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Misaligned Incentives: An Analysis of Executive Compensation as an Indicator of Managerial Influence

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Abstract
This study provides unique evidence for the potential use of the implementation of anti-takeover provisions (ATPs) as an indication of managerial influence in compensation setting processes within publicly traded firms. While many firms utilize anti-takeover provisions to protect their ability to adhere to its corporate strategy and policy, the imposition of an anti-takeover provision distinctly predicts both a structural and aggregate change in the compensation packages of CEOs in S&P 500 firms. In the three years following a firm’s implementation of an anti-takeover provision, the compound annual growth rate (CAGR) of total executive compensation increases by 42% relative to the CAGR across all S&P 500 firms. Moreover, these altered compensation plans more heavily favor increasing levels of stock-based and bonus-based compensation than the average packages of S&P 500 CEOs. Thus, this study provides principal evidence of managerial influence in the compensation setting processes within by publicly traded firms.

Keywords

Disciplines
Business
MISALIGNED INCENTIVES: AN ANALYSIS OF EXECUTIVE COMPENSATION AS AN INDICATOR OF MANAGERIAL INFLUENCE

By

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An Undergraduate Thesis submitted in partial fulfillment of the requirements for

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ABSTRACT

This study provides unique evidence for the potential use of the implementation of anti-takeover provisions (ATPs) as an indication of managerial influence in compensation setting processes within publicly traded firms. While many firms utilize anti-takeover provisions to protect their ability to adhere to its corporate strategy and policy, the imposition of an anti-takeover provision distinctly predicts both a structural and aggregate change in the compensation packages of CEOs in S&P 500 firms. In the three years following a firm’s implementation of an anti-takeover provision, the compound annual growth rate (CAGR) of total executive compensation increases by 42% relative to the CAGR across all S&P 500 firms. Moreover, these altered compensation plans more heavily favor increasing levels of stock-based and bonus-based compensation than the average packages of S&P 500 CEOs. Thus, this study provides principal evidence of managerial influence in the compensation setting processes within by publicly traded firms.

Keywords: Executive compensation, managerial influence, anti-takeover provision, principal-agent problem, S&P 500, stock-based compensation, corporate governance
INTRODUCTION

Executive compensation packages have garnered significant scholarly debate over the past three decades. In 1965, the ratio of the average CEO’s pay to that of the average worker in the United States was approximately 20:1; however, in 2015, the same ratio grew exponentially to 303:1.¹ While the relative growth in the size of these packages is widely known, markedly less of the current scholarly discussion has focused on analyzing the attributes of increasingly dynamic compensation structures approved by publicly traded companies. The typical pay package for a CEO and other top executives consists of four parts: a base salary, an annual bonus tied to certain performance measures, stock grants and stock options, and a long-term incentive plan and other perquisites.² However, for the purposes of this research study, these four components are further segmented into six separate, observable components as defined by the Institutional Shareholders Services. Further, existing research has shown that stock awards and stock options, which accounted for 57.2% of CEO pay among S&P 500 companies in 2014, have been increasingly used by firms through a proposed justification of more effective alignment of the incentives of the CEO with those of common shareholders.³ However, this shift in the relative structure of compensation packages has accelerated the growth of total compensation granted to an executive in a given year. Additionally, recent trends in executive compensation highlight that many firms have utilized existing regulations, both from federal regulators and tax authorities, as baselines for executive compensation, rather than altering compensation to be within these boundaries.⁴

Generally, the existing literature regarding executive compensation has attempted to analyze the impacts of rapidly expanding compensation structures. Previous analyses of executive compensation have led to a sustained dialogue among scholars, which aims to determine the most effective strategies for addressing this persistent rise in compensation over the last few decades; although, this literature has devoted fewer resources to developing legal reforms. Thus, further analyzing the incentives that pervade ongoing negotiations between executive and corporate boards will be instrumental in designing potential revisions to current regulations as a whole.

Regulations imposed by stock exchanges, such as the NYSE and NASDAQ, as well as the Securities and Exchange Commission (SEC) and Congress, have led to enhanced disclosure requirements regarding the structure of executive compensation packages provided by publicly traded firms. Thus, the consistent rise of stock-based compensation, coupled with a concurrent increase in disclosure and reporting by publicly traded firms, presents a unique opportunity to analyze the effects of these compensation packages in aligning the incentives of managers with shareholders. The purpose of this study is two-fold. First, this study will examine the current state of executive compensation and will analyze factors relating to the principal-agent problem in compensation negotiations. Second, this study will aim to develop and propose a series of recommendations regarding regulatory reform in order to better align the incentives of executives with those of the firms’ shareholders and to reduce the compensation costs currently borne by shareholders of publicly traded companies.

For the purposes of this research study, shareholder value maximization will be normatively viewed as providing the same outcome as the maximization of firm value. The

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primary motivation for this assumption is that, barring circumstances of insolvency, the value of the debt of publicly traded firms should not fall below par, or face value, due to a significant level of shareholder value within publicly traded firms. As residual claimants to the value of a firm, shareholders capture any incremental increases in firm value above the level of indebtedness of a given firm. Undoubtedly, certain instances exist in which shareholder value maximization does not align with firm value maximization; however, for the purposes of this study, the two concepts are viewed as providing effectively indistinguishable outcomes. As will be discussed, current regulations fail to adequately incentivize corporate boards and executives to refrain from deal-making that is not in the best interests of the shareholders of a firm. Accordingly, the recommendations proposed by this paper do not attempt to entirely eliminate the possibility that managers will exert substantial influence in advocating for either higher compensation or the implementation of anti-takeover provisions that grant them increased job security. Instead, the primary motivations for the recommendations provided by this paper, which would restrict the ability of publicly traded firms to enact changes to either anti-takeover provisions or the growth rate of compensation without providing a justification to shareholders, stem from the assumption that shareholders should be able to choose whether action is necessary for addressing these decisions. If shareholders remain apathetic following the revelation of the granting of favors to executives from the board of directors, the success of these proposed reforms does not change. Simply, these reforms enable shareholders to be more informed and to more easily arrive at a decision in shareholder votes than in the status quo.

Scholars, managers, and shareholders distinctly benefit from the findings of this research project as it provides evidence for the need to reinforce existing corporate governance regulations and may impact the future structure of intracompany power dynamics. Much of the existing
research has explored the systematic reasons for the “ratcheting” of compensation packages as a whole; however, this study will likely contribute to the ongoing scholarly debate by providing a series of proposed reforms that could alleviate many of the effects of the principal-agent problem. Managers and shareholders will be distinctly interested in the findings of this research project as it will likely carry unique implications for future negotiations of executive compensation packages for publicly traded companies. Further, this research study will largely contribute to the existing scholarly discussion regarding executive compensation in that it provides evidence for the managerial power hypothesis proposed by Bebchuk and Fried in 2003.6 Lastly, stock exchanges and the SEC could potentially utilize the findings and recommendations of this research project in order to reinforce the regulatory reforms proposed to federal lawmakers, which may help to better align the incentives of managers and shareholders for publicly traded companies moving forward.

LITERATURE REVIEW

Overview of Moral and Legal Framework Analyses

Current research focusing on the practices that have led to rapidly increasing executive compensation packages is characterized by two salient categories. The first category of research has established various moral frameworks, which attempt to determine the “justness” of compensation packages in terms of both the total wealth and the relative level of pay given to executives.7 This field of literature has argued, for example, that elevated levels of executive compensation are unjustifiable from a utility generation perspective and are harmful to employee

morale and societal welfare as executives do not provide vast multiples of the value created by a regular employee in the status quo. Alternatively, the second category has put forth legal interpretations and has suggested regulatory reforms within the field of executive compensation in order to alleviate the principal-agent problem that seemingly pervades compensation-setting procedures in the status quo. More specifically, the principal-agent problem that pervades the current negotiations processes regarding executive compensation stems from the CEOs innate desire to maximize his or her compensation to the detriment of the shareholders of the firm. This area of research has explored the links between regulations, such as those imposed by the SEC and stock exchanges, and the evolving structures of executive compensation more broadly. Research in this field has criticized the procedures currently employed by major firms to develop and audit compensation packages under the assumption that they are intrinsically prone to the influence accumulated by CEOs in their desire to enhance their compensation packages. Generally, findings from the current literature suggest that major corporations should enact policies that make executive compensation packages more transparent, increase independence and information dissemination within boards of directors and compensation committees, and create incentives that alleviate principal-agent concerns inherent within the approval process pertaining to compensation packages.


10 While the relative change in compensation does not account for a significant amount of corporate profits in a given year, the reduction of overall value that is available for distribution to shareholders, through either dividends or stock repurchases, distinctly harms the shareholders of a firm.


Overview of the Approval Process of Compensation Packages

Existing research posits that executive compensation packages are audited and approved by multiple groups before being awarded to chief executive officers. Typically, the board of directors of a firm will form a compensation committee, composed of three to four independent directors, who provide a recommendation regarding the CEO’s proposed compensation package, using available data on other executive compensation packages in a given industry. Moreover, the board of directors will also hire compensation consultants to provide an analysis of similar CEO’s compensation. Finally, effectively all publicly traded corporations have implemented some form of “say-on-pay” measures in which shareholders are able to vote on the desired level of compensation to be given to the executives of a corporation at least every three years. Taken together, these processes and regulations are intended to ensure that the compensation granted to a CEO is set independently of the desires of the CEO. In defense of these substantial compensation packages, some scholars have argued that these negotiations are assumed to occur at an “arms-length” in which the CEO and the board of directors are presumed to be robust to forces that could lead to excessive or inefficiently negotiated compensation packages. However, other scholars have argued that these systems fail to effectively curtail the “managerial power” exerted by CEOs over the board of directors and compensation consultants. This inherent tension in compensation

negotiations between executives and the board of directors, within the context of existing regulations, has contributed to seemingly detrimental outcomes, such as the ratcheting of compensation packages, which stems from the board of directors’ hesitance to pay the CEO below the average reported by compensation consultants, and the increasing use of stock-based compensation as a means to “camouflage” the total amount of compensation a CEO receives in a given period. This research has emphasized that the board of directors has perverse incentives to appease the CEO and provide him or her with elevated compensation stemming from their desire to be reelected, their social connections to the CEO, and the potential for reciprocal increases in their compensation to be approved by the CEO. Overall, the existing literature highlights the need to diminish executive influence over the compensation setting techniques used by firms as a whole. Without increased independence, compensation packages may continue to be subject to structural manipulation by executives in order to enable rent extraction (i.e. wages that are above the necessary rate required for executives to fully execute their duties) from shareholders, who are regarded as the ultimate owners of a firm.

**Overview of Anti-Takeover Provisions**

Throughout the 1980s, many firms experienced increased takeover interest from private equity firms aiming to generate returns through taking companies private with elevated levels of leverage and existing industry giants who aimed to take advantage of more relaxed anti-trust

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enforcement by the Reagan Administration. As many of these takeovers were consummated on a hostile basis, where the target firm does not solicit or advocate for the takeover, many corporate boards and managers sought to implement anti-takeover provisions (ATPs) in order to reduce the prevalence of these undesired acquisitions. Further, in order to address the increasing prevalence of these anti-takeover provisions, the Delaware Supreme Court had initially called for a two-tiered proportionality review of these provisions in *Unocal v Mesa Petroleum*. The prongs required an assessment of whether the imposition of the anti-takeover provision was in response to a legitimate threat to corporate policy and whether the imposed provision was proportionate to the threat presumed by the board of directors. However, this two-tiered review was effectively removed through the Delaware Supreme Court’s decisions in *Unitrin, Inc. v American General Corp.* and *Paramount Communications, Inc. v Time Warner, Inc.* Thus, despite an initial check on the level of managerial and board power to impose anti-takeover provisions, the effective grant of near-unilateral power to corporations to ward off corporate raiders and hostile conglomerates led to a marked increase in the prevalence of anti-takeover provisions as a whole. While there are many forms of anti-takeover provisions used by firms, only a select few have been shown to effectively influence both the prevalence of takeovers and the premia paid to target firms.

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25 *Unocal Corp v Mesa Petroleum Co*, 493 A2d 946, 954 (Del 1985).
27 Ibid.; *Unitrin, Inc. v American General Corp.*, 651 A2d 1362 (Del 1995); *Paramount Communications, Inc. v Time Warner, Inc.*, 571 A2d1140 (Del 1989).
Many previous academic studies have utilized the G-Index as a proxy in order to determine the relative prevalence of anti-takeover provisions. While the G-Index incorporates twenty-four anti-takeover provisions, many of these provisions have been found to have relatively little, or mixed, impact on takeover dynamics in the market. Some of the more common takeover provisions and their impact on the likelihood of takeover provisions are outlined as follows. A classified board, also referred to as a staggered board, indicates that the board of directors of a firm is divided, for the purpose of election, into separate classes limiting the number of the firm’s directors can be voted upon each year. Commonly, directors are elected in three classes, allowing for only one-third of the board of directors to change in a given proxy vote held by the firm. Thus, by staggering the time periods in which directors can be elected, it becomes incrementally more difficult to gain control over a target company, despite owing potentially more than half of a company’s stock as a majority of a firm’s directors do not stand for election in a given year. This anti-takeover provision enables firms to prevent hostile bidders from acquiring a large voting stake, replacing the existing directors, and incentivizing them to the acquirer’s bid for the firm. A second anti-takeover provision explored in this paper relates to shareholder rights plans, more specifically poison pills. This anti-takeover provision enables a firm to undertake actions that make the target firm more financially unattractive to acquire or would dilute the voting interest of the potential acquirer. Generally, poison pills grant shareholders rights to purchase additional shares of stock in the target firm at a discount, approximately fifty percent, to the market price if the hostile bidder does not seek and receive board approval from the target firm’s board of directors after acquiring a certain percentage, typically twenty percent, of the outstanding stock. This anti-

takeover provision effectively dilutes the shares the hostile bidder has acquired, which increases the effective cost of the acquisition in comparison to the scenario in which the board approves the tender offer. Thus, poison pills normatively incentivize cooperation between the target firm and the acquirer to negotiate and agree upon the terms of an acquisition under the threat of decreased financial attractiveness and increased total expenditures. Golden parachutes are severance agreements between companies and their executives that require a payout contingent on a change in corporate control. These agreements effectively require the acquiring firm to pay an inflated sum of compensation to a target firm’s executives, increasing the effective price of purchasing a firm in the event of a takeover. While this anti-takeover provision has been demonstrated to reduce managerial resistance to takeovers, due to the incentive it provides to accept a takeover offer, the acquiring firm must incorporate these payouts into the total cost of an acquisition. A publicly traded firm may also issue dual-class shares, another anti-takeover provision that allows a firm to maintain multiple classes of shares with different voting and ownership rights. In some cases, a particular class of stock may have five to ten times the voting rights of the common stock, referred to as super-voting rights, which effectively reduces the ability of a hostile acquirer to accumulate the votes needed in the open market to approve a takeover. Additionally, some publicly traded firms may attach special rights to these shares asymmetrically, such as the ability to elect a particular percentage of the directors of a firm. Thus, by shifting the voting dynamics among the interested parties, proxy votes become a less viable method to force the consummation of a takeover. Firms may also implement restrictions to the voting abilities of certain classes of their stock in order to reduce the ability of a hostile acquirer to acquire the percentage of stock required.

to consummate the takeover of the target firm. For instance, confidential voting, which limits the ability to determine which shareholders voted in favor of a proxy-vote, and cumulative voting, which allows shareholders to cast the votes associated with their shares in any proportion enable acquisition targets to impede the consummation of a takeover. Further, many firms implement limitations to the ability to amend the charter and bylaws. These limitations make it incrementally more difficult to remove other anti-takeover provisions, such as poison pills, without the consent of the existing board of directors. Last, some firms may implement a fair price requirement, which effectively mandates that the bidder pay all shareholders the highest price paid by the bidder for any of the shares it acquires in a target company during a specified period before the commencement of a tender offer. While this corporate governance measure does not explicitly make it more difficult to consummate a takeover of a firm, the ability of the target’s board of directors to remove this provision incentivizes discussion between the bidder and the target firm more generally.

Despite the intuitive link between anti-takeover provisions and increased bargaining power for takeover targets, empirical data suggest that this link does not hold true. In fact, the removal of an anti-takeover provision has been shown to increase the probability of a takeover by 4.5% and increases the average takeover premium paid by 2.8%.33 While other confounding variables may impact the exact premium and likelihood associated with public acquisitions, the apparent detriment of anti-takeover provisions for shareholders seems to indicate that these provisions may be implemented as a means to protect executives, rather than to maximize shareholder value. Further, existing research also posits that countries which do not allow for US-style ATPs, particularly Australia, see both higher cumulative shareholder returns as well as long-run economic

gains through the operational improvements garnered by merged entities.\textsuperscript{34} While the comparison between the financial markets of the United States and other countries, such as Australia, is not entirely direct, the observable difference in the takeover arena seems to indicate that takeover provisions do not actually provide incremental benefits to either target firms or their shareholders more generally.\textsuperscript{35} Thus, while many varying forms of anti-takeover provisions are utilized by firms in the status quo, the vast majority of these defenses have distinct impacts on the relative frequency and structure of takeovers in the capital markets of the United States.

\textbf{Overview of Existing Executive Compensation Laws}

Generally, the processes for approving and determining the structure of executive compensation packages stem from regulations imposed by the Congress of the United States, various stock exchanges and the SEC. Beginning in 1918, Congress utilized the Internal Revenue Code (I.R.C.), to influence executive compensation through updating and changing the tax incentives associated with various compensation structures. For instance, Treasury Regulation § 1.162-7 establishes the “reasonableness” standard of review in determining the level of executive compensation that can be deducted for tax purposes, and I.R.C. § 162(m) further establishes a $1 million dollar cap on the amount of compensation that can be deducted that was not performance-based.\textsuperscript{36} Moreover, the Internal Revenue Service (IRS) utilizes twelve factors to determine the reasonableness of compensation in the IRS Revenue Manual § 4.35.2.5.2.2, such as the nature of the employee’s duties, background, and expertise, which all relate to the amount that would be


\textsuperscript{35} Although some firms may have other goals, such as creating societal value, value is presumed to be dependent on the market valuation of a given firm.

paid for like services by like enterprises under like circumstances.\textsuperscript{37} I.R.C. § 280G and 4999 restricted the level of golden parachute payments that qualify as being tax deductible to three times an executive’s base pay and imposed a 20% excise tax payable by the executive in the event of an acquisition, respectively. Lastly, Congress attempted to reign in deferred compensation payments to executives, such that these payments could be accelerated through various methods resulting in elevated pay each year, through I.R.C. § 457A, which imposed a 20% excise tax plus interest imposed on compensation received through deferred compensation structures.\textsuperscript{38} However, nearly every piece of legislation enacted through Congress and their use of the I.R.C. led to adverse circumstances in which the maximums imposed by these regulations become an overarching benchmark for the compensation of CEOs. For instance, the salaries paid to CEOs coalesced to the $1 million-dollar benchmark deductible for tax purposes, and the minimum size of golden parachutes converged to the three times multiple permissible by the IRS Revenue Manual.\textsuperscript{39}

In response to prior legislations ability to reign in compensation schemes, congressional legislators shifted a sizable amount of their regulatory initiatives to federal securities laws, particularly the Securities Act of 1933 and the Securities Exchange Act of 1934.\textsuperscript{40} These securities laws particularly focused on disclosure requirements, and Congress enacted the Sarbanes-Oxley Act in 2002 further requiring corporations to establish independent audit committees, which inevitably initiated the increasing robustness of compensation committees in the status quo.\textsuperscript{41} Further, the SEC altered proxy disclosure requirements in order to examine the firm’s compensation structures for the size, structure, and potential risks intrinsic to certain compensation

\textsuperscript{37} Ibid. \\
\textsuperscript{38} Ibid. \\
\textsuperscript{39} Ibid. \\
\textsuperscript{40} Ibid. \\
\textsuperscript{41} Ibid.
packages as a whole.\textsuperscript{42} This alteration further increased the robustness of the Compensation Committee of publicly traded firms in that all conflicts of interest, both within the compensation committee and among compensation consultants, were required to be disclosed in order to allow regulators and intra-firm auditors to better analyze whether executives could potentially exert influence over the structure of their compensation packages as a whole.\textsuperscript{43}

Finally, after reviewing the success of certain regulations, particularly the Troubled Asset Relief Program (TARP), imposed during the financial meltdown, Congress extended many of the regulations imposed on financial institutions to all publicly traded companies.\textsuperscript{44} Through the passage of the Dodd-Frank Wall Street Reform & Consumer Protection Act (“Dodd-Frank”) an amendment to the Securities Exchange Act of 1933, establishing Section 14 of the regulation.\textsuperscript{45} In addition to lowering the I.R.C. § 162(m) deduction from $1 million to $500,000, other exclusions were significantly reduced, such as those regarding golden parachutes and incentive compensation, and established shareholder say-on-pay initiatives to ensure that the shareholders of a firm were able to vote on executive compensation packages.\textsuperscript{46} However, these shareholder proxy votes do not bind the firm to alter an executive’s compensation package following an adverse outcome; rather, the vote simply serves more as an indication of shareholder agreement with a particular form and value of compensation.\textsuperscript{47} Further, Section 952 § 10C(a) (2) of the Dodd-Frank Act established enhanced independence standards within the Compensation Committee of the board of directors of a firm as a potential means to reduce the likelihood of the conveyance of benefits as a result of the exertion of managerial influence.

\textsuperscript{42} Ibid.
\textsuperscript{43} Ibid.
\textsuperscript{44} Ibid.
\textsuperscript{45} Ibid.
\textsuperscript{46} Ibid.
\textsuperscript{47} Ibid.
MOTIVATIONS FOR THIS RESEARCH STUDY

Generally, the failure of prior regulations to curb the growth of executive compensation, along with a parallel failure to eliminate the availability of pathways for managers to exert influence over various members of the board of directors and compensation committees, highlights the need for a significant redesign of both federal and securities regulations. While the findings of this research paper are not intended to provide evidence as to the justness or appropriateness of the level of executive compensation in the status quo, the motivation for this research paper is to attempt to underscore the need for both increased independence in compensation setting procedures and more restrictive corporate governance regulations. Recent trends in executive compensation packages indicate that previous reforms, particularly say-on-pay requirements imposed by Dodd-Frank have incentivized a shift away from salary and cash-based compensation towards more sophisticated forms of compensation, such as stock-based compensation, which are largely deemed to incentivize managers to act in the best interests of shareholders as a whole. Despite this seemingly logical shift away from legislation that simply attempts to curtail runaway compensation growth, idiosyncratic shifts in both the size and structure of executive compensation packages in the years following the implementation of an anti-takeover provision highlight the need for a purposeful redesign of corporate governance procedures. These potential reforms are discussed later in this research study and will be instrumental in ensuring that managers’ interactions with their firm occur on an arms-length basis.

While the existing literature focuses primarily on the necessity of reforming executive compensation, the justifications for such reforms vary widely. Many of the moral justifications for executive compensation reform focus on mitigating distributive and relational wealth inequality, as well as reducing unjustifiable compensation given to CEOs when viewed from a social utility
perspective. However, the existing legal scholarship focuses on either shareholder or stakeholder value maximization as its primary justification for reforming executive compensation. In fact, much of the existing literature highlights the fact that CEO compensation, on average, accounts for 8% of corporate profits in a given period. As a result, this research paper will attempt to establish broad trends in executive compensation packages approved by firms in the status quo. Specifically, not only will this research aim to assess the effectiveness of executive compensation packages in incentivizing firm value-maximizing actions undertaken by executives, but it will also aim to derive policy recommendations that mitigate the principal-agent problem that exists in compensation setting techniques in the status quo.

Overall, existing research has debated the need for executive compensation reform as a whole. While authors have divergent views regarding the proper justifications for rejecting current compensation structures as inadequate, much remains to be established in terms of modifying intra-firm negotiation dynamics and reducing the principal-agent problem inherent in compensation negotiations as a whole. My research will aim to suggest a series of reforms to existing regulations established by stock exchanges and the SEC, which have inherently affected the evolution of executive compensation packages over the past three decades. More specifically, my research will explore the potential effects that increased board independence and a universal

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50 Ibid.

third-party audit committee may have in reducing the managerial influence that CEOs exert over the structure of their compensation benefits in a given year. Thus, while existing research has analyzed the moral and legal principles surrounding the executive compensation debate in the United States, my research will synthesize elements from both sides in a series of proposed reforms with the intention to reduce many of the agency costs associated with executive compensation in its current form.

METHODS

Research Techniques Overview

The entirety of the data used in this analysis is accessible through Wharton Research Data Services (WRDS). Because information relating to private companies is not publicly available as these firms are not subject to many of the disclosure requirements imposed by stock exchanges and the SEC, this paper is primarily focused on proposing regulatory reforms for publicly traded companies. The analysis conducted in this paper focuses on interpreting publicly available data regarding current executive compensation packages and firm-level nuances that influence compensation negotiations as a whole. The conclusions reached through this analysis will are not intended to be viewed as a judgment as to the justness or level of efficiency of existing compensation packages; rather, this paper primarily explores the potential need for reform of corporate governance regulations to better ensure compensation setting procedures are adequately independent as a whole. Overall, by analyzing publicly available data, the goal of this paper is to derive systematically beneficial recommendations for firms and regulatory authorities as a whole.
Overview of Data Sources

ExecuComp Database Overview

The analysis utilized in this research paper primarily relies on data executive compensation from Standard & Poor’s (S&P’s) Compustat ExecuComp database, which aggregates detailed executive compensation data from publicly traded firms through annual proxy statements from DEF 14A forms filed with the SEC. The data used in this analysis regarding executive compensation are available publicly, and access to Wharton Research Data Services (WRDS) was used in order to collect the data. With the implementation of FAS123R, which required the disclosure of fair-value measurements of equity-based compensation, Compustat - Capital IQ’s ExecuComp (ExecuComp) database aggregates time series data since 1992 detailing breakdown of the value of each component of an executive’s compensation (i.e. salary, bonus, stock awards, option grants, non-equity compensation, pension awards, and all other compensation) for publicly traded firms. The ExecuComp dataset includes over 3462 companies, both active and inactive covering all constituent stocks within the S&P 1500, excluding ADRs which do not file proxy statements with the SEC. For the purposes of this analysis, data were queried from this database for all S&P 500 firms currently within the index with data dating to 2010. Because some firms have recently been added to the index, some executive compensation data dating to 2010 were incomplete and were excluded from the analysis in this paper. Further, because not all firms have filed proxy statements with the SEC as of the writing of this paper, information regarding executive compensation levels in 2018 are excluded from this study in order to improve the accuracy and consistency of these findings. In order to balance practicality with the ability to derive structurally significant conclusions, this research study primarily focuses on the compensation packages of firms within

the S&P 500 Index. Each unique observation for the compensation of executives in a given year are also coded with the name of the executive, the identifying ticker of the firm, and the year the compensation was granted.

**Institutional Shareholder Services Database Overview**

The Institutional Shareholder Services database (ISS) aggregates many measures relating to corporate governance measures undertaken by publicly traded firms. The data provided by ISS enables many large money managers, such as pension funds, to make decisions regarding the suitability of a particular investment in a publicly traded company. With regards to this research study, the data used primarily stem from the IRRC Governance database, also referred to as the IRRC Takeover Defense database (IRRC). This database provides information on takeover defenses and other corporate governance provisions for firms included in the S&P 1500 index. For the purposes of this analysis, the number of anti-takeover provisions is not considered as relevant to the analysis undertaken in this study. Instead, the relative change in the number of anti-takeover provisions is considered in order to effectively track the potential influence of managers over the corporate governance actions undertaken by a firm. By assessing the relative level of compensation before and after the implementation of anti-takeover provisions, as well as the relative structure of these compensation packages, this research is largely intended to discern whether anti-takeover provisions are an indication of an executive’s power to influence the board of directors and compensation consultants to grant particular forms of compensation.
Combined Dataset for S&P 500 Firms

The analysis provided by this research study depends on the combination of both the ExecuComp and IRRC databases into an aggregated dataset. While both databases provide identifying information for each firm, such as the ticker and year of the information, a unique identifier for each company and year was created in order to better ensure the accuracy of the analysis. For each unique combination, the “&” function of Excel was used to combine the ticker and year, which are provided as two separate variables into a single identifies. For instance, in looking at the data regarding American Airlines, ticker AAL, in the year 2012, the “&” function combines “AAL” and “2012” into “AAL2012” (i.e. “AAL&2012” yields “AAL2012”). After creating a unique identifier for each firm and year, the relative change in the number of takeover defenses in place by a firm is calculated. If a firm has implemented one of the eight takeover defenses used in this study, i.e. classified board, golden parachute, poison pill, confidential voting, cumulative voting, dual class stock, fair price requirement, limit ability to amend bylaws, and limit ability to amend charter, the IRRC database codes the variable as “YES” in that year. For instance, if Aflac, ticker AFL, has a golden parachute in 2012, the cell corresponding to the row with AFL2012 and the variable column “Golden Parachutes” would populate as a “YES”. In order to calculate the relative change in the number of takeover defenses, the “=counta()” function of Excel was used. This function counts the number of non-blank cells across the nine anti-takeover provision variable columns. After calculating the number of anti-takeover provisions utilized by these firms each year, the change in the number of provisions was calculated using a simple subtraction of the number of provisions in the current time period “T” minus the number in the previous period “T-1”. Then, using the “=if()” formula, another variable was generated, labeled as “CHECK” if the change in the number of anti-takeover provisions for a given company in that
period was either greater than or less than zero. Lastly, in order to generate the data set used to calculate the compound annual growth rates for firms that had recently implemented an anti-takeover provision, another “=if()” statement was used that populated the variable, labeled as “x”, if the company had a positive change in the number of anti-takeover provisions in comparison to the previous period.

After generating the set of firms that had a positive change in the number of anti-takeover provisions used by the company, another “=if()” statement was used with an embedded “=and()” statement in order to pull the compensation data from the year prior “T-1” through the two years following “T+2” the increase in the number of anti-takeover provisions. The use of the embedded “=and()” statement ensured that the formula did not pull data from different companies within the dataset and pulled the compensation data from the correct time period. As some firms had recently implemented an additional anti-takeover provision, leading to a lack of data in the two years following the variable in question, the compensation data were manually assessed to ensure that the number of observations for each year was consistent. As a secondary check to ensure consistency for all four years, a separate “=counta()” statement was used to tally the number of non-empty cells for each period and type of compensation data pulled from the aggregated dataset. After deducing the compensation data for firms with the desired change in the number of anti-takeover provisions, summary statistics were created in order to compare the relative percentage that each compensation component accounted for in the total compensation granted to these executives. For instance, the amount of salary granted to an executive in the second year following the implementation of an additional anti-takeover provision, labeled as “Salary T+2”, was compared to the total value of the compensation granted to these executives, yielding the relative percentage accounted for by this compensation type, labeled as “Percentage of Total Comp. T+2”.

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This calculation was repeated for each component of compensation, using a segmentation consistent with that of the IRRC Takeover Defense database, and the summaries of the proportions of each component of these compensation packages in the year the anti-takeover provision is implemented “T” and two years after “T+2” are shown in figure 1 and figure 2.

Additionally, in order to calculate the relative growth rate of all components for this subset of S&P 500 firms, the change in the average value of each component was calculated. By taking the sum of the total compensation granted in the period “T+2” and subtracting the sum of the compensation of the same component in the period “T-1” a delta was calculated for each individual component. This change was converted to a growth factor relative to the period “T-1” by adding an additional 100% the percentage change between these periods. After calculating this multiplication factor, the compound annual growth rate, defined as the growth factor raised to the power of the inverse of the number of periods observed. Simply, a generic version of the formula used in the Excel would be as follows: “=(growth factor) ^ (1/number of periods)” yielding a final compound annual growth rate for this subset of S&P 500 firms, labeled as “CAGR (Defense YES)”. These growth rates were then compared to those of the average of all S&P 500 firms for the period from 2010 to 2017, which were calculated under similar methods, other than changing the number of periods observed from three to seven. These resulting growth rates were then used to create a side by side bar plot of the growth rates as shown in figure 3 and figure 4.

RESULTS

Overview

Broadly, the primary research question for this hypothesis analyzes whether current regulations regarding the effectiveness and independence of executive compensation is adequate
within the status quo. Due to the multi-faceted nature of this question, the results section of this paper will focus on highlighting data that point to potential inefficiencies in current regulations, and the section entitled “Discussion” will primarily explore the motivations, benefits, and implications of reforming the existing compensation laws and corporate governance regulations provided by federal and state authorities in the status quo.

**Relative Changes in the Composition of Executive Compensation**

*Salary*

As previously discussed, the salary portion of an executive’s compensation is a predetermined, cash-based form of compensating an executive, independent of his or her performance in guiding the firm. As shown in figure 1, salary accounted for approximately 9.4% of the total compensation granted to an executive in the year an additional anti-takeover provision was implemented. However, as shown in figure 2, salary accounted for approximately 8.1% of the total compensation granted, an associated 14.2% decrease in the relative percentage of total compensation.
Figure 1: This figure displays the average composition of executive compensation packages in the year that an anti-takeover provision is implemented. Stock awards comprised the most significant portion of total compensation (39.5%), followed by non-equity incentive plan compensation (21.0%), option awards (16.7%), salary (9.4%), pension-based compensation (7.4%), bonuses (3.3%), and all other compensation (2.6%)
Figure 2: This figure displays the average composition of executive compensation packages two years after, T+2, an anti-takeover provision is implemented. Stock awards comprised the most significant portion of total compensation (49.7%), followed by non-equity incentive plan compensation (14.3%), option awards (13.1%), salary (8.1%), all other compensation (7.3%), pension-based compensation (5.3%), and bonuses (2.4%).

**Bonus**

Another cash-based component of an executive’s compensation, bonuses are set either as a preset percentage of the salary granted to an executive or vary based on performance relative to a set of objective criteria and benchmarks. While initially accounting for 3.3% of an executive’s compensation in the year an anti-takeover provision has been implemented, this component accounted for 2.4% of the total compensation two years after the implementation of an anti-
takeover provision. This change is associated with a 26.6% decrease relative to the proportion comprised by this form of compensation in the initial year.

**Stock Awards**

Stock awards are a non-cash form of compensation granted to executives each year. In the year of an anti-takeover provision’s implementation, stock awards accounted for 39.5% of total compensation and 49.7% of total compensation two years following the implementation. This 25.8% increase in the relative proportion of total compensation explained by stock awards appears to indicate an increased emphasis placed on non-cash compensation two years after the implementation of an anti-takeover provision relative to its proportion in the year the provision is implemented.

**Option Awards**

Another non-cash form of compensation, option awards are typically granted as a way to align the long-term incentives of an executive with the shareholders of a firm, due to the need for the stock price of a firm to appreciate before the options are in the money. In the period an additional anti-takeover provision is implemented, option awards accounted for 16.7% of total compensation and 13.1% two years following the implementation. This 21.7% decrease in the relative portion of total compensation explained by option awards indicates an increasing level of emphasis placed on stock awards, a more immediate form of equity-based compensation, rather than overarching favoritism given to equity-based compensation as a whole.
Non-Equity Incentive Plan Compensation

Non-equity incentive plans provide specific targets and goals for a firm to meet in order for an executive to be granted additional compensation in a given period. Initially accounting for 21.0% of total compensation in the year an additional anti-takeover provision is implemented, non-equity incentive plan compensation accounted for 14.3% of total compensation two years after the implementation of the provision. This 32.3% decrease indicates a shift towards equity-based, more specifically stock-based compensation, following the implementation of an anti-takeover provision.

Pension-Based Compensation

Pension-based compensation is comprised of both above-market earnings from deferred compensation plans and aggregate increases in the actual value of defined benefit and other long-term pension plans. Initially accounting for 7.4% of total compensation in the year an additional anti-takeover provision is implemented, pension-based compensation accounted for 5.3% of total compensation two years after the implementation of the provision. This 29.3% decrease is likely due to a decrease in the above-market earnings provided by deferred compensation plans as executives are compensated more heavily in stock awards.

All Other Compensation

All other compensation effectively functions as a catchall for the compensation that does not fit into the other buckets set by the ExecuComp database. This form of compensation includes severance payments, debt forgiveness, imputed interest, payouts for the cancellation of stock options, payment for unused vacation, tax reimbursements, signing bonuses, 401K contributions,
and life insurance premiums. Initially accounting for 2.6% of total compensation in the year an additional takeover provision is implemented, all other compensation accounted for 7.3% of total compensation two years after the implementation of the provision. This 176.5% increase indicates a marked shift in the manner in which executives are compensated by their firms as a whole.

**Overall Trends**

Aside from stock awards and all other compensation, each segment of an executive’s compensation explained a relatively lower portion of the total compensation paid to an executive in a given year. Both forms of cash-based compensation, salary and bonus, declined by double-digit percentages relative to their starting value in the year an additional anti-takeover provision was implemented. Moreover, long-term incentive plans, such as option awards, non-equity incentive plan compensation, and pension-based compensation, ubiquitously declined relative to their starting proportions in the year of an ATP’s implementation. This appears to indicate a shift towards stock-based compensation, which may be utilized as a potential means to align the interests of the managers of a firm with those of the shareholders. However, as noted in the next section, the relative growth rates of each of these compensation components, along with the growth rate of the total value of compensation appear to indicate that managers may be exerting influence over their compensation packages more broadly.

**Observed Changes in the Growth Rates of Executive Compensation**

**Overview**

The basis for determining the potential value of using a firm’s implementation of anti-takeover provisions as an indicator for managerial power largely stems from observing a change
in the growth rate of the components of executive compensation and the overall size of the packages as a whole. This section explores the robustness of this indicator variable through reporting the observed growth rates for both the S&P 500 and firms that have recently implemented an additional anti-takeover provision, and this section also reports the change using the entirety of the S&P 500 as the baseline control group.

**Figure 3**: This figure displays the compound annual growth rates for each component of executive compensation packages, as well as total compensation, and excludes all other compensation as the scale becomes distorted due to the significant increase in the growth rate of all other compensation following the implementation of an anti-takeover provision. For all firms within the S&P 500, salaries increased at an average rate of 1.3%, bonuses declined at a rate of -7.3%, stock awards increased at a rate of 9.3%, option awards increased at a rate of 2.6%, non-equity incentive compensation increased at a rate of 1.5%, pension-based compensation declined at a rate of 3.7%, and total compensation increased at a rate of 4.1%. Following the implementation of an anti-takeover provision, salaries increased at an average rate of 0.6%, bonuses declined at a rate of 4.5%, stock awards increased at a rate of 14.3%, option awards declined at a rate of 2.4%, non-
equity incentive compensation declined at a rate of 7.0%, pension-based compensation declined at a rate of 5.7%, and total compensation increased at a rate of 5.9%.

Figure 4: This figure reports the same data as figure 3 but includes the compound annual growth rate for all other compensation. For all S&P 500 firms, the average growth rate of all other compensation grew at an average rate of 6.3%, while firms that had recently implemented an anti-takeover provision displayed an average growth rate of 48.6% for all other compensation. Overall, the growth rate of stock-based and aggregate compensation (total) are markedly higher in firms that have implemented at least one anti-takeover provision than the average for all S&P 500 firms.

Salary

Because of the restrictions to the tax deductibility of the salary paid to an executive in a given year, the growth rate of salary-based compensation tends to be relatively low (Kennedy 2012). For all S&P 500 firms, salary-based compensation grew at a compound annual growth

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rate of 1.3% from 2010 to 2017, which is approximately twice the growth rate of 0.6% for firms that had recently implemented an anti-takeover provision. This 52.3% decrease in the growth rate of salary-based compensation may be a non-significant effect caused more so by existing regulation rather than by managerial influence.

**Bonus**

While bonuses have displayed a recent decline due to the rise of equity-based incentive compensation, the rate of this decline slows in the period following the implementation of an anti-takeover provision. The average rate of decline in bonus compensation is 7.3%, while this rate of decline is 4.5% for firms that had recently implemented an anti-takeover provision. While this 38.2% decline in the rate of decline of bonus-based pay is uniquely different from zero, bonuses account for a relatively small proportion of total compensation for these firms, approximately two to three percent, meaning that this decreasing rate of decline has less of an impact on overall compensation than other components.

**Stock Awards**

Many firms have shifted towards an increased use of stock awards as a means to align managerial incentives with those of shareholders. However, while the average growth rate in stock awards for the S&P 500 was 9.3%, the rate of increase for firms that had recently implemented an anti-takeover provision was 14.3%. This corresponds to a 54.2% increase in the compound annual growth rate for a typical S&P 500 firm; moreover, because stock awards account for the largest component of executive compensation, this finding has a significant impact on the growth of executive compensation as a whole.
Option Awards

For S&P 500 firms, the average growth rate of option awards is 2.6%. However, for firms that had recently implemented an additional anti-takeover provision, option awards decreased at an average rate of 2.4%. Not only does this 191.6% decrease in the growth rate imply a shift in favoritism away from option awards, but this finding also implies that firms that had recently implemented an anti-takeover provision have uniquely different compensation packages as a whole. Further, because option awards account for approximately one-eighth of an executive’s total compensation, this rate of decline has a tangible impact on the total compensation of executives more broadly.

Non-Equity Incentive Plan Compensation

Non-equity incentive plan compensation increased at an average rate of 1.5% for all S&P 500 firms. After the implementation of an anti-takeover provision, the growth rate of non-equity incentive plan compensation significantly decreased to an average rate of decline of 7.0%, a 557.9% decrease from the average of all firms. Accounting for one-fifth of total executive compensation, the sign reversal in the growth rate of non-equity incentive plan compensation, coupled with a significant increase in the growth rate of stock awards, appears to indicate that firms that had recently implemented an anti-takeover provision prefer to provide equity-based compensation above other forms of compensation.

Pension-Based Compensation

Pension-based compensation declined at an average rate of 3.7% for all S&P 500 firms. After the implementation of an anti-takeover provision, the rate of decline for pension-based
compensation increased to 5.7%, a 53.1% increase in comparison to the average of all firms. Although pension-based compensation accounted for approximately one-twentieth of an executive’s total compensation, this increase in the rate of decline indicates a temporal shift in granting compensation as a whole. Firms that have recently implemented an anti-takeover provision appear to favor granting executives additional compensation upfront rather than in long-term incentive plans.

All Other Compensation

All other compensation was historically the smallest component of executive compensation packages for S&P 500 firms, accounting for approximately one-fortieth of total compensation. The rate of growth of all other compensation was 6.3% for all S&P 500 firms; however, the growth rate for firms that had recently implemented an additional anti-takeover provision was 48.6%, corresponding to a 667.2% increase in the growth rate of all other compensation. These firms appear to provide executives with additional benefits through this form of compensation in comparison to the rest of the S&P 500 as a whole.

Overall Trends

While there is a marked shift in the compensation schemes of firms that have recently implemented an anti-takeover provision, the compound annual growth rate of total compensation also increased from 4.1%, for all S&P 500 firms, to 5.9%, for firms that had recently implemented an anti-takeover provision. This change corresponds to a 42.2% increase in the growth rate of total executive compensation for firms that have recently implemented an anti-takeover provision. Thus, firms that have recently implemented these provisions not only compensate executives
differently than the average of the S&P 500, but these firms also compensate CEOs more significantly as a whole. These firms displayed sign reversals in the growth rates of option awards and non-equity incentive plan compensation; moreover, these firms demonstrated an increased willingness to compensate executives through stock awards rather than through more long-term incentive structures. While the level of managerial influence exerted on corporate boards is uniquely opaque, it appears that the implementation of an anti-takeover provision results in increased compensation for executives as both actions are beneficial for executives to the detriment of the firm, in terms of reduced corporate profits and decreased shareholder returns. These results indicate an apparent need for the reformation of existing corporate governance regulations in order to better ensure that managers are unable to exert influence over corporate boards moving forward.

DISCUSSION

Overview

The aforementioned results indicate that the implementation of an anti-takeover provision by a publicly traded firm within the S&P 500 predicts a shift in both the composition of executive compensation packages as well as a shift in the growth rate of all compensation components as a whole. These findings appear to indicate that current regulations, which have largely attempted to curtail seemingly exorbitant compensation schemes, may simply lack the necessary power to shift intra-firm negotiation dynamics towards an adequate level of independence. The following section is broken down into three components. First, the discussion will explore potential explanations for the observed shift in compensation schemes following the implementation of an anti-takeover provision. Second, this section analyzes the shortfalls of existing regulations in preventing the exertion of managerial influence over the board of directors. Last, this section proposes a series of
reforms that may assist regulatory bodies in ensuring adequate independence in compensation negotiations and in preventing the misuse of managerial influence moving forward.

Potential Causes for Altered Compensation Schemes

Overview

Generally, the implementation of an anti-takeover provision should not have a direct impact on the compensation received by an executive as these two corporate governance decisions are not systemically interrelated. When a firm implements an additional anti-takeover provision, excluding circumstances in which the firm is operating under the threat of acquisition, it appears that executives largely become the sole beneficiaries of this governance measure as it results in increased job security. Thus, it appears that managerial self-interest, coupled with non-confrontational corporate boards, lead to a marked shift in compensation following the implementation of an anti-takeover provision.

Managerial Self-Interest

The primary research hypothesis explored in this paper assumes that, if a publicly traded firm implements an anti-takeover provision, then executives are more likely to exert influence over the structure of their own compensation packages. Because of the benefits conveyed to executives following the implementation of an anti-takeover provision, such as increased job security and negotiating leverage in the event of an attempted hostile takeover, managers may simply be exerting influence over their corporate board for their own interests. As an extension of the managerial power hypothesis proposed by Bebchuk and Fried in 2003, it appears that managers use both accumulated influence and social capital to help ensure certain benefits accrue to their
position, rather than to shareholders, within publicly traded firms. This is largely due to two primary reasons. First, the relative frequency of takeovers for firms with high levels of anti-takeover provisions is markedly lower than those firms with few to no anti-takeover provisions. Under this outcome, it follows that managers are more insulated and protected in their roles as an executive of the firm. By reducing the pressure of corporate raiders and hostile bidders over the actions of a potential target firm, anti-takeover provisions reduce the need for managers to capitulate to market demands. Their decisions can largely be viewed as being seemingly independent from those of the shareholders of a firm, who may want to receive capital gains through the takeover premium paid in the event of an acquisition, leading to less efficient management as a whole. Thus, managers can effectively discount the threat of removal by making it incrementally more difficult to consummate takeovers in the status quo through the implementation of anti-takeover provisions. Because of this insulating effect, it follows that executives may also desire to influence other corporate governance decisions, such as those regarding compensation, for their own benefit if the board has implemented measures that benefit them in the past.

Non-Confrontational Corporate Boards

When viewed through a game theory perspective, it becomes clear that capitulating to the desires of the chief executive officer of a firm reduces the likelihood of conflict and tension in the long run. In the scenario in which a corporate board approves an anti-takeover provision advocated for by the executives of a firm, it follows that other desires of these executives, such as increased compensation, may also be granted as a way to appease the executive. Further, the observable ratcheting of compensation by publicly traded firms appears to indicate an inherent desire by
corporate boards to ensure the satisfaction of executives as a whole (Bebchuk and Fried, Pay Without Performance: Overview of the Issues 2004). When corporate boards begin to prioritize the desires of executives over those of the shareholders of a firm, it becomes clear that existing corporate governance regulations do not go far enough in ensuring independence and preventing the granting of favors in order to ensure shareholder value maximization. The debate regarding the appropriateness of shareholder value maximization is far from settled; however, as residual owners of a publicly traded firm, shareholders benefit when the overall value of a firm is maximized due to the fixed value of leverage in calculating enterprise value. As noted in figure 3 and figure 4, the growth rate of total compensation increases by 42.2% following the implementation of an anti-takeover provision relative to the S&P 500 as a whole. If those firms that have approved the implementation of a measure that insulates executives also grants those executives more robust compensation as well, it appears that corporate boards have reduced the overall importance of shareholder value maximization as both actions empirically reduce shareholder value. Moreover, corporate boards are largely hesitant to pay CEOs a level below the average reported by compensation consultants, which has led to the increasing use of stock-based compensation as a means to camouflage the total value of compensation received by an executive.54 Thus, the relative lack of emphasis on value maximization by the boards of publicly traded firms seems to indicate a misalignment of the incentives of shareholders, managers, and the directors of these firms as a whole.

Shortfalls of Existing Corporate Governance Regulations

Overview

As previously discussed, existing regulations largely aim to incentivize firms to compensate executives in a particular manner. For instance, the IRS imposes a cap on the tax deductibility of certain components of executive compensation, such as salary and deferred compensation payouts, which incentivizes firms to compensate their executives at least the cap set in these regulations. This section will explore the failure of tax incentives to serve as a cap to the value of certain components of executive compensation, as well as the failure of SEC regulations, such as say on pay, to give existing shareholders a more powerful platform to directly impact compensation packages as a whole.

Failure of Tax Incentives to Curtail Compensation Growth

Fundamentally, federal regulators have utilized the internal revenue code (I.R.C.) to provide tax incentives to compensate executives in a particular manner. I.R.C. § 457A and I.R.C. § 162(m) both attempted to make excessive compensation less attractive to publicly traded firms by creating an excise tax on particular compensation types and limiting the tax deductibility of particular forms of compensation, respectively. However, these incentives purportedly became viewed as the minimum level of acceptable compensation for executives, rather than as a cap, resulting in the increased ratcheting of the total value of compensation as a whole. Generally, it appears that firms have accepted the increased costs associated with compensating their executives above the levels set for tax purposes due to a combination of corporate boards wanting to keep executives satisfied with their compensation and executives wanting to extract the maximum

amount of value for the effort they exert in their roles. These idiosyncratic characteristics of publicly traded firms have significantly reduced the impact that tax regulations can have on reigning in compensation. Instead of better aligning compensation structures with the normative optimal level of compensation set by federal regulators, tax regulations appear to have had a noticeable detrimental impact. Moreover, this failure of tax regulations has had a uniquely negative impact on shareholder value as incremental compensation granted to executives carries an additional tax burden that had not existed previously. Thus, federal regulations have essentially perpetuated a system that shifts value from the shareholders of a firm to the US government and executives more generally. Overall, it is clear that additional regulations on executive compensation through the tax code will not provide a viable solution to the existing problems that currently pervade executive compensation negotiations.

**Failure of Federal Securities Regulations to Curtail Compensation Growth**

Under the purview of federal securities regulators, publicly traded firms have had to comply with increasingly complex corporate governance regulations. In recent years, federal regulators have relied upon federal securities regulations to attempt to reign in the growth of executive compensation packages. Particularly, following the financial crisis of 2008 and 2009, the Dodd-Frank reforms became ubiquitously applied to all publicly traded firms, most notably resulting in the imposition of say on pay requirements allowing shareholders to have a voice in approving the compensation granted to an executive in a given year. However, because say on pay proxy votes are not binding for the board of directors in terms of ultimate approval for compensation packages, this increased regulation has not had a tangible impact on curtailing the growth of compensation as a whole. Instead, executive compensation has continued its historic
rise in recent years. Moreover, because the imposition of an anti-takeover defense not only predicts a 42.2% increase in the growth rate of total compensation but also a 54.2% increase in the growth rate of stock-based compensation, it is clear that federal securities regulations have not been successful in either granting shareholders additional power in approving compensation or in remedying the lack of independence on corporate boards. Specifically, Section 952 § 10C(a) (2) of the Dodd-Frank Act, which imposed increased independence standards on the Compensation Committee, largely misses the mark in terms of ensuring that compensation negotiations occur at an arm’s length basis. The primary findings of this research paper indicate that managers not only exert influence over the board of directors to implement provisions that provide increased job security but also that they lobby for increased levels of compensation in forms that may actually be higher when taking into account the value appreciation of stock-based compensation. Overall, it is clear that federal securities regulations have also resulted in a tangible failure in reigning in the compensation decisions of publicly traded companies within the United States.

Potential Reforms to Existing Executive Compensation Regulations

Overview

Because of the failure of both tax incentives and federal securities regulations to reign in executive compensation, additional reforms need to be deliberated and implemented in order to better ensure that managers do not exert influence over corporate boards moving forward. As this paper does not take a final position on the appropriateness of current levels of compensation, the following recommendations center around making it increasingly difficult for executives to impact the decision-making processes of corporate boards. Largely, existing research has focused on the change in managerial decision processes associated with varying levels of anti-takeover
protections; however, this area of research has not explored the incentives that managers have to advocate for such provisions and does not attempt to reconcile this with changes in the behavior of corporate boards. This section proposes two primary reforms to current corporate governance regulations. The first recommendation would restrict the ability of corporate boards to increase the growth rate the compensation of executives within one year of the implementation of an anti-takeover provision. The second recommendation would require publicly traded firms to provide justifications for increases in executive compensation in order to increase the efficacy of say on pay requirements as a whole.

**Delayed Executive Compensation Increases**

Because of the significant structural changes in executive compensation packages following the implementation of an anti-takeover provision, this recommendation would make it incrementally harder for managerial influence to result in both increased protection and compensation for executives. This reform would likely be implemented as an addition to existing federal securities regulations that restrict the actions of publicly traded firms in the status quo. The justification for this reform is three-fold. First, because executives are likely to have existing relationships with the board of directors, it is difficult to ensure that managerial influence will cease to be utilized through regulation. Instead, this reform assumes that managers will still utilize their status within their respective firms in order to influence the actions approved by the board of directors as a whole. By doing so, it becomes clear that restricting the type of decisions that can be considered by corporate boards will result in a reduction of the power this influence has to enable publicly traded firms to convey incremental benefits to executives. While this reform may not be able to prevent managers for advocating for increased compensation, this reform would
both increase the transparency of the granting of favors between the board of directors and the executive and would serve as an overarching reduction in the power of managerial influence more broadly. Thus, the restriction of managerial influence is more effective than existing regulations as it targets the primary pathway utilized to increase at a rate above that of the firm’s historical increases.

**Reporting Justifications for Increases in Compensation Growth**

Generally, say on pay initiatives lack the structural power to reign in executive compensation in that these votes are non-binding over the board of directors in the final approval of compensation packages. The current problems that pervade executive compensation negotiations seemingly stem from a lack of adequate independence in the compensation setting processes in the status quo. As previously discussed, corporate boards are hesitant to pay an executive below the average compensation reported by compensation consultants, leading to a scenario in which executive compensation growth has an upward trending bias. With varying levels of social capital attained by executives, compensation setting procedures not only tend to result in ever-increasing compensation, but executives may utilize their power to advocate for even higher levels of compensation, particularly advocating for stock-based compensation. This desired shift towards equity-based compensation is understandable as any appreciation in the market price of a company’s stock would result in an increase in the total value of compensation granted in a given year. Thus, while attempting to remove all interaction between corporate boards and executives would both unrealistic and infeasible, imposing additional regulations that require written justifications for increases in executive compensation would inherently reduce the opacity

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and inefficiency of compensation setting procedures. This improvement is due to two primary reasons. First, written justifications reported alongside say on pay compensation disclosures would enable shareholders to gain insight as to the reasoning for any positive deviation in the historical growth rates of executive compensation. If a publicly traded firm has displayed below average market performance but compensation begins to display exponential growth, the shareholders of the firm would increasingly rely on these written disclosures to determine if this corporate governance action is in their best interest. In a scenario in which shareholders do not believe that the board is independently evaluating and approving compensation packages, and is, instead, granting a favor to the chief executive of a firm, it would become incrementally more likely that the board of directors would be replaced during the following voting cycle. Moreover, should an additional anti-takeover provision be implemented around the same time period as an observed increase in the growth rate of executive compensation, this proposed regulation would make it increasingly difficult to justify a second corporate governance action that reduces shareholder returns.

Second, should both recommended reforms be implemented simultaneously, the exertion of managerial power would become less impactful as the association between anti-takeover provisions and executive compensation growth is robustly identified through the findings of this paper. Normatively, managers should attempt to undertake corporate actions that increase the value of the firm as this satisfies executives’ fiduciary responsibility to both the firm and its shareholders as a whole. However, if managers decide to use the structural power associated with their position in the firm, this increased standard for justifying increases in compensation would make it more difficult for corporate boards to grant favors to executives, such as increasing compensation and implementing anti-takeover provisions, without drawing suspicion from the
shareholders of a firm. This regulation would not remove the possibility of shareholder apathy in which shareholders simply do not take action to curtail value destructive corporate actions after the revelation of such actions. However, the goal of this regulation is not to entirely prevent managers from undertaking potentially value destructive actions; instead, the aim of this regulation is to provide shareholders with additional information in an attempt to shift power from executives to the shareholders of a firm. The directors of a firm would also be incentivized to refrain from capitulating to managerial demands as any action that knowingly decreases the value of a firm could be used as a basis for their removal in an upcoming election. Thus, by modifying the incentives that pervade executive compensation setting procedures in the status quo, this proposed regulatory reform could result in increased shareholder value creation moving forward.

CONCLUSION

In recent decades, the growth rate of executive compensation has outpaced the rate of value appreciation of the S&P 500. While some scholars attempt to examine the appropriateness of such an increase, this paper, instead, explores a potential explanation for these increases: the exertion of managerial influence over corporate boards. This research paper has demonstrated a link between the implementation of an anti-takeover defense and a marked increase of approximately 42% in the growth rate of executive compensation packages in comparison to the S&P 500 average. Moreover, this paper has demonstrated that corporate boards are more likely to compensate executives through equity-based measures, instead of long-term incentive plans, following the implementation of an anti-takeover provision, further reinforcing that a link between managerial influence and executive compensation exists in the status quo. This research paper also explored the rationale for reforming existing corporate governance regulations as they fail to
adequately prevent the exertion of managerial influence. The proposed reforms provided by this paper, which curtail the ability of the corporate board to undertake a simultaneous adoption of anti-takeover provisions and the ratcheting of compensation without providing written justifications to shareholders, aim to better enable shareholders to take action in addressing these issues moving forward. Overall, while this paper has not attempted to take a stance on the adequacy or appropriateness of the current levels of executive compensation, this paper has provided evidence that managers may be exerting substantial influence over their own compensation under current regulations.

AREAS FOR FUTURE RESEARCH

While this paper has explored the link between anti-takeover provisions and executive compensation, more research should be done in order to determine a causal link between other corporate actions and managerial influence. Moreover, because of idiosyncratic factors that may affect the growth rates of executive compensation across varying firms, more research should be done in an attempt to control for these factors to see if the observed relationship remains robust. Lastly, it will be important to examine if the implementation of a particular type of anti-takeover provision is more significantly predictive of a shift in the compensation structure of publicly traded firms in order to better design regulations that attempt to prevent the exertion of managerial influence moving forward.
APPENDIX

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<td>-7.0%</td>
<td>-5.7%</td>
<td>48.6%</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change (in %)</th>
<th>Salary</th>
<th>Bonus</th>
<th>Stock Awards</th>
<th>Option Awards</th>
<th>Non-Equity</th>
<th>Pension</th>
<th>All Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-52.3%</td>
<td>-38.2%</td>
<td>54.2%</td>
<td>-191.6%</td>
<td>-557.9%</td>
<td>53.1%</td>
<td>667.2%</td>
<td>42.2%</td>
</tr>
</tbody>
</table>

Table 1: This table provides the average growth rates of each component of the executive compensation packages for all S&P 500 firms for the subset of firms that have implemented an anti-takeover provision. The change is calculated using the average growth rate of all S&P 500 firms as the initial condition.

<table>
<thead>
<tr>
<th>Percentage of Total Comp (2010)</th>
<th>Salary</th>
<th>Bonus</th>
<th>Stock Awards</th>
<th>Option Awards</th>
<th>Non-Equity</th>
<th>Pension</th>
<th>All Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9.7%</td>
<td>3.9%</td>
<td>33.9%</td>
<td>20.1%</td>
<td>19.7%</td>
<td>8.6%</td>
<td>4.1%</td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp (2017)</td>
<td>8.1%</td>
<td>1.9%</td>
<td>46.4%</td>
<td>15.9%</td>
<td>17.8%</td>
<td>4.9%</td>
<td>5.1%</td>
<td></td>
</tr>
<tr>
<td>Change (in %)</td>
<td>-16.4%</td>
<td>-52.3%</td>
<td>37.1%</td>
<td>-21.1%</td>
<td>-9.8%</td>
<td>-43.6%</td>
<td>24.0%</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: This table provides the change in the percentage of total compensation accounted for by each component of executive compensation packages for all S&P 500 firms. The change is calculated using the starting percentage as the initial condition.
Table 3: This table provides the change in the percentage of total compensation accounted for by each component of executive compensation packages for the subset of S&P 500 firms that implemented an anti-takeover provision during the period from 2010 - 2017. As in table 2, the change is calculated using the starting percentage as the initial condition.

<table>
<thead>
<tr>
<th>Year ATP is Implemented</th>
<th>Salary</th>
<th>Bonus</th>
<th>Stock Awards</th>
<th>Option Awards</th>
<th>Non-Equity</th>
<th>Pension</th>
<th>All Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>T+2 ATP Implementation</td>
<td>9.4%</td>
<td>3.3%</td>
<td>39.5%</td>
<td>16.7%</td>
<td>21.0%</td>
<td>7.4%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Change (in %)</td>
<td>-14.2%</td>
<td>-26.6%</td>
<td>25.8%</td>
<td>-21.7%</td>
<td>-32.3%</td>
<td>-29.3%</td>
<td>176.5%</td>
</tr>
</tbody>
</table>

Table 4: This table provides the percentage of total compensation that is accounted for by salary from the year prior to two years after the implementation of an anti-takeover provision. The table also reports the change in the total value of this component, as well as the numerical percentage change and the compound annual growth rate for the period.
Table 5: This table provides the percentage of total compensation that is accounted for by bonuses from the year prior to two years after the implementation of an anti-takeover provision. The table also reports the change in the total value of this component, as well as the numerical percentage change and the compound annual growth rate for the period.

<table>
<thead>
<tr>
<th></th>
<th>Bonus T-1</th>
<th>Bonus T</th>
<th>Bonus T+1</th>
<th>Bonus T+2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>34,920</td>
<td>22,782</td>
<td>48,001</td>
<td>30,429</td>
</tr>
<tr>
<td>Average</td>
<td>392</td>
<td>249</td>
<td>539</td>
<td>342</td>
</tr>
<tr>
<td>Percentage of Total Comp T-1</td>
<td>3.3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T</td>
<td></td>
<td>2.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T+1</td>
<td></td>
<td></td>
<td>4.2%</td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T+2</td>
<td></td>
<td></td>
<td></td>
<td>2.4%</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>89</td>
<td>89</td>
<td>89</td>
<td>89</td>
</tr>
</tbody>
</table>

|                          |           | -36.5%    | 116.4%    | -36.6%    |
| Value % Change YoY      |           |           |           |           |

|                          | -1.3%    | 2.2%      | -1.8%     |
| Relative % Change       |           |           |           |

|                          | -4.5%    |           |           |
| CAGR % by Component     |           |           |           |
Table 6: This table provides the percentage of total compensation that is accounted for by stock awards from the year prior to two years after the implementation of an anti-takeover provision. The table also reports the change in the total value of this component, as well as the numerical percentage change and the compound annual growth rate for the period.

<table>
<thead>
<tr>
<th></th>
<th>Stock Awards T-1</th>
<th>Stock Awards T</th>
<th>Stock Awards T+1</th>
<th>Stock Awards T+2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>418,195</td>
<td>428,501</td>
<td>499,710</td>
<td>624,473</td>
</tr>
<tr>
<td>Average</td>
<td>4,099</td>
<td>4,819</td>
<td>5,615</td>
<td>7,017</td>
</tr>
<tr>
<td>Percentage of Total Comp T-1</td>
<td>39.5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T</td>
<td>39.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T+1</td>
<td></td>
<td></td>
<td>44.1%</td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T+2</td>
<td></td>
<td></td>
<td></td>
<td>49.7%</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>89</td>
<td>89</td>
<td>89</td>
<td>89</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Value % Change YoY</th>
<th>Relative % Change</th>
<th>CAGR % by Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.6%</td>
<td>-0.3%</td>
<td>14.3%</td>
</tr>
<tr>
<td></td>
<td>16.5%</td>
<td>4.9%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25.0%</td>
<td>5.6%</td>
<td></td>
</tr>
</tbody>
</table>
Table 7: This table provides the percentage of total compensation that is accounted for by option awards from the year prior to two years after the implementation of an anti-takeover provision. The table also reports the change in the total value of this component, as well as the numerical percentage change and the compound annual growth rate for the period.
Table 8: This table provides the percentage of total compensation that is accounted for by non-equity incentive plans from the year prior to two years after the implementation of an anti-takeover provision. The table also reports the change in the total value of this component, as well as the numerical percentage change and the compound annual growth rate for the period.

<table>
<thead>
<tr>
<th></th>
<th>Non-Equity T-1</th>
<th>Non-Equity T</th>
<th>Non-Equity T+1</th>
<th>Non-Equity T+2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>222,843</td>
<td>193,337</td>
<td>211,125</td>
<td>179,209</td>
</tr>
<tr>
<td>Average</td>
<td>2,504</td>
<td>2,172</td>
<td>2,372</td>
<td>2,014</td>
</tr>
<tr>
<td>Percentage of Total Comp T-1</td>
<td>21.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T</td>
<td></td>
<td>17.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T+1</td>
<td></td>
<td></td>
<td>18.6%</td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T+2</td>
<td></td>
<td></td>
<td></td>
<td>14.3%</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>89</td>
<td>89</td>
<td>89</td>
<td>89</td>
</tr>
</tbody>
</table>

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value % Change YoY</td>
<td>-13.2%</td>
<td>9.2%</td>
<td>-15.1%</td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative % Change</td>
<td>-3.4%</td>
<td>0.9%</td>
<td>-4.4%</td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAGR % by Component</td>
<td>-7.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 9: This table provides the percentage of total compensation that is accounted for by pension-based compensation from the year prior to two years after the implementation of an anti-takeover provision. The table also reports the change in the total value of this component, as well as the numerical percentage change and the compound annual growth rate for the period.

<table>
<thead>
<tr>
<th></th>
<th>Pension T-1</th>
<th>Pension T</th>
<th>Pension T+1</th>
<th>Pension T+2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>78,750</td>
<td>74,086</td>
<td>70,368</td>
<td>66,081</td>
</tr>
<tr>
<td>Average</td>
<td>885</td>
<td>832</td>
<td>791</td>
<td>742</td>
</tr>
<tr>
<td>Percentage of Total Comp T-1</td>
<td>7.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T</td>
<td></td>
<td>6.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T+1</td>
<td></td>
<td></td>
<td>6.2%</td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T+2</td>
<td></td>
<td></td>
<td></td>
<td>5.3%</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>89</td>
<td>89</td>
<td>89</td>
<td>89</td>
</tr>
<tr>
<td>Value % Change YoY</td>
<td>-5.9%</td>
<td>-5.0%</td>
<td>-6.1%</td>
<td></td>
</tr>
<tr>
<td>Relative % Change</td>
<td>-0.7%</td>
<td>-0.6%</td>
<td>-0.9%</td>
<td></td>
</tr>
<tr>
<td>CAGR % by Component</td>
<td>-5.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 10: This table provides the percentage of total compensation that is accounted for by all other compensation from the year prior to two years after the implementation of an anti-takeover provision. The table also reports the change in the total value of this component, as well as the numerical percentage change and the compound annual growth rate for the period.

<table>
<thead>
<tr>
<th></th>
<th>All Other T-1</th>
<th>All Other T</th>
<th>All Other T+1</th>
<th>All Other T+2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>27,801</td>
<td>36,645</td>
<td>46,109</td>
<td>91,264</td>
</tr>
<tr>
<td>Average</td>
<td>312</td>
<td>412</td>
<td>524</td>
<td>1,025</td>
</tr>
<tr>
<td>Percentage of Total Comp T-1</td>
<td>2.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T</td>
<td>3.3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T+1</td>
<td></td>
<td></td>
<td>4.1%</td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T+2</td>
<td></td>
<td></td>
<td></td>
<td>7.3%</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>89</td>
<td>89</td>
<td>88</td>
<td>89</td>
</tr>
<tr>
<td>Value % Change YoY</td>
<td>31.8%</td>
<td>27.3%</td>
<td>95.7%</td>
<td></td>
</tr>
<tr>
<td>Relative % Change</td>
<td>0.7%</td>
<td>0.7%</td>
<td>3.2%</td>
<td></td>
</tr>
<tr>
<td>CAGR % by Component</td>
<td>48.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 11: This table provides the percentage of total compensation that is accounted for by total compensation from the year prior to two years after the implementation of an anti-takeover provision. This table is used as a robustness check to ensure that the percentage accounted for by all components of executive compensation total to 100.0%. The table also reports the numerical percentage change in value of total compensation during the period.

<table>
<thead>
<tr>
<th></th>
<th>Total T-1</th>
<th>Total T</th>
<th>Total T+1</th>
<th>Total T+2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>1,058,642</td>
<td>1,094,426</td>
<td>1,134,184</td>
<td>1,257,062</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>11,895</td>
<td>12,297</td>
<td>12,744</td>
</tr>
<tr>
<td>Percentage of Total Comp T-1</td>
<td>100.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T</td>
<td></td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T+1</td>
<td></td>
<td></td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Percentage of Total Comp T+2</td>
<td></td>
<td></td>
<td></td>
<td>100.0%</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>89</td>
<td>89</td>
<td>89</td>
<td>89</td>
</tr>
<tr>
<td>Value % Change YoY</td>
<td>3.4%</td>
<td>3.6%</td>
<td>10.8%</td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES


