216	886.09 ***	0.00 ***	0.00	34,063.51	3,581.57
Total Gains	216	2,258.90 ***	82.75 ***	0.00	67,847.21	6,904.05

Table XIDirect Gain Subject to Clawback by Firm Size

We repeat our analysis from Table VI by firm size. This table compares the total amount of direct gain (i.e. excess incentive compensation) to how much would be recoverable under each clawback provision. The top three rows in each panel report the total number of firm-years, firms, and CEOs in the full sample and each sub-sample. The first column displays the aggregate, mean, and median directgain by CEO. Direct Gain is calculated as the difference between the estimated compensation based on unrestated performance variables and the estimated compensation based on the restated performance variables. The second column reports how many of the firm-years, firms, and CEOs are reachable under Dodd-Frank Section 954, as well as how much of the direct gain would be recoverable under Dodd-Frank. Next to the second column is the percentage of the sample subject to Dodd-Frank as well as the percentage of the firm-years, firms, and CEOs are reachable under sarbanes Oxley Section 304, as well as how much of the direct gainwould be recoverable under sorts how many of the direct gainwould be recoverable under SoX. Next to the third column reports how many of the direct gainwould be recoverable under SoX. Next to the third column is the percentage of the sample subject to SOX as well as the percentage of compensation (aggregate, mean, and median) subject to clawback. All numbers are reported in thousands of dollars (except firm-year observations, number of firms, and number of CEOs).

Panel A: S&P 500 Firms	(1)	(2)	(3)	
i unei A. SQI 500 Films				(5) Subject to SOX	
	Total Gain	Subject to Dodd-Frank Clawback		Clawback	
Firm-year observations	191	133	69.63%	44	23.04%
Number of Firms	60	59	98.33%	14	23.33%
Number of CEOs	81	74	91.36%	21	25.93%
Direct Gain					
Aggregate	58,428.57	47,836.31	81.87%	38,034.88	65.10%
Mean (per CEO)	712.54	646.44	90.72%	199.14	27.95%
Median (per CEO)	134.24	97.56	72.68%	89.09	66.37%
Panel B: S&P Mid-Cap 400	(1)	(2)		(3)	
-	Total Gain	Subject to Do	dd-Frank	Subject to S	OX
		Clawba	ck	Clawback	
Firm-year observations	169	122	72.19%	31	18.34%
Number of Firms	59	58	98.31%	10	16.95%
Number of CEOs	69	67	97.10%	11	15.94%
Direct Gain					
Aggregate	11,627.07	6,796.48	58.46%	1441.51	12.40%
Mean (per CEO)	166.13	101.44	61.06%	8.53	5.13%
Median (per CEO)	103.78	74.13	71.43%	7.25	6.99%
Panel C: S&P Small-Cap 600	(1)	(2)		(3)	
	Total Gain	Subject to Dodd-Frank Clawback		Subject to SOX Clawback	
Firm-year observations	216	160	74.07%	18	8.33%
Number of Firms	76	76	100.00%	8	10.53%
Number of CEOs	95	89	93.68%	8	8.42%
Direct Gain					
Aggregate	18,079.65	10,041.53	55.54%	796.27	4.40%
Mean (per CEO)	190.32	112.83	59.28%	3.69	1.94%
Median (per CEO)	81.92	64.70	78.98%	23.83	35.19%

Appendix A

Table AI

Magnitude of Restatement (Change in Net Income)

This table compares the change in net income for our sample of high concern restatements against the change in net income for all other restatement firms with compensation data available in Execucomp. The first column reports the number of firms in each group. The remaining columns display descriptive statistics for the two groups. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

	Firms	Mean	Median	Min	Max	StdDev
ΔNet Income						
High Concern Restatement Firms	195	-130,073.92 ***	-8,728.00 ***	-6,335,000.00	0.00	667,823.49
All Other Restatement Firms	354	-31,840.86 ***	-2,912.00 ***	-2,237,625.00	0.00	146,951.48
Test of Differences		-98,233.05 ***	-5,816.00 ***			

Table AII Option Exercises

Insider trading data is collected from Thomsons Reuters. Panel A shows the total gains from option exercised by CEOs from firms that restated earnings during the period 1998 to 2009. The first row displays the total aggregate number (and gain) of options exercised. The second row displays the number of options exercised that were expiring within 12 months following the exercise date. The third row shows how many of the total options exercised became exercisable within 12 months prior to exercise. Panel B shows the ratio of exercised options to exercisable and total options held by CEOs in the sample. The number of exercisable and unexercisable options are collected from the firm's proxy statements (DEF 14A) in SEC EDGAR.

Panel A: Gains from Option Exe	rcise						
		Number	Gain (\$)				
Total Options		91,053,812 2,408,588,584					
Expiring within 12 Months		33,821,189	37.14%	661,0′	72,427	27.45%	
Newly Exercisable		3,627,108	3.98%	79,5	78,477	3.30%	
Panel B: Percent of Options Exercised							
						Std.	
_	Ν	Mean	Median	Min	Max	Dev.	
Exercised / Exercisable	115	0.3016 ***	0.2112 ***	0.0001	1.0000	0.2727	
Exercised / Total Options	115	0.2117 ***	0.1416 ***	0.0000	1.0000	0.2267	

Appendix B

Date Years Date Initiated Executive Role Restated Resolved Amount Firm 12/06/07 William McGuire CEO 2003-2006 United Health Care 12/06/07 \$468 million 09/01/08 James O'Leary CFO 2002-2008 **Beazer Homes** 08/30/11 \$1.4 million 09/01/08 Ian McCarthy CEO 2002-2008 **Beazer Homes** 03/01/11 \$6.48 million 07/22/09 Maynard Jenkins CEO 2002-2004 CSK Auto 11/15/11 \$2.8 million 03/05/10 Daniel Ustain CEO 2001-2005 Navistar 08/05/10 \$1.32 million 03/05/10 Robert Lannert CFO 2001-2005 Navistar 08/05/10 \$1.05 million 06/01/10 Walden O'Dell CEO 2002-2007 Diebold 06/09/10 \$470,016 04/02/12 Michael A. Baker CEO 2006-2008 ArthoCare Pending 04/02/12 Michael Gluk CFO 2006-2008 ArthoCare Pending

Clawback Actions by the SEC under SOX Section 304

Appendix C

American International Group (AIG), Inc.

Clawback.

All of the 2010 incentive compensation paid to the current named executives is subject to "clawback" if it is later determined to have been based on materially inaccurate financial statements or any other materially inaccurate performance metrics, or if the current named executive is terminated due to misconduct that occurred during 2010.

The Committee retains discretion to reduce the amount of any incentive compensation on the basis of individual or company-wide performance, and all incentive compensation paid is subject to clawback if the payments were based on materially inaccurate financial statements or any other materially inaccurate performance metric criteria, or if the individual is terminated due to misconduct that occurred during the period in which the payment was earned.

[Annual Report 4-4-2011; adopting Dodd-Frank requirements; board discretion]

Allegheny Energy, Inc.

Recovery of Compensation Due to Financial Restatement

The Board has adopted a policy providing it with sole and absolute authority within governing law to seek reimbursement of annual incentive payments paid to any Named Executive Officer or other specified officer who engages in fraud or intentional misconduct that causes or partially causes the need for a restatement of AE's financial results (often referred to as a "recoupment" or "claw-back" policy).

The policy also requires the forfeiture of bonuses and other compensation if the Board determines that knowing misconduct by the CEO or CFO has occurred and caused AE's financial results to be restated. In this situation, the Board will take steps to secure reimbursement from the responsible CEO or CFO of certain bonus, incentive-based or stock-based compensation and net profits realized by the responsible officer from the sale of AE's securities.

[Annual Report 2-23-2011; adopting fraud requirement; board discretion]

Brown Shoe Co., Inc.

The awards include a clawback provision as a risk mitigator, providing that the Committee may require that any holder of a long-term incentive award whose malfeasance contributed to a restatement return any proceeds from the award. The Committee also retained the right to exercise negative discretion to reduce any award payout based on the quality of the Company's earnings.

[Proxy Statement 4-15-2011; adopting fraud requirement]

CDI Corp.

Our Clawback Policy

CDI has a "clawback" policy under which the company can cancel and recoup from any employee in the CDI organization any incentive compensation or equity awardsthat were based on incorrect information, whether the error in the information occurred as a result of oversight,

negligence or intentional misconduct (including fraud). The Committee has discretionto treat employees who received an award based on incorrect information differently depending on an employee's degree of involvement in causing the error, an employee's assistance in discovering and/or correcting the error, and any other facts that the Committee determines to be relevant. [Proxy Statement 4-19-2011; adopting part of incentive compensation; board discretion]

CNO Financial Group, Inc.

Clawback Rights

Our Amended and Restated Long-Term Incentive Plan contains a clawback provision relating to our long-term equity awards: stock options, P-Shares and restricted shares. Under this clawback provision, if our financial statements are required to be restated as a result of errors, omissions, or fraud, the Committee may, at its discretion, based on the facts and circumstances surrounding the restatement, direct the recovery of all or a portion of an equity award from one or more executives with respect to any fiscal year in which our financial results are negatively affected by such restatement. To do this, we may pursue various ways to recover from one or more executives: (1) seek repayment from the executive; (2) reduce the amount that would otherwise be payable to the executive under another benefit plan; (3) withhold future equity grants, bonus awards, or salary increases; or (4) take any combination of these actions.

Our Pay for Performance (P4P) Plan contains recapture rights of any incentive amount paid or vested in the event that the Committee determines that the achievement of performance goals was based on incorrect data.

[Proxy Statement 4-12-2011; all or part of incentive compensation; board discretion]

Computer Sciences Corp.

Compensation Recoupment Policy

CSC maintains a compensation recoupment or "clawback" policy that permits the Company to recover performance based compensation from participants whose fraud or intentional illegal conduct materially contributed to a financial restatement. The policy allows for the recovery of the difference between compensation awarded or paid and the amount which would have been paid had it been calculated based on the restated financial statements, excluding any tax payments. In addition, under the Company's equity grant agreements, employees may be required to forfeit awards or gains if a recipient breaches the non-competition or non-solicitation of employees or non-disclosure provisions of such agreements.

[*Proxy Statement 6-24-2011; requires fraud or illegal conduct; excess incentive compensation*]

Dana Holdings Corp.

Clawback Provisions

In order to mitigate risk to Dana of paying either annual or long term incentives based on faulty financial results, we have a policy (Clawback Policy) regarding adjustment of performance-based compensation in the event of a restatement of our financial results that provides for the Compensation Committee to review all bonuses and other compensation paid or awarded to our executive officers based on the achievement of corporate performance goals

during the period covered by a restatement. If the amount of such compensation paid or payable to any executive officer based on the originally reported financial results differs from the amount that would have been paid or payable based on the restated financial results, the Compensation Committee makes a recommendation to the independent members of the Board as to whether to seek recovery from the officer of any compensation exceeding that to which he or she would have been entitled based on the restated results or to pay to the officer additional amounts to which he or she would have been entitled based on the restated results, as the case may be.

[Proxy Statement 4-4-2011; excess incentive compensation; board discretion]

Interpublic Group of Companies, Inc.

Compensation Recovery in the Event of a Financial Restatement:

The company has adopted a policy under which, in the event of a significant restatement of financial results due to fraud or misconduct, it will review payments made to senior executives on the basis of having met or exceeded specific performance targets during the restatement period. If such bonuses would have been lower had they been calculated based on such restated results, the Board of Directors will, to the full extent permitted by governing law, seek to recoup for the benefit of the company all such bonuses to senior executives whose fraud or misconduct, as determined by the Board of Directors, resulted in such restatement. For purposes of this policy, the term "senior executives" means "executive officers" as defined under the Securities Exchange Act of 1934, as amended, and the term "bonuses" means awards under The Interpublic Group of Companies, Inc. 2004 Performance Incentive Plan or any equivalent incentive plan which supersedes such plan.

[*Proxy Statement 4-20-2011; requires fraud or misconduct; excess incentive compensation*]

LCA Vision Inc.

Adjustment or Recovery of Awards

Under the 2006 Stock Incentive Plan (and under the proposed 2011 Plan), if, at any time within one year after the date on which a participant exercised an option or on which restricted stock vests, the Committee determines in its discretion that we have or a subsidiary has been materially harmed by the participant, then any gain realized by the participant shall be paid by the participant to us upon notice from us. The Dodd-Frank Act also requires recoupment of compensation in certain situations.

[Proxy Statement 4-15-2011; limited recovery to one-year following action]

Molex Inc.

Recoupment and Forfeiture Policies

Under the Molex Annual Incentive Plan, the Board may require reimbursement of incentive awards paid to a named executive officer where (i) the payment was predicated in whole or in part upon the achievement of certain financial results that were subsequently the subject of a material restatement; (ii) in the Board's view the named executive officer engaged in fraud or misconduct that caused the need for the restatement; and (iii) a lower incentive award would have been made to the named executive officer based upon the restated financial results.

The Board may also seek reimbursement of incentive awards paid to any named executive officer in other circumstances involving fraud or misconduct if such fraud or misconduct caused substantial harm to Molex even in the absence of a restatement of Molex's financial statements.

[*Proxy Statement 9-9-2011; requires fraud or misconduct; excess incentive compensation*]

New York Times Co.

Board Policy on Recoupment of Bonuses Upon Restatement Due to Fraud or Misconduct.

In the event of a restatement of the Company's financial statements due to fraud or intentional misconduct, the Board will review performance-based bonuses to executive officers whose fraud or intentional misconduct caused the restatement, and the Company will seek to recoup bonuses paid for performance during the period or periods that are the subject of the restatement.

[Proxy Statement 3-18-2011; adopting fraud requirement]

Petroleum Development Corp.

Clawback Provisions

The employment agreements also contain a recoupment (or "clawback") provision requiring the executive to reimburse all or a portion of his/her annual bonus if the Company must restate all or a portion of its financial statements due to material noncompliance by the Company with any financial reporting requirement under securities laws. The reimbursements are equal to the difference between the bonus paid to the executive for the affected years and the bonus that would have been paid to the executive had the financial results been properly reported.

[Proxy Statement 4-21-2011; adopting Dodd-Frank requirements]

Pep Boys Manny Moe & Jack

Recoupment Policy.

In fiscal 2010, we adopted a recoupment policy. We will seek to recover, at the direction of the Compensation Committee, all or a portion of any compensationawarded or paid to a current or former Officer during the prior three fiscal years yearif (i) the amount of such compensation was based on the achievement of certain financial results that were subsequently the subject of a restatement due to the material noncompliance of the Company with any financial reporting requirement under the securities laws and (ii) a lower award or payment would have been made to the Officer based upon the restated financial results. If, however, the Compensation Committee determines that an Officer engaged in misconduct that resulted in the obligation to restate or knew or should have known of such misconduct and failed to take appropriate action, then we will seek to recover the related compensation regardless of the fiscal year in which it was paid.

[Proxy Statement 4-29-2011; adopting Dodd-Frank requirements]

Sprint Nextel Corp.

Clawback Policy

We have a "clawback" policy, which provides that, in addition to any other remedies available to us under applicable law, we may recover (in whole or in part) any bonus, incentive payment, commission, equity-based award or other compensation received by certain executives, including our named executive officers, if our board or any committee of our board determines that (a) such bonus, incentive payment, commission, equity-based award or other compensation is or was based on any financial results or operating objectives that were impacted by the officer's knowing or intentional fraudulent or illegal conduct, and (b) recovery is appropriate.

[Proxy Statement 3-28-201; requires intentional or fraudulent conduct]

Tenet Healthcare Corp.

Performance-Based Annual Bonus

The Compensation Committee annually determines cash bonuses, if any, to be paid out under the company's Annual Incentive Plan ("AIP"). Approximately 1900 employees participate in the AIP. AIP awards are subject to a "clawback" provision under which the Board of Directors may require reimbursement to the company of a cash bonus in the event of a material restatement of our financial results caused by the recipient's fraud or other misconduct.

[Proxy Statement 9-23-2011; requires fraud or misconduct; board discretion]