

Department of “Management”, Chair of “Global Economic Challenges”

***“Has Top Executive Remuneration, in
US, Gone Too Far?”***

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*omn[ia] meruisse te neque
omnia contigisse mi[hi ut praestarem]*

*You deserved everything but [...]
it did not fall to my lot to give you everything as I ought;*

*Laudatio Turiae, Rome, 1st cent. B.C.
A funeral eulogy; (ILS 8393. Tr. E. Wistrand. L)*

Almost all pay-systems, over the years, have gone out of control, but those of executives have even more, in every sense.

There is abundant and recent evidence (1992, Levy and Murnane; 1999, Auten and Carroll; 2008, Gee; 2012, Bakija, Cole, Heim) from the labour economics literature that, in US, increases in earnings inequality have been “fractal” in nature (almost regardless of how you define a group, including by occupation): earnings inequality has been increasing within that group.

On the hedge of this increase in income inequality among upper and lower percentile of earners, differences within the composition of the top 1%, and 0,1% of income earners are mining the fair distribution of earnings among different social classes, and thus concentrating among few specialists and professional figures (managers, executive managers, financial professionals, real estate professionals) the wealthiest and richest man of United States of America (and so probably the world, so far), while keeping out many others (such as lawyers, medical, blue collar, government, teachers, professors, scientists, computer, math, engineering, arts, media, sports).

In the past three decades in America executive compensation or pay has risen dramatically, far well beyond what can be explained by changes in firm size, performance, and industry classification.

Neither the international data on top income shares seems consistent with some of the theories for rising income inequality, and when processed a second time, result only partly consistent with others.

The rapid rise in managers, but more specifically CEOs, pay over the last 30 years has sparked an intense debate about the nature of the pay-setting process. It is clear that executive compensation has increased greatly over time, but there is an open debate over why this has happened, and whether there are enough CEOs (or at least, much more than there used to be) for this to explain much of the rise in top income shares.

Many reasons or causes can be objectively adducted in order to try to explain this rise, but they almost seem to partly work, when considered in isolation. Observers differ as to how much of the rise in and nature of this compensation is a natural result of competition for scarce business talent benefiting stockholder value, and how much is the work of manipulation and self-dealing by management unrelated to supply, demand, or reward for performance.

Employment, productivity and earnings in U.S. and Western economies depend heavily on resource allocations decisions made by the CEOs and their senior management teams, at a relatively small number of large companies. A company’s senior executives, with the support and under the advice of boards of directors, are responsible to decide the proportion of resources to allocate to investments in productive capability, and the residual distributions to shareholders. Central to corporate resource-allocation decisions are the modes of compensation that incentivize and rewards CEOs.

Senior management or executive management is generally a team of individuals, at the highest level of management of an organization, who have the day-to-day tasks of managing that organization, holding specific powers delegated to them with and by authority of a board of directors and/or the shareholders: usually the senior management of a company is appointed by the corporation's board of directors and approved by shareholders. A management team is usually composed by: Chief Executive Officer (CEO), Chief Financial Officer (CFO), Chief Marketing Officer (CMO), General Counsel.

In many countries, there is a separate executive board for day-to-day business and supervisory board (elected by shareholders) for control purposes. The board of directors is technically not part of management itself (since it should be independent from the latter, to be able to supervise it better), although there are frequent.

Most CEO compensation packages contain five main, basic components: salary, benefits, incentive pay, with a short-term focus (they measure performance over a period of one, or less than one, year. Usually are formula-driven and have some performance criteria attached), incentive pay, with a long-term focus (3-5 years is common, they are projected to counterbalance short term incentives, in order to better align managers' and shareholders' objectives, and to avoid the risk of over-incentivize managers to enhance current performance, at expenses of long term one - short termism) and, last but not least, severance, or pensions or, more in general deferred compensation. In addition, CEOs often receive contributions to extra-defined-benefit, such as Supplemental Executive Retirement Plan (SERP), various perquisites, and other several single-payments.

Theories about executive compensation, financial market asset prices, social norms, and institutions could be important contributing factors to rising top income shares, but estimating their influence is complicated by the fact that we lack good observable indicators of social norms, laws and executive compensation practices that are comparable across countries. These factors due play an important role in shaping the framework, and the context in which, different solutions are adopted.

Chapter 2 introduces different views over the evolution and the composition of executive compensation. We will first give an historical-perspective view, analysing the works of Hopkins and Lazonick (2016) and Murphy (2012), to then approach the "optimal contracting" view (2000, Hubbard; 2008, Kaplan), and finally evaluate the "managerial power" approach (2004, Fried and Bebchuck, et al.).

Chapter 2 begins providing an overview of the history of equity-based pay in the United States to clarify the changing characteristics, functions, and impacts of stock options and stock awards; it, also, proposes an historical perspective approach to the theme, based on a series of action and counter-action put in place by U.S. government and various others actors, such as various regulators, academics, institutional investors, CEOs, etc. In the end it analyses two different perspectives on the theme: "Optimal contracting" and "Managerial power" perspective.

Most recent analyses of executive compensation have focused on efficient-contracting and managerial-power rationales for pay, while ignoring or downplaying the causes and consequences of disclosure requirements,

tax policies, accounting rules, legislation, and the general political climate. Government intervention has been both a response to and a major driver of time trends in executive compensation over the past century, and any explanation for pay that ignores political factors is critically incomplete.

Two broad patterns for government intervention into CEO pay. The first can be described as knee-jerk reactions to isolated perceived abuses in pay, leading to disproportionate responses and a host of unintended and undesirable consequences. The second pattern – best described as “populist” or “class warfare” – arises in situations where CEOs (and other top executives) are perceived to be getting richer when lower-level workers are suffering. The associated attacks on wealth in these situations gave rise to disclosure rules in the 1930s, limits on tax deductibility for CEO pay in the early 1990s, and wide-ranging pay regulations in the 2010 Dodd-Frank Act. Beyond these two broad patterns, indirect intervention in the form of accounting rules, securities laws, broad tax policies, and listing requirements have also had direct impact on the level and composition of CEO pay.

We will first investigate IRS view on equity based compensation, from the beginning of 19th century, till world war II, passing through Great Depression era, in fact, after the creation of a permanent income tax under the 16th Amendment in 1913, considerable U.S. legislation concerning the gains from exercising an executive stock option focused on the appropriate tax treatment.

At issue was whether the exercising of a stock option provided the executive with additional employee compensation or an ownership stake in the company. If it was simply compensation, then the taxable event would be taxed at the ordinary income-tax rate. If, however, the acquired shares made the executive an owner, then the taxable event would occur when the executive decided to sell the shares and the realized gains could be taxed at the capital-gains rate. During the 1920s the IRS generally held that the taxable income generated by stock options was compensation, not capital gains, and hence should be taxed at the ordinary rate in the year in which the option was exercised.

However, both the level and the composition of CEO pay have changed dramatically over time.

The post-WWII era can be divided into at least two distinct periods. Prior to the 1970s, we observe low levels of pay, little dispersion across top managers, and only moderate levels of equity compensation. From the mid-1970s to the end of the 1990s, all compensation components grow dramatically, differences in pay across managers and firms’ employees widen, and equity incentives tie (or at least attempt to tie) managers’ wealth closer to firm performance.

We will see how between 1950 and 1976, in what W. Lazonick calls Old Economy corporations³, the main purpose of executive stock options was to provide senior executives with a tax dodge, enabling them to pay capital-gains taxes on the realized gains from stock options in lieu of the very high ordinary marginal income-

³ Lazonick William; (2009); *"Sustainable Prosperity in the New Economy? Business Organization and High-Tech Employment in the United States"*; W. E. Upjohn Institute for Employment Research; chapter 3.

tax rates that prevailed at the time.

In fact, by 1950, the tax issue surrounding stock options was a big deal: the highest marginal tax rates on ordinary and corporate incomes had swelled to 91% and 42% (from 25% and 12% in 1928, respectively), compared to a capital gains rate of 25% (from 12.5% in 1928). Corporate executives, lobbied for capital-gains treatment for stock options, contending that their managerial performance would be enhanced by having a proprietary interest in the corporations that employed them.

The Revenue Act of 1950 acceded to this line of argument, defining a *restricted* stock option. In 1950 the capital-gains tax rate was still 25 percent, while the marginal income-tax rate on income over \$200,000 was 84.4 percent. From 1951 through 1964 this top ordinary rate stood at 91 percent.

In 1961 Gore introduced a bill in Congress to rescind the tax privileges of executive stock options, arguing that the 1950 legislation created a “glaring loophole” in the tax law that had resulted in “flagrant abuses.” In 1964 Congress revised the tax code pertaining to stock options.

Under the Revenue Act of 1964:

- Executives were required to hold stock acquired through option exercises for three years (rather than six months) in order to be taxed at the lower capital gains rate.
- Exercise prices could be no less than 100% (rather than 85%) of the grant-date market prices.
- The maximum option term was reduced from ten years to five years.
- The option price could not be reduced during the term of the option, nor could an option be exercised while there is an outstanding option issued to the executive at an earlier time.
- Finally, (but perhaps most importantly), the 1964 law reduced the top marginal tax rate on ordinary income from 91% to 70%, and progressively raised capital gain tax rate, to a high of 39,9% in 1976.

While cash compensation escalated (at least in nominal terms) during the 1970s, the use of stock options was relatively stagnant. Part of the declining popularity of options reflected the change in tax policies in 1964 and 1969 that made qualified stock options less attractive, coupled with their outright prohibition in 1976. More importantly, was the prolonged stagnation in the stock market. The void in compensation created by worthless stock options was quickly filled by a plethora of new plans designed to provide more predictable pay-outs, including: book-value plans, long-term performance plans, guaranteed bonuses and various perquisites such as low-interest loans, yachts, limousines, corporate jets, club memberships retreats at exotic locations, etc. etc. In August 1977, the SEC issued Interpretive Release #5856 stating that the value of perquisites (and other forms of compensation) must be included as compensation in proxy statements and in 1979 IRS issued significant new auditing guidelines aimed at detecting and taxing executive perquisites.

Although CEO pay and bottom-line corporate profitability remained relatively stagnant from 1970-1982, productivity did not. Spurred in part by the oil-price shocks of 1973 and 1977, this period brought significant

technological advances that improved productivity, declines in regulation, and increases in global trade, what Jensen (1993) calls the “Modern Industrial Revolution”. By the early 1980s, most sectors in the U.S. economy were saddled with increasing excess capacity: technological change dramatically increased capacity for computing firms, while increased competition from non-unionized entrants created excess capacity in a variety of industries. The executive compensation practices of the 1970s provided few incentives for executives to pursue value-increasing reductions in excess capacity and disgorgements of excess cash. Equity-based compensation accounted for only a small fraction of CEO pay, and the options that existed often were underwater or expired worthless. Annual bonuses were focused on beating annual budget targets rather than creating long-run value. Performance-based terminations were almost non-existent and the managerial labour market was similarly ineffective in disciplining poor performance. Boards of directors typically dominated by corporate insiders (in influence if not in numbers), had little reason to reduce corporate waste as long as the companies were delivering positive nominal profits. However, pressures to improve performance and disgorge cash were ultimately introduced by the capital markets, including “hostile takeover”.

The takeover market was complemented by the emergence of leveraged buyouts (LBOs). The emergence of LBOs and leveraged recapitalizations created substantial amounts of shareholder value in firms with stable cash flows and no productive alternative uses. The emerging market for corporate control had pronounced effects on the U.S. stock market. After nearly two decades of stagnation, the Dow Jones Industrial Average rallied from below 800 to over 2700 between mid-1982 and mid-1987 (i.e., appreciating nearly 30% per year for five years). While the largest beneficiaries were shareholders in firms that became takeover targets, the rally was broad based and lifted share prices across a wide range of firms and industries.

The 1980s, saw the rise of broad-based stock option plans at start-up New Economy companies⁴.

These used stock options to entice professional, technical, and administrative personnel to give up, secure employment with already established companies (career-with-one-company). Anyway, during the 1990s, most of old economy corporations shed the norm of a career with one company, using, surprisingly, stock-based options to incentivize and reward professionals.

The rise of broad-based stock option plans led the asset managers of pension funds and mutual funds, which invested a growing proportion of the nation’s savings in shares of publicly listed corporations, to raise concerns about the implications of broad-based stock options for dilution of the shareholdings of the stocks in the funds’ portfolios. The asset managers were far less concerned with the realized gains on stock-based executive pay than with the prospective compensation costs of stock-option plans, in terms of dilution.

To aid decision-making concerning the buying, holding, and selling of stocks, the asset managers looked to

⁴ Lazonick William; (2009); *"Sustainable Prosperity in the New Economy? Business Organization and High-Tech Employment in the United States"*; W. E. Upjohn Institute for Employment Research; chapter 2.

the FASB to provide an upfront estimate of the “fair value⁵” of this mode of compensation, based on grant-date stock prices.

Academics recommended that executive pay be tied more closely to company value through increases in stock options and other forms of equity-based incentives. These pressures began having an impact: non-equity-based CEO pay continued to grow in real terms after the mid-1980s, but became a smaller part of the total compensation package. For the first time since the 1950s, stock options re-emerged as the dominant form of incentives compensation.

However, by far the largest increase comes in the form of stock options, which become the single largest component of CEO pay in the 1990s.

Between 1980 and 2004, Mutual Fund founder John Boogle estimates total CEO compensation grew 8.5 percent per year compared to corporate profit growth of 2.9 percent per year and per capita income growth of 3.1 percent. Forbes reports that from 1989 through 2008 total compensation for CEOs of Fortune 500 firms increased at 9.5% per year, while S&P 500 index increased at a rate of 8.2%, and the average wages for workers, increased by only 4.3%. By comparison, in 2007 CEOs made 344 times what the average work made, up from 71 times in 1989.

On a much wider scale, as reported (2012) by J. Bakija, A. Cole and B.T. Heim, share of the nation’s income going to the top percentiles of the income distribution in the United States has increased dramatically over the past three decades.

They found out that, executives, managers, supervisors, and financial professionals account for about 60 percent of the top 0.1 percent of income earners in recent years, and can account for 70 percent of the increase in the share of national income going to the top 0.1 percent of the income distribution between 1979 and 2005. After the Regan decade, and its liberalization wave, based on the theoretical assumption that market forces are able to optimally allocate resources when working without restrictions, we assist to a stock option epidemic explosion, during the “Go-go Nineties”. This was the period when public opinion and politicians, started to turn their attention toward equity based compensation.

With the scandals era, outraged public opinion started to demand for stricter regulations on the theme.

The CEO pay debate achieved international prominence during the 1990-1991 recession, ending up with SEC’s new 1992 disclosure rules, which required companies to produce:

- A Summary Compensation Table summarizing the major components of compensation received by the

⁵ The FASB, with the regulatory support of the SEC, promoted the reporting and recording of “fair-value” stock-based compensation expenses based on Black-Scholes-Merton (BSM) stock-option pricing models.

The Black-Scholes model for calculating the premium of an option was introduced in 1973 in a paper entitled, *"The Pricing of Options and Corporate Liabilities"*, published in the *Journal of Political Economy*. The formula, developed by three economists – Fischer Black, Myron Scholes and Robert Merton – is perhaps the world's most well-known options pricing model. The Black-Scholes model is used to calculate the theoretical price of European put and call options, ignoring any dividends paid during the option's lifetime.

CEO and other highly paid executives over the past three years.

- Tables describing option grants, option holdings, and option exercises in detail.
- A chart showing the company's stock-price performance relative to the performance of the market and their peer group over the prior five fiscal years;
- A report by the compensation committee describing the company's compensation philosophy.
- Overall, the new rules dramatically increased the information available about stock option grants and holdings, and the performance graph cemented the idea that the objective of the firm was to create shareholder value.

The median pay for CEOs in S&P 500 firms more than tripled between 1992 and 2001, driven by an explosion in the use of stock options. CEO incentive compensation in the early 1990s was split about evenly between options and accounting-based bonuses. By 2000, stock options accounted for more than half of total compensation for a typical S&P 500 CEO. Six main factors that fuelled the explosion in stock options: (1) Shareholder pressure for equity-based pay; (2) SEC holding-period rules; (3) SEC option disclosure rules; (4) Clinton's \$1 million deductibility cap; (5) New accounting rules for options; (6) NYSE listing requirements. Accounting scandals erupted across corporate America during the early 2000s: in the midst of these scandals, Congress quickly passed the Sarbanes-Oxley Act in July 2002, setting or expanding standards for accounting firms, auditors, and boards of directors of publicly traded companies. The Act was primarily focused on accounting irregularities and not on compensation. However, Congress could not resist the temptation to use the new law to further regulate executive pay. First, Section 402 of Sarbanes-Oxley prohibited all personal loans to executives and directors. Second, Section 304 of Sarbanes-Oxley requires CEOs and CFOs to reimburse the company for any bonus or equity-based compensation received, and any profits realized from selling shares, in the twelve months commencing with the filing of financial statements that are subsequently restated as a result of corporate misconduct. This "clawback" provision of Sarbanes-Oxley – which was subsequently extended in the TARP legislation and Dodd-Frank Financial Reform Act was notable mostly for its ineffectiveness. Finally, Section 403 of Sarbanes-Oxley required that executives disclose new grants of stock options within two business days of the grant.

In 2005, academic research by University of Iowa professor Erik Lie and subsequent investigations by the Wall Street Journal unearthed a practice that became known as option backdating. The Wall Street Journal's crusade against backdating triggered SEC investigations into more than 140 firms. The SEC prosecuted backdating cases with a zeal usually reserved for hardened criminals. Changes in reporting requirements in 2002 essentially put an end to option backdating for top-level executives more than two years before academics and the media uncovered the practice.

Meanwhile, as a direct response to Enron scandal, Section 409(A) was added to the Internal Revenue Code as part of the American Jobs Creation Act of 2004. In essence, the objectives of Section 409(A) were to limit the

flexibility in the timing of elections to defer compensation in nonqualified deferred compensation programs, to restrict withdrawals from the deferred accounts to pre-determined dates, and to prevent executives from receiving severance-related deferred compensation until six months after severance. Section 409(A) imposes taxes on individuals with deferred compensation as soon as the amounts payable under the plan are no longer subject to a substantial risk of forfeiture.

The first decade of the new century brought several important changes in the level and composition of CEO pay: median grant-date total CEO pay in the S&P 500 declined from \$9.3 million in the peak year of 2001 to \$9.0 million in 2011, representing the first prolonged stagnation in CEO pay since the early 1970s.

The decrease in pay primarily reflects both a substantial decline in the grant-date value of stock options, and a shift in the industry composition of the S&P 500. The percentage of companies granting options to their CEOs in each year increased from about 63% in 1992 to 87% by 2001, falling to 68% in 2011, while the percentage of companies making restricted stock or performance-share grants more than tripled from 25 percent to 82 percent. The trend suggests a substitution of stock grants for stock options, although more than half of the S&P 500 CEOs have received both options and restricted stock annually since 2006.

The scandals that erupted across corporate America during the early 2000s focused attention on the quality of accounting disclosures, which in turn renewed pressures for companies to report the expense associated with stock options on their accounting statements. Shareholder groups began demanding shareholder votes on whether options should be expensed.

The Emergency Economic Stabilization Act of 2008 (EESA) is a law enacted in response to the subprime mortgage crisis, which gives the Treasury Secretary the authority to buy up to \$700 billion of troubled assets, in order to improve liquidity in the market, stabilize economy and restore investors' confidence. It required financial institutions, to sell their assets to TARP in order to issue equity warrants or equity or senior debt securities to the Treasury. While applying only to TARP recipients the October 2008 EESA covered the top-five executives, and covered a much broader set of material inaccuracies in performance metrics when compared to Sarbanes-Oxley Act.

On February 4, 2009, President Obama's administration responded with its own proposal for executive-pay restrictions that distinguished between failing firms requiring exceptional assistance and relatively healthy firms participating in TARP's Capital Purchase Program. Separate bills proposing amendments to EESA had been passed by both the House and Senate, and it was up to a small conference committee to propose a compromise set of amendments that could be passed in both chambers. On February 13th the conference chairman (Senator Chris Dodd) inserted a new section imposing restrictions on executive compensation that were opposed by the Obama administration and severe relative to both the limitations in the October 2008 version and the February 2009 Obama Proposal. Nonetheless, the compromise was quickly passed in both chambers with little debate and signed into law as the American Recovery and Reinvestment Act of 2009 by

President Obama on February 17, 2009 (ARRA).

In July 2010, President Obama signed into law the Dodd-Frank Wall Street Reform and Consumer Protection Act or Dodd-Frank Act. Passed as a response to the Great Recession, it brought the most significant changes to financial regulation in the United States since the regulatory reform that followed the Great Depression. It made changes in the American financial regulatory environment that affect all federal financial regulatory agencies and almost every part of the nation's financial services industry. As the extensive title of the Act declaims, its intents are to promote the financial stability of the United States by improving accountability and transparency in the financial system, to end "too big to fail", to protect the American taxpayer by ending bailouts and to protect consumers from abusive financial services practices.

Executive compensation has evolved over time in response to changes in both economic and political environments. Government intervention has been both a response to and a major driver of time trends in executive compensation over the past century, and any explanation for pay that ignores political factors is critically incomplete. What makes CEO pay both interesting and complicated is the fact that the efficient contracting, managerial power, and political paradigms co-exist, interact, and are plausible at the same time. At one end of the spectrum, CEO pay is viewed as the efficient outcome of a labour market in which firms optimally compete for managerial talent. At the other end of the spectrum, the high levels of CEO pay are seen as the result of executives' ability to set their own pay and extract rents from the firms they manage.

According to Kaplan (2008), and others, while corporate governance and CEO pay are not perfect, a great deal of evidence suggests that CEO pay is largely determined by market forces. Many others academics view the high level of CEO compensation as the result of powerful managers setting their own pay ("Rent extracting"⁶ vs "Optimal contracting" view).

Since both shareholders and executives are equally informed and acting in their own interest, according to the optimal contracting view, incentive contracts, while aligning executives' and shareholders' objectives, encourage managers to maximize profits, and so shareholders return (MSV Theory). The bargain between (and the successive monitoring activity, operated by one of) the two parts happens at an arm's length, thus eliminating unwise compensation practices. According to supporters of this approach, rising in CEO pay, therefore, appears to be part of (not the cause of) the general increase in economic inequality: market forces (and arm's-length bargaining) have driven the large increase in pay of this as well as the other groups. Main points of the supporters of this view are that CEOs are strongly paid for performance and boards do monitor CEOs; CEO tenures are lower than they have been since tenures began to be measured in the 1970s; CEO turnover is more closely tied to stock performance than it has been since turn over began to be studied in the 1970s.

⁶ The idea of rent-seeking was developed by Gordon Tullock in 1967, while the expression was coined in 1974 by Anne Krueger. In economics and in public-choice theory, rent-seeking involves seeking to increase one's share of existing wealth without creating new wealth. Rent-seeking results in reduced economic efficiency through poor allocation of resources, reduced actual wealth creation, lost government revenue, increased income inequality.

All of these factors suggest that the CEO job has become increasingly difficult and less pleasant.

On the contrary, the rent extraction view posits that weak corporate governance and acquiescent boards allow CEOs to (at least partly) determine their own pay, resulting in inefficiently high levels of compensation.

Rent-seeking is the use of social institutions (such as the power of government), to redistribute wealth among different groups without creating new wealth. It is an attempt to obtain economic rent by manipulating the social or political environment in which economic activities occur, rather than by creating new wealth.

Managerial power theory attempts to explain high executive pay, arguing that executive compensation is often excessive when compared against a hypothetical, economically efficient compensation contract. The theory also argues that executive pay does not correlate to performance: in other words, high earners are not necessarily high performers. "Managerial power approach," focuses on a different link between the agency problem and executive compensation. Under this approach, executive compensation is viewed not only as a potential instrument for addressing agency problems, but also as part of the agency problem itself.

Then we will present a brief summary, with our conclusions on the three approaches just analysed, which are quite explanatory of the whole phenomenon, when considered together (complementing, rather than contrasting each other).

All three the approaches, governmental intervention, managerial power and competitive market forces are important determinants of CEO pay, and that neither approach alone is fully consistent with the available evidence. Although one approach is conceptually quite different from the other two approaches, they should not be proposed as a unique possibility nor complete replacement to the others. Compensation arrangements might be shaped both by market forces that push toward value-maximizing arrangements, and by the influence of managerial power, leading to departures from these arrangements in directions favourable to managers, which are then mitigated by government intervention. The managerial power approach simply claims that these departures from value-maximizing arrangements are substantial and that compensation practices thus cannot be adequately explained by optimal contracting alone. The optimal contracting view recognizes that managers suffer from an agency problem and do not automatically seek to maximize shareholder value. Thus, providing managers with adequate incentives is important.

While an executive may be any corporate "officer" - including president, vice president, or other upper-level manager - in any company, the source of most comment and controversy is the pay of chief executive officers (CEOs) (and to a lesser extent the other top five highest paid executives) of large publicly traded firms. Most of the private sector economy in the United States is made up of such firms where management and ownership are separate, and there are no controlling shareholders.

This separation of those who run a company from those who directly benefit from its earnings, create what economists call a "principal-agent problem", where upper-management (the "agent") has different interests, and considerably more information to pursue those interests, than shareholders (the "principals").

This "problem" may interfere with the ideal of management pay set by "arm's length" negotiation between the executive attempting to get the best possible deal for him/her-self, and the board of directors seeking a deal that best serves the shareholders, rewarding executive performance without costing too much.

A principal-agent model of CEO pay permeates almost all works on CEO compensation. According to this model, principals must delegate control of the firm to an agent (the CEO) who may be unwilling to work hard and whose objectives may not be fully aligned with those of the firm's principals. Incentive contracts offer a partial solution to this agency problem. This agency problem, while bearing a major responsibility for the rise in CEO compensation, it also permeates corporate governance at all its levels. The deviation from the principal's interest by the agent is called "agency costs". Managerial power and rent extraction behaviours are likely to have an important influence on the design of compensation arrangements; solutions adopted so far have used incentive pay, to try to overcome the shortcomings deriving from this information asymmetry.

Much research has focused on how executive compensation schemes can help alleviate the agency problem in publicly traded companies. To adequately understand the landscape of executive compensation, however, it is necessary to recognize that compensation schemes are also partly a product of this same agency problem.

Compensation arrangements currently provide as weak incentives to reduce managerial slack and increase shareholder value as would be provided by arm's length arrangements.

Also Bebchuk and Fried (2003), though arguing that executive compensation is part of the agency problem itself, still believe in the basic message of agency theory: in the opinion of Bebchuk and Fried, to overcome the failures identified, pay for performance must be improved.

To curb opportunistic behaviour, agency theory argues that the CEOs' and directors' incentives need to be aligned with shareholders by tying pay to performance and by providing managers and directors with equity-based stakes in their firms. Corporate policy has widely followed this prescription. In 2001, equity-based pay constituted about two thirds of the median annual pay of U.S. top executives, compared to zero in 1984 (2003, Hall).

My point of view is that, despite its dominance, since it has been always used as unique remedy, the agency model (and its solutions adopted so far) has proved to be seriously incomplete, and to partly work as a detrimental force to impede executives' rent extractions. High-powered incentive compensation, even if it could be optimally designed, does not solve the problems in the corporate sector identified but aggravates it, when considered alone.

Frey and Osterloh suggest a model based on a new concept, based on intrinsic and extrinsic incentives. Psychologists have proposed some different ways of thinking about motivation, including one method that involves looking at whether motivation arises from outside (extrinsic) or inside (intrinsic) the individual: in fact, human beings derive utility from the activity itself, or because they wish to comply to given normative standards, or for the reward associated. Extrinsic motivation occurs when we are motivated to perform a

behaviour or engage in an activity to earn a reward or avoid punishment. Intrinsically motivated behaviours are performed because of the sense of personal satisfaction that they bring.

The design of an efficient incentive system, needs the use of an approach capable to consider either the characteristics of the business, and of the much wider habitat-industry in which it is operating, either the functions and the role, as well as the social and psychological identikit and inclinations of the person involved. Contingency approach is a concept in management stating that there is no one universally applicable set of management principles, neither rules, nor solutions by which to manage organizations: there is no reason to expect that "one size fits all". Thus, the implementation of the same incentive plan within enterprises which present a different corporate culture, or structure, or operative system or within people asked to perform different tasks, and having different attitude toward risk, decision making, future expectations, may have very different result. Incentives can be restructured through individual contracts, by connecting as closely as is optimal the information available about executives' performance, and the compensation for that performance. Because of differences in the quantity and quality of information available about the performance of individual employees, the ability of employees to bear risk, and the ability of employees to manipulate evaluation methods, the structural details of individual contracts vary widely, including such mechanisms as discretionary bonuses, promotions, profit sharing, efficiency wages, deferred compensation, stock grants, stock-options grants and so on. Milgrom and Roberts (1992) identify four principles of contract design: (1) when perfect information is not available, Holmström (1979) developed the Informativeness principle, which states any measure of performance that (on the margin) reveals information about the effort level chosen by the agent should be included in the compensation contract. This includes, for example, Relative Performance Evaluation; (2) the Incentive-Intensity principle states that the optimal intensity of incentives depends on four factors: the incremental profits created by additional effort, the precision with which the desired activities are assessed, the agent's risk tolerance, and the agent's responsiveness to incentives; (3) the Monitoring Intensity principle, is complementary to the second; in that situations in which the optimal intensity of incentives is high; (4) Equal Compensation Principle, which essentially states that activities equally valued by the employer should be equally valuable to the employee. This relates to the problem that employees may be engaged in several activities, and if some of these are not monitored or are monitored less heavily, these will be neglected, as activities with higher marginal returns to the employee are favoured.

The major problem in measuring performance is the setting of a standard by which to judge the performance: it is convenient the use some form of relative performance evaluation. Subjective performance is typically used for jobs with a high degree of complexity. Problems with subjective performance evaluation have resulted in a variety of incentive structures and supervisory schemes. When the measurement of workers' productivity is difficult, making it hard to measure effort and/or performance contributions of each participant, it can be hard if not even impossible task, to distinguish between single contributions and effects or output they are

going to generate. In fact, if the objective of performance evaluation is to induce a precise behaviour, results must be: (1) accountable, (2) measurable.

A different set of solutions is now considered and proposed according to the different tools, or actions or tenant/s considered:

1. Incentive plan should: (1) Basing compensation on increasing the intrinsic value of business, rather than the merely achievement of financial indicators; (2) CEOs' incentive plan should be designed on a contingency approach;

Furthermore, executives' incentive plan should encourage long term thinking and discourage pursuit of short-term profits through different techniques: (3) incentive pay should be spread out over an extended period of years and it should be phased in as well. The vesting period, and the timing of exercisability (as well as the unwinding) of stock grants and options grants should be carefully planned in advanced, and shouldn't be left to managerial freedom. Firms could require stocks' sales to be carried out gradually over a specified period, perhaps pursuant to a prearranged plan. Alternatively, executives could be required to publicly disclose in advance their intended trades (1998, Fried). A number of firms have adopted "trading windows" and "blackout periods" to restrict the times during the year that a manager can sell or buy shares (2000, Bettis, Coles, and Lemmon); (4) "clawback" provisions for returning incentive compensation to the company if an accounting restatement of earnings is made; (5) factor out windfalls unrelated to the managers' own efforts in calculating bonuses or granting stock or stock options through reduced "wind-fall" provisions. One approach could be to relatively evaluate the CEO's performance with the ones of direct competitors, eventually rewarding excess spread surpluses, and punishing spread deficit, basing evaluation on different parameters. Another approach discussed frequently by academics, regarding options, is linking the exercise price of options to a market-wide index or a sector index (1999, e.g. Rappaport). Another strategy is to condition the "vesting" of options on the firm meeting specified performance targets; (6) set a price to the stock grants, or the option grants out-of-the-money; (7) prevent executives from hedging their stock or stock options in the company; (8) including Debt or Debt-Like compensation along with cash and equity based compensation.

2. Shareholders: should be constantly aware of their power and should act jointly to ensure that corporate value would not be eventually destroyed by distortion and misuse of managerial power, through: (1) encourage long term thinking and discourage pursuit of short-term profits through the various techniques of incentive planning expressed just above; (2) Join themselves into groups: by acting like a group, shareholders can exercise more pressure: (a) to turn in their favour regulations as well as government's and regulatory authorities' opinion; (b) to monitor boards of director.

- (3) Take advantage on the say-on-pay; (4) make mandatory the audit of executive pay by an independent firm.
3. Government: (1) pass a law that sets a ratio of pay between a firm's CEO and its most typical workers or median workers, and encourages corporations not to exceed it by: (a) by denying them government contracts if they do or, (b) denying corporate income tax deductions on executive compensation in excess of the ratio.
(2) Set a maximum wage or maximum compensation for executives; (3) increases in compulsory disclosure; (4) increases in transparency; (5) Intervene on the personal income conjunctively with capital gain as well as corporate income tax rates, in order to counterbalance, dis-equilibrative forces which may cause frictions in the market, and generate social disequilibrium.
 4. Boards of directors: improvements in board accountability to shareholders, including limits on the use of staggered boards and increased transparency and accountability, granting shareholders the right to nominate directors and propose changes to governance arrangements in the corporate charter.
 5. Academics: scholars, especially social scientists, hold a special place in society. Supported by tax dollars, private giving, or both, they are asked to live in society and, at the same time, somehow examine it as though they live apart from it. It is from that insider/outsider perspective that they can see what others, caught in the pressures of their daily lives, cannot see. As the world becomes a more complicated place, as economic and environmental conditions become more unforgiving, and as partisan political passions intensify, business scholars may find themselves increasingly asked to share their expertise in support of or opposition to all manner of initiatives. They must neither shy away from this challenge nor numb the public with endless “on the one hand, on the other hand” disquisitions.

Frey and Osterloh (2005) analysed the firm as a bundle of common pool resources. These are collective goods in the form of firm specific investments, generating a joint surplus that cannot be attributed to single actors. The production of such collective goods is based on extrinsic and intrinsic incentives. In contrast, agency theory assumes that manager's additional or marginal effort is solely motivated by one factor, extrinsic incentives. Individuals derive utility from the activity itself or because they wish to comply to given normative standards for their own sake. The extent of intrinsically motivated behaviour systematically depends on conditions that can be shaped by appropriate institutions.

Intensive interdependencies for selfish individuals create three problems: (1) the option to free ride, (2) to exploit information asymmetries, and (3) to under invest in firm-specific resources.

Thus, social dilemmas are at the heart of firms' activities, and they arise if the actions of self-interested individuals do not lead to socially desirable common pools. Corporate virtue has proved to be another crucial common pool resource in the firm.

Social dilemmas can be solved if the good of the community enters into the preferences of the individual,

therewith becoming prosocial preferences. The social dilemma is turned into a coordination game where defection is no longer the dominant solution (1974, Sen). Prosocial preferences are a special case of intrinsic motivation. People are prepared to behave in a prosocial way, however prosocial behaviour varies considerably across cultures. Several institutional factors can influence intrinsically motivated prosocial behaviour: the effects can be subdivided (1997, Frey) into crowding-out and crowding-in.

I conclude with few lines. Agency theory as the dominant approach to corporate governance is faced with widely publicized corporate scandals. High powered incentive compensation, aggravates the problems in the corporate sector. Pay for performance gives managers and directors incentives to manipulate performance criteria and to resort to fraudulent accounts to the disadvantage of the long-term interests of the firm.

Even if equity-based compensation provides managers and directors with desirable monetary incentives, the system of pay for performance needs to be improved and supported by prosocial motivations.

To conclude, it is not just the unfairness of the extraordinary high amounts of pay that senior executives take home that is at issue. The value-extracting behaviour of senior executives, incentivized and rewarded by stock-based pay, bears prime responsibility for the concentration of income among the richest households and the erosion of middle-class employment opportunities in the United States.

Top executives' compensation scheme are central subject of intense debate between academics, politicians and public opinion. The discussion regards a wide spectrum of issues, that includes both the efficiency and the effectiveness of these compensation schemes, as well as the adequacy and fairness of the size and volumes of managers' perceived emoluments.

Corporate governance essentially involves balancing the interests of the many stakeholders in a company - these include its shareholders, management, customers, suppliers, financiers, government and the community. Thus we are facing an agency problem (at various levels of the organization).

In the classical principal-agent problem, a principal must delegate a task to an agent, whose incentives are not perfectly aligned with those of the principal.

High powered incentive compensation, aggravates the problems in the corporate sector. Pay for performance gives managers and directors incentives to manipulate performance criteria and to resort to fraudulent accounts to the disadvantage of the long-term interests of the firm.

Even if equity-based compensation provides managers and directors with desirable monetary incentives, the system of pay for performance needs to be improved and supported by prosocial motivations.

Incentive theory is a specific theory of motivation, derived partly from behaviourist principles of reinforcement, which concerns an incentive or motive to do something. The most common incentive would be a reward. It is a central theme of economics that incentives promote effort and performance, and there is a lot of evidence that they often do (e.g. 1997, Gibbons; 2000, Lazear). In other words, contingent rewards serve as "positive reinforces" for the desired behaviour.

In psychology, their effect is much more controversial. A long-standing paradigm clash has opposed proponents of the economic view to the “dissonance theorists”, who argue that rewards may actually impair performance, making them “negative reinforces”, especially in the long run (see, e.g. Kruglanski (1978) for an account of this debate, and Deci, Koestner and Ryan (1999) for a recent and comprehensive meta-analysis of experimental results)¹¹.

¹¹ Bénabou and Tirole, Roland and Jean; (February 2003); “*Intrinsic and Extrinsic Motivation*”; The Review of Economic Studies Limited; n° 70, pages 489-520.

1.1 Geo-Economic Scope, CME and LME

Before starting the dissertation, I would like to make some reflections about the geo-economical scope of the results that my work is going to present, and about their validity.

Even though we are experiencing nowadays the effects of an intensified and fast-growing globalization, which is pushing different societies, with very different cultures and values among them, through different patterns, toward the convergence to the Tayloristic “one-best-way culture”, slowly levelling out dissimilarities and which is mitigating social and economic differences between the same countries, we are still far to observe an homogeneous landscape, with respect to top executive pay-system.

So even if the forces of globalization are working to harmonize, across countries, practices and solutions to common issues and shortcomings regarding executive pay-system, it would be either silly nor useful to consider the world as a such, and not to make a preliminary distinction based on some geo-economic assumptions.

It's central to the present work the distinction between capitalistic and non-capitalistic economic system of production. This because we are going to investigate top executive pay-systems, their evolution, how they are composed, and why they are composed that way (three academics' different perspective, plus my point of view), not in all its different shades of grey all over the world (which would be an amazing - in the real sense of the word - job), but just for capitalistic system of production. Moreover, the data set we are going to include are mainly composed by U.S. and, sometimes, Western countries statistics (in which of all operates a type of capitalistic production - with small differences and exceptions).

Briefly, Capitalism is an economic system based on private ownership of the means of production and their operation for profit. Characteristics central to capitalism include private property, capital accumulation, wage labour, a price system, and competitive markets. In a capitalist market economy, decision-making and investment is determined by the owners of the factors of production in financial and capital markets, and prices and the distribution of goods are mainly determined by competition in the market.

Once we have made this gross distinction between capital and non-capital system of production¹⁵, economists, political economists, historians, philosophers and sociologists have adopted different perspectives in their analyses of capitalism and have recognized various forms of it in practice.

These include “laissez-faire” or free market capitalism, welfare capitalism, and state capitalism.

¹⁵ Given by the presence or the absence and the degree of concentration and presence of the preceding elements: private property, capital accumulation, wage labour, a price system, and competitive markets.

Different forms of capitalism feature varying degrees of free markets, public ownership, obstacles to free competition, and state-sanctioned social policies. The degree of competition in markets, the role of intervention and regulation, and the scope of state ownership vary across different models of capitalism the extent to which different markets are free, as well as the rules defining private property, are matters of politics and of policy. Most existing capitalist economies are mixed economies, which combine elements of free markets with state intervention, and in some cases, with economic planning.

An important distinction between capital system of production is given by Peter A. Hall and David Soskice (2001), in their book *"Varieties of capitalism: the institutional foundations of comparative advantage"*; Hall and Soskice set out two distinct types of capitalist economies: liberal market economies (LME) (e.g. U.S., U.K., Canada, Australia, New Zealand, Ireland) and coordinated market economies (CME) (e.g. Germany, Japan, Sweden, Austria).

Those two types can be distinguished by the primary way in which firms coordinate with each other and other actors; they considered five spheres in which firms must develop relationships with others:

1. Industrial relations: companies have to coordinate with their workers, trade unions and other employers over wage and productivity. CMEs generally have a higher level of membership in trade unions and employers' organizations and bargaining over wages tends to happen at the industry, sectoral or national level. Conversely in LMEs workers and employers are often less organized and wage negotiations take place at the company level.
2. Vocational training and education: firms face the problem of securing a workforce with suitable skills, while workers face the problem of deciding how much to invest in what skills. In CMEs workers tend to have specific skills that are tied to the firm or the industry they are working in, while in LMEs workers have more general skills that easily can be used to work at other companies or industry.
3. Corporate governance: issues of coordination arise from this sphere, since firms turn for access to finance and in which investors seek assurances of returns on their investments. The solutions devised to these problems affect both the availability of finance for particular types of projects and the terms on which firms can secure funds. Firms in CMEs rely more on patient capital, i.e. capital that doesn't totally depend on financial openness and short term return on investment. LMEs tend to rely more heavily on public information about finances and short-term capital, such as stock markets.
4. Inter-firm relations: the relationships a company forms with other enterprises, and notably its suppliers or clients, with a view to securing a stable demand for its products, appropriate supplies of inputs, and access to technology. These are endeavours that may entail standard-setting, technology transfer, and collaborative research and development. Here, coordination problems stem from the sharing of proprietary information and the risk of exploitation in joint ventures.

Inter-firm relations in CMEs tend to be more collaborative, while in LMEs are more competitive and arms-length.

5. Relations with employees: central problem is to ensure that employees have the requisite competencies and cooperate well with others to advance the objectives of the firm. In this context, familiar problems of adverse selection and moral hazard arise, and issues of information-sharing become important.

In CMEs managers often have to cooperate with employees to reach major decisions, while in LMEs there is often a more adversarial relation between management and employee in which managers are the prime decision-makers.

It follows that national political economies can be compared by reference to the way in which firms resolve the coordination problems they face in these five spheres.

The core distinction they draw is between two types of political economies, LME and CME, which constitute ideal types at the poles of a spectrum along which many nations can be arrayed.

In liberal market economies, firms coordinate their activities primarily via hierarchies and competitive market arrangements. Market relationships are characterized by the arm's length exchange of goods or services in a context of competition and formal contracting. In response to the price signals generated by such markets, the actors adjust their willingness to supply and demand goods or services.

In coordinated market economies, firms depend more heavily on non-market relationships to coordinate their endeavours with other actors and to construct their core competencies. These non-market modes of coordination generally entail more extensive relational or incomplete contracting, network monitoring based on the exchange of private information inside networks, and more reliance on collaborative, as opposed to competitive, relationships to build the competencies of the firm.

In contrast to LMEs, where the equilibrium outcomes of firm behaviour are usually given by demand and supply conditions in competitive markets, the equilibria on which firms coordinate in CMEs are more often the result of strategic interaction among firms and other actors. Capitalist firms typically face coordination problems in their productive operations. While firms in LMEs turn to market institutions to solve these problems, firms in CMEs turn to non-market institutions. The term 'coordinated' is thus stated with respect to the strategic interaction between capitalist firms and non-market institutions.

Table 1.1, in the next page, resumes, under different criteria, stereotypes for LME and CME.

Once introduced the CME/LME framework, it's time to make a step ahead, and outline the space of my research. Even though it is true that capital market economies and liberal market economies do presents lots of similarity among them¹⁶, and so it would be easy to do all the same brush, and to make a "one-size-fit-all-

¹⁶ This is especially true when confronted with other system of production, such as the communism or socialism, or other mixed system of production.

analysis”, I want to make clear that my reasoning, and successively my results, will be conceived and will be valid for liberal market economies (LMEs), with special regards to USA case.

This choice has been made in order to avoid an either too general, vague and superficial, either too long, voluminous and complicated, dissertation - which would inevitably be the case, if we didn't posit the former distinctions.

Table 1.1, resumes under different criteria, stereotypes for LME and CME.

CRITERIA	LME	CME
Mechanism	Competitive market arrangements	Non market relations
Equilibrium	Demand/supply hierarchy	Strategic interaction among firms and other actors
Inter-firm relations	Competitive	Collaborative
Mode of production	Direct product competition	Differentiated, niche production
Legal systems	Complete and formal contracting	Incomplete and informal contracting
Institutions' function	Competitiveness, freer movements of input	Monitoring, sanctioning of defectors
Employment	Full time, general skill, short term, mobile	Shorter hours, specific skill, long term, immobile
Wage bargain	Firm level	Industry level
Training and education	Formal education from High schools and Colleges	Apprenticeship imparting industry-specific skills
Unionization rate	Low	High
Income distribution	Unequal (High Gini Coefficient)	Equal (low Gini coefficient)
Innovation	Radical	Incremental
Comparative advantage	High-tech and service	Manufacturing
Policies	Deregulation, anti-trust, tax break	Encourages information, sharing and collaboration of firms

So even if my work may result correct and truthful, and so able to represent problems and issues in the pay-system of top executive within different capitalistic production, it better represents and suits problems and issues in LMEs' top executive pay-system.

The geographical and the political scope of validity and applicability of the present work would be limited and confined by these assumptions, made on economic variables.

1.2 Definition of Senior Management and Importance of Their Role in Modern Societies

Senior management or executive management is generally a team of individuals, at the highest level of management of an organization, who have the day-to-day tasks of managing that organization - sometimes a company or a corporation. Responsibilities of a top executive also depend on the size of the company.

In smaller companies, a top executive may have a say on every issue. In a larger company, however, the top executive generally focuses more on policy making and strategic planning: here top management translates the policy (formulated by the board-of-directors) into goals, objectives, and strategies, and projects a shared-vision of the future.

Senior managers hold specific executive powers delegated to them with and by authority of a board of directors and/or the shareholders: usually the senior management of a company is appointed by the corporation's board of directors and approved by shareholders.

Senior management are sometimes referred to, within corporations, as executive management, top management, upper management, higher management, or simply seniors.

The highest-level executives in senior management usually have titles beginning with "chief" forming what is often called the C-suite. The traditional three such officers are chief executive officer (CEO), chief operations officer (COO), and chief financial officer (CFO). Depending on the management structure, titles may exist instead of, or are blended or overlapped with other traditional executive titles, such as president, various designations of vice presidents (e.g. VP of marketing), and general managers or directors of various divisions (such as director of marketing); the latter may or may not imply membership of the board of directors.

A management team is usually composed by:

- Chief Executive Officer (CEO): it's CEO's responsibility to implement board decisions and initiatives and to maintain the smooth operation of the firm, with the assistance of senior management. Often, the CEO will also be designated as the company's president and will be one of the inside directors on the board (if not the chairman).
- Chief Financial Officer (CFO): reporting directly to the CEO, the CFO is responsible for analysing and reviewing financial data, reporting financial performance, preparing budgets and monitoring expenditures and costs. The CFO is required to present this information to the board of directors at

regular intervals and provide this information to shareholders and regulatory bodies such as the Securities and Exchange Commission (SEC).

- Chief Marketing Officer (CMO): responsible for all marketing activities of an organization. The CMO must quickly react to changing circumstances in the firm, and must shape the company's understanding of a particular product, sales strategy, or marketing idea. The CMO must be a nexus of information.
- Chief Security Officer (CSO)/ Chief Information Security Officer (CISO): this person can report to many different individuals, including the CEO, CFO, General Counsel, COO, and CIO. The role can be focused on many different things, with the primary purpose of keeping companies safe from physical and technological attacks. This leader role requires a strong business acumen, good technical knowledge, and capable risk manager. When the role is being established, it should be positioned in a manner that maintains a strong segregation of duties.
- Chief Information Officer (CIO): are responsible for the overall technological direction of an organization, which includes managing information technology and computer systems. They organize and supervise information-technology-related workers, projects, and policies.
- Chief Human Resources Officer (CHRO): The CHRO is the highest ranking corporate officer who oversees all aspects of human resource management and industrial relations policies, practices and operations for an organization.
- General Counsel: The organization's chief lawyer. In a company, the person holding this position typically reports directly to the CEO, and their duties involve overseeing and identifying the legal issues in all departments and their interrelation, including engineering, design, marketing, sales, distribution, credit, finance, human resources, production, as well as corporate governance and business policy. This would naturally require in most cases reporting directly to the owner or CEO overseeing the very business on which the CLA is expected to be familiar with and advise on the most confidential level. This requires the CLA/CLO/General Counsel to work closely with each of the other officers, and their departments, to appropriately be aware and advise.
- Chief Operations Officer (COO): the COO looks after issues related to marketing, sales, production and personnel. More hands-on than the CEO, the COO looks after day-to-day activities while providing feedback to the CEO. The COO is often referred to as a senior vice president.

There are considerable variations in the composition and responsibilities of corporate titles.

Within the corporate office or corporate centre of a company, some companies have a Chairman and Chief Executive Officer (CEO) as the top-ranking executive, while the number two is the President and Chief Operating Officer (COO); other companies have a President and CEO but no official deputy. Typically, senior managers are "higher" than vice presidents, although many times a senior officer may also hold a vice president title, such as Executive Vice President and Chief Financial Officer (CFO). The board of directors is technically

not part of management itself (since it should be independent from the latter, to be able to supervise it better), although there are frequent exceptions (e.g. multiple director or interlocking director¹⁸ case).

In many countries, particularly in Europe and Asia, there is a separate executive board for day-to-day business and supervisory board (elected by shareholders) for control purposes. In these countries, the CEO presides over the executive board and the chairman presides over the supervisory board, and these two roles will always be held by different people. This ensures a distinction and an independency (at least planned, if not actual) between management by the executive board and governance by the supervisory board.

In the United States and other countries that follow a single-board corporate structure, the board of directors (elected by the shareholders) is often equivalent to the European/Asian supervisory board, while the functions of the executive board may be vested either in the board of directors or in a separate committee, which may be called an operating committee (J.P. Morgan Chase), management committee (Goldman Sachs), executive committee (Lehman Brothers), or executive council (Hewlett-Packard), or executive board (HeiG) composed of the division/subsidiary heads and senior officers that report directly to the CEO.

State laws in the United States traditionally required certain positions to be created within every corporation, such as president, secretary and treasurer. Today, the approach under the Model Business Corporation Act, which is employed in many states, is to grant companies discretion in determining which titles to have, with the only mandated organ being the board of directors.

Some states that do not employ the MBCA continue to require that certain offices be established. Under the law of Delaware¹⁹, where largest US corporations are established, stock certificates must be signed by two officers with titles specified by law (e.g. a president and secretary or a president and treasurer). Every corporation incorporated in California²⁰ must have a chairman of the board or a president (or both), as well as a secretary and a chief financial officer.

American companies are generally led by a chief executive officer (CEO). In some companies, the CEO also has the title of president. In other companies, the president is a different person, and the primary duties of the two positions are defined in the company's bylaws (or the laws of the governing legal jurisdiction).

The next level, which are not executive positions, is middle management and may be called vice president, director or manager, depending on the size and required managerial depth of the company.

Employment, productivity and earnings in U.S. and Western economies depend heavily on resource allocations decisions made by the CEOs and their senior management teams, at a relatively small number of

¹⁸ It refers to the practice of members of a corporate board of directors serving on the boards of multiple corporations. A person that sits on multiple boards is known as a multiple director. Two firms have a direct interlock if a director or executive of one firm is also a director of the other, and an indirect interlock if a director of each sits on the board of a third firm.

¹⁹ "Delaware General Corporation Law", § 158; retrieved 19 December 2013.

²⁰ "California Corporations Code", § 312; retrieved 19 December 2013.

large companies²¹.

A company's senior executives, with the support and under the advice of boards of directors, are responsible to decide the proportion of resources to allocate to investments in productive capability, and the residual distributions to shareholders. Central to corporate resource-allocation decisions are the modes of compensation that incentivize and rewards top executives: over the years, experts have projected and designed modes of compensation characterized by a very wide choice of different components.

Over the past years, the main discussion over corporate governance between academics has revolved around the phenomenon of the separation between ownership and control, characteristic of the large, Anglo-Saxon, public corporates

“Maximize shareholders value” (MSV) theory, with corporate performance measured by a “Total shareholder return” (TSR – see formula), has represented key goal for United States company, in the last decades.

$$T_{\text{ot}}S_{\text{hareholder}}R_{\text{eturn}} = \text{TSR} = (\mathbf{P}_{\text{end}} - \mathbf{P}_{\text{begin}} + \mathbf{D}_{\text{ividend}})/\mathbf{P}_{\text{begin}}$$

Formula 1.1, Total Shareholder Return (TSR) formula.

Since 1980's, in order to align senior executives' objectives with shareholders' goals, and so MSV theory, compensation experts and specialists have designed and introduced modes of compensation characterized by an array of different components.

1.3 How Senior Executives Remuneration is Nowadays Formed and Composed

Before we go any further, it is important that we have a common understanding of the elements that commonly go to make up an executive reward package, and how it is projected.

A public company must have a compensation committee composed of independent members of its board of directors. The committee determines the CEO's pay package and also determines compensation for the company's other executive officers or makes recommendations to the full board. Compensation for CEOs and top executives generally consists of a base salary, cash bonuses and awards of stock and stock options²² that vest over time, and can also depend on meeting performance goals.

There are many ways to measure compensation, including the estimated value when a package is granted or the value when the stocks and options are vested and any gains are realized. We will discuss these methods later on, now we analyse the different components and to what extent these components are created.

Despite substantial heterogeneity in pay practices across firms, most CEO compensation packages contain five main, basic components: salary, benefits, incentive pay, with a short-term focus, incentive pay, with a long-

²¹Data source: Lazonick, William; (2015); “*Labour in the Twenty-first Century: the Top 0.1% and the Disappearing Middle Class*”, in Weller, Christian E.; “*Inequality, Uncertainty and Opportunity: the Varied and Growing Role of Finance in Labour Relations*”; Cornell University Press; pages: 143-192.

²² An option gives the executive the right to purchase a share of company stock in the future at a fixed price.

term focus and, last but not least, severance, or pensions or, more in general deferred compensation. In addition, CEOs often receive contributions to extra-defined-benefit, such as Supplemental Executive Retirement Plan (SERP), various perquisites²³, and other several single-payments²⁴.

1. Salary (and others benefits package): it is a fixed amount of money or compensation, typically not affected by company's performance, which rewards CEOs in function of the position covered, and comparing market pay rates for people performing similar work, in similar industries, in the same region.

As a general rule, the larger the firm, the smaller the fraction of total compensation for senior executives is made up of salary and higher the fraction is made up of variable, or "at-risk" pay.

2. Benefits consist primarily of pension contributions. In US, other benefits comprise mainly social security and health insurance contributions. When summed up, they can sometimes, even exceed the salary.
3. Short-term incentive (STIP²⁵): they measure performance over a period of one, or less than one, year. Usually are formula-driven and have some performance criteria attached depending on the role of the executive. So typically non-discretionary, tied to one or more measures of annual accounting performance, and paid in either cash or stock. In 2010, 85.1 percent of CEOs at S&P 500 companies received an annual bonus pay-out. The median bonus was \$2.15 million²⁶.

If the word bonus suggests payment for particularly good performance, it is not always reserved for performance above average performance in American firms.

4. Long-term incentive plans (LTIP¹³): to be considered a long-term incentive the measurement period must be in excess of one year (3–5 years is common).

They are projected (or at least should be) to counterbalance short term incentives, in order to better align managers' and shareholders' objectives, and to avoid the risk of over-incentivize managers to enhance current performance, at expenses of long term one (short termism²⁸). These long-term rewards are often paid out over several years, again with payment in either cash or stock, and in that case they constitute an equity-based pay.

5. Severance, or buy-out, pensions schemes, or deferred compensation: CEOs, and sometimes other executives in large public firms, commonly receive large "separation packages" (aka "walk-away"

²³ Like cars or club membership or personal assistants or sports tickets, office space, secretarial help, and cell phone service. They do have the advantage of not having to be reported to shareholders or the SEC in dollar value.

²⁴ Like "Golden hellos", which hiring bonuses for executives from rival companies, are intended to compensate a new hire for the loss of value of stock options provided by his/her current employer that are forfeited when they joining a new firm, or "Golden Goodbyes".

²⁵ Data from Equilar Inc. database.

²⁶ Data source: (2011); "2011 CEO Pay Strategies Report for S&P 500 Companies"; Equilar Inc.

²⁸ It refers to an excessive focus on short-term results at the expense of long-term interests.

packages) when leaving a firm, whether from being fired, retired, not rehired, or replaced by new management after an acquisition. The packages include features such as retirement plans and deferred compensation, as well as post-retirement perks and guaranteed consulting fees.

To more exhaustively analyse the principal variable to take into consideration when projecting a stock option plan, Table 1.2³⁰ is introduced.

Table 1.2 analyses the principal variable to take into consideration when projecting a stock option plan.

PLAN VARIABLE	MAIN ALTERNATIVES
a) Operation recipients	All employee, or just top management; All employee with the same qualification, or just some (cherry-picking); Fixed-term contract or permanent employees;
b) Vesting period duration	Vesting period length; Immediate or deferred exercisability; Accrual of the underlining rights on a single date, or on multiple dates; Automatic accrual of the underlining rights;
c) Exercisability period duration	Length of exercisability period; Frequency of exercisability period, within a solar year; Presence (or absence) of “acceleration clauses”;
d) Quantity	Fix or variable quantity; Link between company performance/personal profile;
e) Price	In/out/at the money price; Fixed or indexed; Link between company performance and market indicators;
f) Payment method	Either cash or stock; Granting of a subsidized loan;
g) Origin of titles	From a capital increase, or market repurchase; Title of holding companies;
h) Eventual restrictions	Length of lock-up period;

³⁰ Data Source: Zattoni Alessandro; (September 2006); “Corporate Governance”; EGEA; chapter 8: “La Remunerazione del Top Management”.

While the use of stock and options may reassure stockholders and the public that management's pay is linked to increasing shareholder value - as well as earn an IRS tax deduction as incentive pay - critics charge options and other ways of tying managers' pay to stock prices are fraught with peril³¹.

We now introduce the four more common stock grants and stock option grants.

- Stock grants and restricted stock grants: it occurs when an employer pays a part or all of the compensation in the form of corporate stock. Restricted stock, also known as letter stock or restricted securities, refers to stock of a company that is not fully transferrable until certain conditions (restrictions) have been met. Upon satisfaction of those conditions, the stock is no longer restricted, and becomes transferable.
- Stock Option grants and restricted option grants: the kind that firms grant their executive management is, usually, a restricted "call option." It gives the recipient the right (but not the obligation) to buy, if determined condition (restrictions) have been met, the company's stock at a predetermined price.

Example: the stock is trading at \$10 today and the options, which will vest in two years, allow the worker to buy each stock at \$12, the employee will only exercise the options if the shares trade for more than \$12 in the stock market when they vest. If the shares are worth less, it is cheaper to purchase the same stock via a regular broker.

As regards to tax purposes, in United States there are two class of stock options:

- a) Non-qualified stock option (NSO) grants are tax deductible by the company that provides them. Since the grant is provided at a specific price, which is usually lower than the market value for the company's stock, the employees who choose to take advantage of this opportunity pay income tax on the difference between these two prices upon purchase. It's important to note that employees are not subject to taxes when the option becomes available to them; rather, they only pay taxes when they purchase a stock option.
- b) Qualified stock option grants, also known as an incentive stock option (ISO), usually only offered to key employees and top-tier management; this type of employee stock option gives participants an additional tax advantage that unqualified (NSO) or non-statutory stock options do not: they enjoy special tax-benefit, since are taxed at a capital gain rate, instead of paying ordinary income taxes upon it.

Statutory stock options (ISOs) require a plan document that clearly outlines how many options are to be given to which employees, and those employees must exercise their options within 10 years of receiving them. Furthermore, the option exercise price cannot be less than the market price of the

³¹ In the late 1990s, investor Warren Buffett lamented that *"there is no question in my mind that mediocre CEOs are getting incredibly overpaid. And the way it's being done is through stock options"*.

stock at the time the option was granted. Statutory stock options cannot be sold until at least a year after the exercise date and two years after the date the option was granted.

Incentive stock options are similar to non-qualified stock options in terms of form and structure:

Schedule: ISOs are issued on a beginning date, known as the grant date, and then the employee exercises his or her right to buy the options on the exercise date. Once the options are exercised, the employee has the freedom to either sell the stock immediately, or wait for a period of time before doing so. Unlike NSOs, the offering period for incentive stock options (ISOs) is always 10 years, after which time the options expire.

Vesting³²: ISOs usually contain a vesting schedule that must be satisfied before the employee can exercise the options. The standard three-year cliff schedule is used in some cases, where the employee becomes fully vested in all of the options issued to him or her at that time. Other employers use the graded vesting schedule that allows employees to become invested in one-fifth of the options granted each year, starting in the second year from grant. The employee is then fully vested in all of the options in the sixth year from grant.

Exercise Method: they can be exercised in several different ways. The employee can pay cash up front to exercise them, or they can be exercised in a cashless transaction or by using a stock swap.

Although ISOs have more favourable tax treatment than non-qualified stock options (NSOs), they also require the holder to take on more risk by having to hold onto the stock for a longer period of time in order to receive the better tax treatment.

Bargain Element: ISOs can usually be exercised at a price below the current market price and thus provide an immediate profit for the employee.

Clawback Provisions: these are conditions that allow the employer to recall the options, such as if the employee leaves the company for a reason other than death, disability or retirement, or if the company itself becomes financially unable to meet its obligations with the options.

US taxation: ISOs are eligible to receive more favourable tax treatment than any other type of employee stock purchase plan. This treatment is what sets these options apart from most other forms of share-based compensation. However, the employee must meet certain obligations in order to receive the tax benefit.

³² Vesting is the process by which an employee accrues non-forfeitable rights over employer-provided stock incentives or employer contributions made to the employee's qualified retirement plan account or pension plan. Under Section 83 of the "Internal Revenue Code", the value of property transferred in connection with the performance of services is included in gross income, and is recognized as such on the date on which the property is no longer subject to a substantial risk of forfeiture, or the date on which the property becomes transferable, whichever is earlier. In the case of restricted stock, the former date is generally known as the "vesting date" and is the date when the employee recognizes income for tax purposes (assuming that the restricted stock is not transferable at an earlier date, which is how employers generally structure their restricted stock awards).

There are two types of dispositions for ISOs:

- Qualifying Disposition - A sale of ISO stock made at least two years after the grant date and one year after the options were exercised. Both conditions must be met in order for the sale of stock to be classified in this manner.
- Disqualifying Disposition - A sale of ISO stock that does not meet the prescribed holding period requirements.

Just as with non-statutory options, there are no tax consequences at either grant or vesting. However, the tax rules for their exercise differ markedly from non-statutory options. An employee who exercises a non-statutory option must report the bargain element of the transaction as earned income that is subject to withholding tax. ISO holders will report nothing at this point; no tax reporting of any kind is made until the stock is sold. If the stock sale is a qualifying transaction, then the employee will only report a short or long-term capital gain on the sale. If the sale is a disqualifying disposition, then the employee will have to report any bargain element from the exercise as earned income.

Example: CEO X receives 1 000 non-statutory stock options and 2 000 incentive stock options from his company. The exercise price for both is \$15. He exercises all of both types of options about 13 months later, when the stock is trading at \$40 a share, and then sells 1,000 shares of stock from his incentive options six months after that, for \$45 a share. Eight months later, he sells the rest of the stock at \$50 a share.

The first sale of incentive stock is a disqualifying disposition, which means that Steve will have to report the bargain element of \$25 000 ($\40 actual share price - $\$15$ exercise price = $\$25 \times 1\,000$ shares) as earned income³³. He will have to do the same with the bargain element from his non-statutory exercise, so he will have \$50 000 of additional income to report in the year of exercise. But he will only report a long-term capital gain of \$35 000 ($\50 sale price - $\$15$ exercise price $\times 1\,000$ shares) for his qualifying ISO disposition³⁴.

In general, we can affirm that, top-executives' compensation schemes are characterized by:

1. Part of the remuneration is tied to company performance: the indicators can be divided into quantitative and qualitative. The former can be further divided into accounting parameters, linked with income and profitability, and financial indicators, linked to share value.

³³ Since are classifiable as disqualifying disposition.

³⁴ Since more than two years after the grant date, and more than one year after the options were exercised, has passed.

2. Long or mid-term horizon: performance indicators taken into account are evaluated, usually, during periods superior, or at least equal to a solar year, and are projected to countervail short term myopic strategy, possibly adopted to boost current profitability.
3. The prominence of the variable component, and its effect: the first of these should be carefully calibrated in order to counterbalance the level of risks, avoiding to exaggerate and exacerbate potential benefits; while, should not be reduced (nor even cancelled out) the, potential and eventual but still possible, losses, occurring to top executives in case of downside risks³⁵.
4. Homogeneity of purposes and objectives: even if this shall not appear the case, there are some major objectives, common to almost every compensation scheme (at least in theory): to align shareholders' and senior executives' targets, to encourage an entrepreneurial behaviour, to attract and retain workforce, to reduce the explicit cost of managerial work and to create a participatory business environment.

Usually large companies, ex post, report and disclose the ratio of a CEO's pay to the median pay for the firm's other employees, but not everyone agrees that a board should consider what the company pays to other employees, when deciding about CEOs' compensation packages.

In the United States, "*The Dodd-Frank Wall Street Reform and Consumer Protection Act*" of 2010³⁶, required large public companies to calculate and report the ratio of a CEO's pay to the median pay for the firm's other employees. It was a contentious mandate. Corporate lobbying groups vigorously opposed it, saying the ratio would be too costly to compile, while unions and other supporters said transparency would help bring down exorbitant CEO pay.

But so far, the Securities and Exchange Commission (SEC) has not issued a final rule on how to calculate the ratio. And so shareholders, and the public, are left with private analyst, think tank and union analyses that examine CEO compensation at the 350 or so largest companies and rely on government data for industry- or economy-wide worker income.

³⁵ Downside risk is the financial risk associated with losses. That is, it is the risk of the actual return being below the expected return, or the uncertainty about the magnitude of that difference.

³⁶ It is an Act, was signed into federal law by President Barack Obama on July 21, 2010. Passed as a response to the Great Recession, to promote the financial stability of the United States by improving accountability and transparency in the financial system, to end "too big to fail", to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes.

1.4 The Mass Media and Public Opinion Perception on Executive Compensation: USA

Seventy-four percent of Americans believe CEOs are not paid the correct amount relative to the average worker. Only 16 percent believe they are. While responses vary across demographic groups (e.g., political affiliation and household income), overall sentiment regarding CEO pay remains highly negative³⁷.

According to Brian Tayan, researcher at Stanford Graduate School of Business, “Whether high pay packages are deserved is a controversial subject. Whether the government can or should intervene is even more divisive. Public consensus is that there is a problem. There is much less agreement on a solution.”

The controversy over CEO compensation has reached new heights with labour unions, media, and even political candidates from both major parties (like in the US), expressing public criticism. According to Democratic candidate Hillary Clinton, the average CEO “... is now earning 200 times the average hourly wage. Twenty years ago the ratio was about forty times. People all over this country are really upset about this.”

According to Republican candidate Donald Trump, CEO compensation is a “total and complete joke.... They get whatever they want.” On its website, the AFL-CIO³⁸ cites a CEO-to-worker pay ratio of 331:1, underlying how, in recent decades, corporate CEOs have been taking a greater share of the economic pie while wages have stagnated and unemployment remains high. A Bloomberg report claims “... the gap between pay for U.S. chief executive officers and the people who work for them has widened sevenfold in three decades. Are bosses seven times smarter these days? Company boards seem to think so.”³⁹

Executive pay packages in the United States have been taken to task as excessive, lacking transparency, controlled by their beneficiaries rather than shareholders, and rewarding the executive behaviour that ought to be discouraged - such as short-term profit, excessive risk-taking of the sort that leads to speculative bubbles, or just plain failure. Their detractors have included not only economists but conservative establishmentarians such as Ben Bernanke and George W. Bush, and prominent management consultants, money managers and investors such as Peter Drucker, John Bogle and Warren Buffett⁴⁰.

The general public has also expressed dissatisfaction at times. A mid-June 2009 public opinion poll by Gallup found 59 percent of Americans polled were in favour of "the federal government taking steps to limit the pay of executives at major companies".

³⁷ Data source: Lareker, Donatiello and Tyan, David, Nicholas and Brian; (2016); “*Americans and CEO Pay: 2016 Public Perception Survey on CEO Compensation*”; Stanford Graduate School of Business and the Rock Centre for Corporate Governance.

³⁸ The American Federation of Labor and Congress of Industrial Organizations (AFL-CIO) is a national trade union centre and the largest federation of unions in the United States. It is made up of fifty-six national and international unions, together representing more than 12 million active and retired workers.

³⁹ Data source: Caleb Melby; (9 August 2016); “*Executive Pay: Valuing CEOs*”; bloombergbriefs.com/quicktake.

⁴⁰ Data source: Hunt, Albert R.; (18 February 2007) “*Letter from Washington: as U.S. rich-poor gap grows, so does public outcry*”; New York Times.

1.5 Trends in Executive Pay, Income Growth of Top Earners

Starting from the 50's till nowadays, first executives' salaries, then pay systems and more recently compensation scheme, have been subject to an increasing trend, both at an absolute and at a relative level.

In 2007, the world's twenty highest paid chief executive officers and chief financial officers were American. They made 344 times more than average workers - a gap 20 times bigger than it was in 1965²⁶, but this was huge drop in ratio from 2000 levels, when they averaged 525 times the average pay.

The 2007-2010 financial crisis drove executive pay down somewhat, but it had begun to recover by 2010.

The average pay for the chief executive of an American publicly traded company fell from \$15.1 million in 2007 to \$10.1m in 2009, but was back up to nearly \$12 million in 2010 according to governance research firm⁴¹.

Bonuses awarded for firms that had been rescued by government Troubled Asset Relief Program (TARP⁴²) and other funds were under particular scrutiny, including that of the United States Treasury's new special master of pay, Kenneth R. Feinberg.

Both the level and the composition of CEO pay have changed dramatically over time.

The post-WWII era can be divided into at least two distinct periods. Prior to the 1970s, we observe low levels of pay, little dispersion across top managers, and only moderate levels of equity compensation. From the mid-1970s to the end of the 1990s, all compensation components grow dramatically, and differences in pay across executives and firms widen. By far the largest increase comes in the form of stock options, which become the single largest component of CEO pay in the 1990s.

Since the 1990s, CEO compensation in the US has outpaced corporate profits, economic growth and the average compensation of all workers. Between 1980 and 2004, Mutual Fund founder John Bogle estimates total CEO compensation grew 8.5 percent per year compared to corporate profit growth of 2.9 percent per year and per capita income growth of 3.1 percent⁴³.

Forbes reports that from 1989 through 2008 total compensation for CEOs of Fortune 500 firms increased at 9.5% per year, while S&P 500 index increased at a rate of 8,2%, and the average wages for workers, increased by only 4.3%. By comparison, in 2007 CEOs made 344 times what the average work made, up from 71 times in 1989. In 1989 salary and bonuses were 65% of total CEOs pay, and increased at 4.2% (roughly the same

⁴¹ Data source: (2011); "2011 CEO Pay Strategies Report for S&P 500 Companies"; Equilar Inc.

⁴² The Troubled Asset Relief Program (TARP) is a program of the United States government to purchase toxic assets and equity from financial institutions to strengthen its financial sector that was signed into law by U.S. President George W. Bush on October 3rd, 2008.

It was a component of the government's measures in 2008 to address the subprime mortgage crisis.

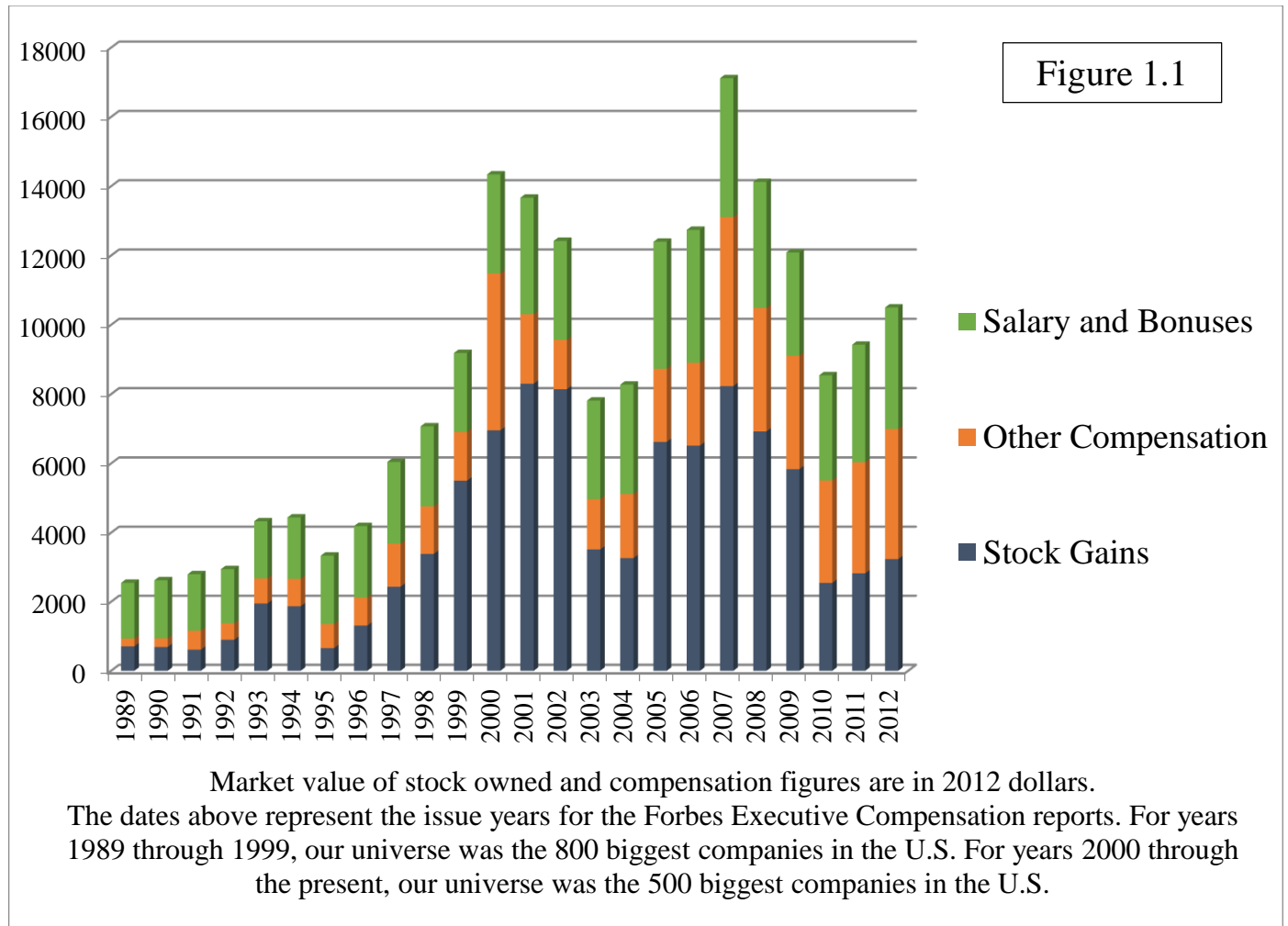
The TARP program originally authorized expenditures of \$700 billion. The Dodd-Frank Wall Street Reform and Consumer Protection Act, signed into law in 2010, reduced the amount authorized to \$475 billion. By October 11, 2012, the Congressional Budget Office (CBO) stated that total disbursements would be \$431 billion, and estimated the total cost, including grants for mortgage programs that have not yet been made, would be \$24 billion.

⁴³ Data source: Bogle, John C.; (May 2008); "Reflections on CEO Compensation"; Academy of Management.

rate as workers' pay). However, stock gain (26.1% of total pay in 1989) grew by 13.2%, and "other compensation" forms increased by 15.7% - both annually (Figure 1.1)⁴⁴.

If we consider period 2000 – 2008, average CEO pay declined and restricted stock grants have replaced stock options as the most popular form of equity compensation. It is arguably too early to judge whether the post-2001 period constitutes a third regime in CEO compensation, or just a temporary anomaly caused by the technology bust of 2000-01 and the financial crisis of 2008, even if some signs of regrowth are notable.

Figure 1.1 Composition over two decades of CEOs' pay, divided by macro-thematic components.



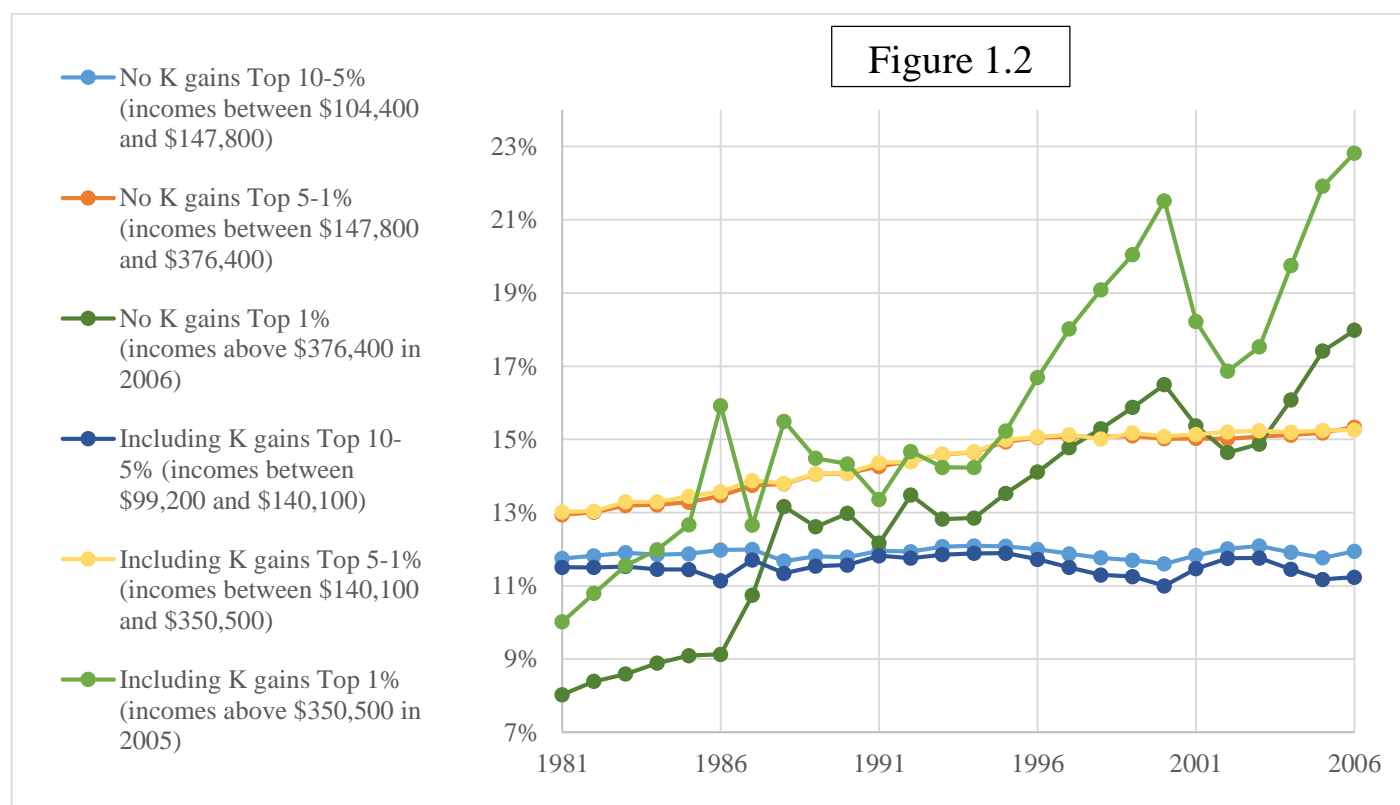
Data source: (2012); "Forbes Annual Executive Compensation Reports"; U.S. Bureau of Labor Statistics, (www.bls.gov).

On a much wider scale, as reported (2012) by J. Bakija, A. Cole and B.T. Heim, share of the nation's income going to the top percentiles of the income distribution in the United States has increased dramatically over the past three decades.

⁴⁴ Data source: (2012); "Forbes Annual Executive Compensation Reports"; U.S. Bureau of Labor Statistics, (www.bls.gov).

They found out that, executives, managers, supervisors, and financial professionals account for about 60 percent of the top 0.1 percent of income earners in recent years, and can account for 70 percent of the increase in the share of national income going to the top 0.1 percent of the income distribution between 1979 and 2005. Figure 1.2 decompose, the top US decile of income share, into three groups, from 1981 till 2006. The increase of income share captured by the top percentile of earners, is here noticeable and remarkable, both considering, nor leaving out capital gains; similar trends cannot be outlined for neither one of the two groups. During 1979-2005 there was substantial heterogeneity in growth rates of income for top earners across occupations, and significant divergence in incomes within occupations among people in the top 1 percent.

Figure 1.2 Decomposition of the top decile US income share into three groups, from 1981 until 2006.



Data source: Piketty and Saez (2003, updated in 2008 at <http://elsa.berkeley.edu/~saez/TabFig2006.xls>).

For many occupations, the share of the top percentile of taxpayers in each occupation remained relatively stable between 1979 and 2005, but for executives, financial professions, and real estate these shares changed noticeably. The fraction of the top 1 percent that are non-financial executives, managers, and supervisors gradually declined, starting at 36 percent in 1979 and dropping to 31 percent by the end of the sample period. Salaried executives declined sharply from 21 percent of the top percentile in 1979 to 11.3 percent by 2005. By

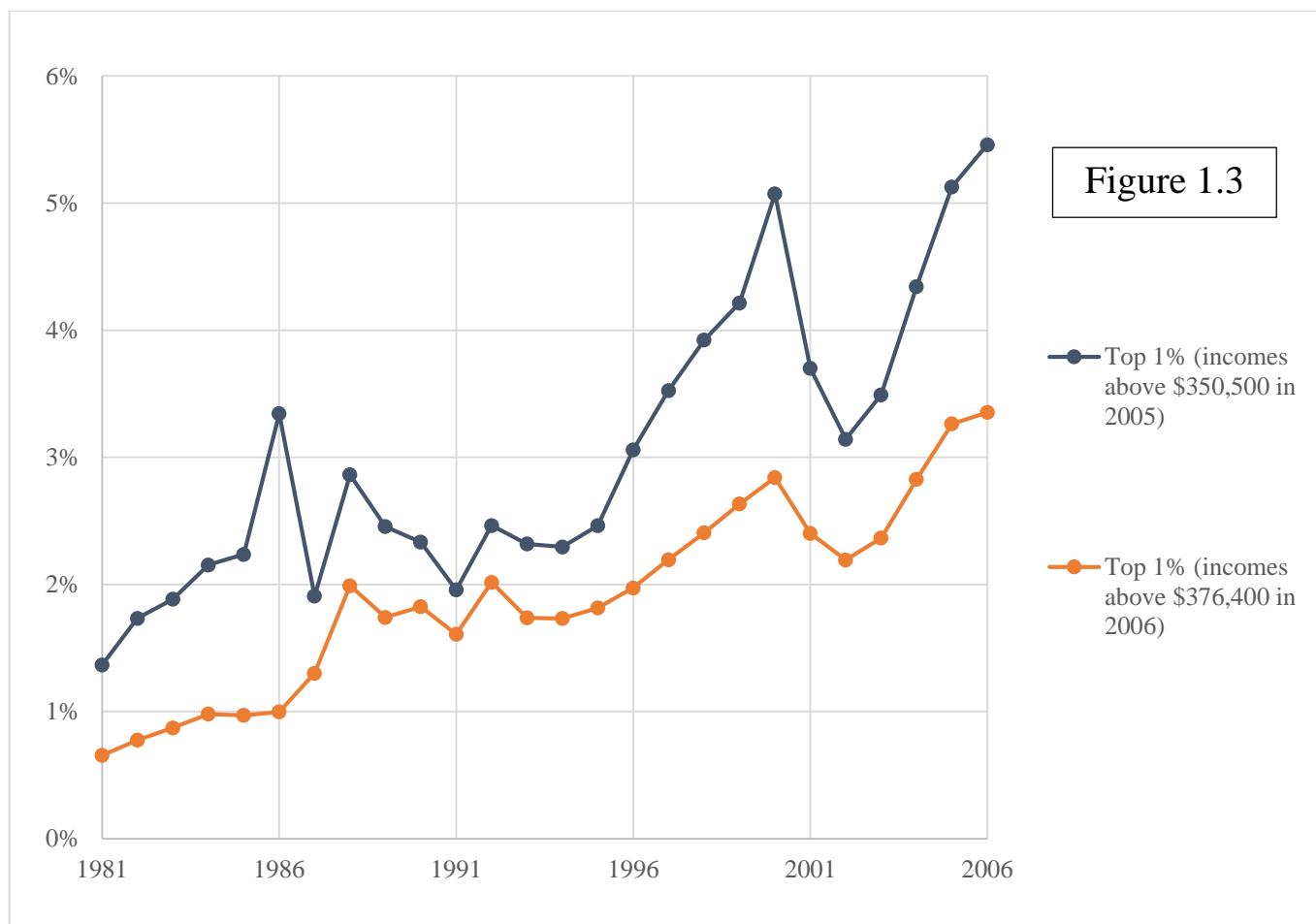
2005, executives, managers, supervisors, and financial professionals accounted for 60.5 percent of primary taxpayers in the top 0.1 percent of the distribution of income excluding capital gains⁴⁵.

The heterogeneity in income growth rates across professions within the top one percent, and the divergence in incomes within professions in the top one percent, both suggest that the causes of rising top income shares cannot just, or even primarily, be things that are changing in similar ways over time for everyone within the top one percent, such as federal marginal income tax rates, or globalization.

The fact that top income shares have been rising rapidly in English-speaking countries, but not in Continental Europe and Japan might suggest that skill-biased technical change, globalization, and the closely related “superstar” theory are not very good explanations for rising top income shares in the U.S.

Other data from individual income tax returns tabulated by Piketty and Saez (2003, updated 2008) and shown in Figure 1.3. It shows the share of income going to the top 0.1 percent, of the income distribution in the U.S., based on data from Piketty and Saez (2006), updated in 2008.

Figure 1.3 Percentage of national income received by top 0.1% of income earners: US, from 1991 until 2006.



Data source: Piketty and Saez (2003), updated in 2008 at <http://elsa.berkeley.edu/~saez/TabFig2006.xls>.

⁴⁵ Data Source: Bakija, Heim and Cole, Jon, Bradley T. and Adam; (April 2012); “Jobs and Income Growth of Top Earners and the Causes of Changing Income Inequality: Evidence from U.S. Tax Return Data”; working paper, available at: <http://web.williams.edu/Economics/wp/BakijaColeHeimJobsIncomeGrowthTopEarners.pdf>.

It shows that while the share going to top earners increased dramatically between 1981 and 2006 in the U.S., it was basically flat in these other countries until very recently. There is evidence of some increase in top income shares in Japan and France since the late 1990s, but the changes are far less pronounced than what has occurred in the U.S.

It is important to note that Piketty and Saez (2003, updated 2010), among others, have shown salary income and business income (including self-employment income, S-corporation⁴⁶, and partnership income), both of which largely reflect labour compensation, now account for the majority of the incomes of top income earners, and have been growing substantially as a share of that income in recent decades. As a result, salary income and business income account for about 63 percent of the increase in the share of national income (including capital gains) going to the top 0.1 percent of the income distribution between 1971-1980 and 2001-2010.

So theories which try to explain the rising top income shares shown in Figure 1.3, must largely be about compensation for labour.

One explanation for rising income inequality emphasizes that it coincided with advancing globalization; this may increase the demand for the labour of high-skill workers in the U.S., because they can now sell their skills to a wider market, and highly-skilled workers are scarcer in the rest of the world. Globalization may similarly depress wages for lower-skilled workers, because they now have to compete with abundant low-skill workers from the rest of the world (1941, Stolper and Samuelson; 2008, Krugman). But this seems not to be the case when confronting the data with other countries, such as Japan or France.

A second hypothesis is skill-biased technical change (1992, Katz and Murphy; 2002, Bound and Johnson; 2002, Card and DiNardo; 2006, Garicano and Rossi-Hansberg; 2007, Garicano and Hubbard). Technology has arguably changed over time in ways that complement the skills of highly-skilled workers, and substitute for the skills of low-skilled workers. A third hypothesis, closely related to the previous two, is the “superstar” theory suggested by Sherwin Rosen (1981). In this theory, compensation for the very best performers in each field rises over time relative to compensation for others, because both globalization and technology are enabling the best to sell their skills to a wider and wider market over time, which displaces demand for those who are less-than-the best. This is easiest to see for entertainers, but could easily apply to other professions as well.

A fourth hypothesis is that the increasing inequality may be explained to some extent by executive compensation practices (2001, Bertrand and Mullainathan; 2002, Bebchuk and Walker; 2005, Bebchuk and Grinstein; 2009, Eissa and Giertz; 2010, Friedman and Saks; 2008, Gabaix and Landier; 2002, Murphy; 2006, Piketty and Saez).

⁴⁶ An S corporation, for United States federal income tax purposes, is a closely held corporation (or, in some cases, a limited liability company or a partnership) that makes a valid election to be taxed under Subchapter S of Chapter 1 of the Internal Revenue Code. In general, S corporations do not pay any federal income taxes. Instead, the corporation's income or losses are divided among and passed through to its shareholders. The shareholders must then report the income or loss on their own individual income tax returns.

Bebchuk and Walker (2002) and Bebchuk and Grinstein (2005), among others, have argued that high and rising executive pay reflect the fact that the pay of executives is set by their peers on the board of directors, that free rider problems prevent shareholders from doing sufficient monitoring of executive compensation practices, and that the problems have been getting worse over time. Bertrand and Mullainathan (2001) present empirical evidence indicating that executive pay is in fact equally influenced by effort and luck, and that luck has less of influence on executive pay in firms that various observable indicators suggest are better governed. This supports the notion that executive compensation practices are not entirely efficient.

Murphy (2002) argue that executive pay reflects economically efficient compensation necessary to align executive incentives with those of shareholders. Gabaix and Landier (2008) argue that the increasing scale of firms has been critical to explaining rising executive pay; however, Friedman and Saks (2010) show that real executive pay grew very little between World War II and the mid-1970s despite large increases in firm size during that period, casting doubt on the Gabaix and Landier hypothesis. A fifth hypothesis is that technological change and compensation practices in financial professions play a critical role.

Another hypothesis related to the past few is that social norms and institutions in the United States may be changing over time in a way that reduces opposition to high pay (2006, see e.g., Piketty and Saez).

Other explanations for the changes in pre-tax income inequality consider the influence of tax changes that occurred in the past few decades. This is explored in the now voluminous literature on the “taxable income elasticity,” recently and comprehensively reviewed by Saez, Slemrod, and Giertz (2012).

In conclusion, our findings suggest that the incomes of executives, managers, supervisors, and financial professionals can account for a huge share (60 percent) of the increase in the share of national income going to the top percentile of the income distribution between 1979 and 2005⁴⁷. We also noticed significant heterogeneity in income growth across and within occupations among people in the top percentile of the income distribution, suggesting that factors that changed in the same way over time for all high-income people are probably not the main cause of increasing inequality at the top.

The incomes of executives, managers, financial professionals, and technology professionals who are in the top 0.1 percent of the income distribution are found to be very sensitive to stock market fluctuations. Most of our evidence points towards a particularly important role for financial market asset prices, shifting of income between the corporate and personal tax bases, and possibly corporate governance and entrepreneurship, in explaining the dramatic rise in top income shares.

⁴⁷ Data Source: Bakija, Heim and Cole, Jon, Bradley T. and Adam; (April 2012); “*Jobs and Income Growth of Top Earners and the Causes of Changing Income Inequality: Evidence from U.S. Tax Return Data*”; working paper, available at: <http://web.williams.edu/Economics/wp/BakijaColeHeimJobsIncomeGrowthTopEarners.pdf>.

1.6 About Compensation of the Board of Directors

Over the past 15 years, the methods of compensating non-executive directors have changed in tandem with the risk and workload of being a director. In the US, the catalyst for change over this time period includes a variety of regulatory requirements, such as Sarbanes-Oxley and Dodd Frank, enhanced proxy disclosure rules and increases in shareholder activism.

By way of examples, Audit Committees meet more frequently and must have at least one qualified financial expert, and Compensation Committees have greater workloads. Today's corporate director needs to dedicate more time to the job, assume greater risk, and meet higher qualification standards.

The traditional directors' compensation program included both an annual retainer and a separate fee provided for attending Board and Committee meetings. The presence of a meeting fee encouraged meeting attendance and automatically adjusts for workload as measured by the number of Board and Committee meetings. Meeting attendance is less of an issue today as companies disclose whether their directors attend at least 75% of meetings and proxy advisors scrutinize those directors who fail to meet the threshold.

Over the past decade, total director remuneration has grown by approximately 5% per year on average⁴⁹. As director compensation has increased, the trend has been to provide greater focus on equity compensation, which provides direct economic alignment to the shareholders who directors represent. In order to align directors' economic interests with the shareholders they represent, companies typically provide full-value equity awards and require minimum stock ownership specified as a multiple of the annual retainer or equity award value.

Currently, it is common to have equity represent a slight majority of regular annual compensation – such as a pay mix of equity compensation 55% and cash compensation 45%. In analysing broad market practices, we typically find directors' total compensation allocated 40% to 50% to cash compensation and 50% to 60% to equity compensation⁵⁰.

Today independent directors are either led by a Non-Executive Chairman (at companies who have separated the leadership role) or a Lead Director (for companies who maintain a combined Chairman and CEO role or an Executive Chairman). At companies who have separated the Board Chairman and CEO roles, an independent Non-Executive Chairman is appointed to lead the independent directors. The responsibilities of this position vary by company as does the amount of additional compensation, which is provided through cash, equity or a combination thereof.

For those companies who have decided to continue with a single combined role, an independent director serving in the role of Lead Director (or Presiding Director) has emerged as a best practice to lead executive sessions of independent directors. When this role emerged in the mid-2000s, the Lead Director often received

⁴⁹ See note 29.

⁵⁰ See note 29.

no additional compensation and frequently rotated among independent Committee Chairmen or was represented by the Governance Committee Chairman. More recently, for companies to maintain the combined role of Chairman and CEO, Lead Directors have become more prominent and are now typically appointed by the independent directors and are compensated with an additional retainer.

It's time, at this point in the discussion, to introduce different views over the evolution and the composition of executive compensation. We will first give an historical-perspective view, analysing the works of Hopkins and Lazonick (2016) and Murphy (2012), to then approach the "optimal contracting" view (2000, Hubbard; 2008, Kaplan), and finally evaluate the "managerial power" approach (2004, Fried and Bebchuck, et al.).

2.1. “Historical-Perspective” View: the Role of Government

Most recent analyses of executive compensation have focused on efficient-contracting and managerial-power rationales for pay, while ignoring or downplaying the causes and consequences of disclosure requirements, tax policies, accounting rules, legislation, and the general political climate. Government intervention has been both a response to and a major driver of time trends in executive compensation over the past century, and any explanation for pay that ignores political factors is critically incomplete.

There have been two broad patterns for government intervention into CEO pay. The first pattern can be described as knee-jerk reactions to isolated perceived abuses in pay, leading to disproportionate responses and a host of unintended and undesirable consequences. As an example, outrage over a single \$4.1 million change-in-control payment in 1982 led to strict limitations on all golden parachutes for top executives, which in turn led to a host of unintended consequences including an explosion in the use of golden parachutes, tax gross up provisions, and employment agreements; the rules also encouraged shorter vesting periods for stock awards and early exercise of stock options. The second pattern – best described as “populist” or “class warfare” – arises in situations where CEOs (and other top executives) are perceived to be getting richer when lower-level workers are suffering. The associated attacks on wealth in these situations gave rise to disclosure rules in the 1930s, limits on tax deductibility for CEO pay in the early 1990s, and wide-ranging pay regulations in the 2010 Dodd-Frank Act. Beyond these two broad patterns, indirect intervention in the form of accounting rules, securities laws, broad tax policies, and listing requirements have also had direct impact on the level and composition of CEO pay.

As we were illustrating in the first chapter, an employee stock option gives the recipient the right to acquire a specified number of shares in the company for which he or she works by exercising the option to buy those shares at the stock-market price that prevailed on the date that the option was granted. Once an option vests, the employee can exercise the option, in whole or in part, at any time until the termination date specified in the option grant. The employee will only choose to exercise the grant if the market price is higher than the exercise price. The spread between the exercise price of the shares and their market price on the date that the option is exercised (in whole or in part) constitutes realized gains.

Almost all employee stock options are nonqualified, which means that the realized gains are taxed at the ordinary income-tax rate at the time that the option is exercised and represent part of the employee's compensation. Far less common is the "incentive" (or qualified) stock option that (as explained below) must be held for at least one year after the exercise date to qualify for capital-gains tax treatment, with taxes due in the year in which the gains are realized by selling the shares. A stock award gives the recipient employee the right to the shares in the award on the date that the award vests. A minimum restriction is that the employee must remain with the company for a certain period of time from the grant date (three years is a common duration). The award might carry other restrictions such as the need for the company to achieve a certain earnings-per-share (EPS) target. When all restrictions have been met, and the award vests, the employee's realized gains are the market price of the company's stock on the vesting date times the number of shares in the award. Even if the market price on the vesting date is below the market price on the grant date, stock awards provide realized gains to the employee. These gains are taxed at the ordinary income-tax rate. Since the early 2000s stock awards have become more widely utilized as a mode of executive compensation. Previously the vast majority of stock-based pay grants were stock options. Even in this sense, a government intervention can shape and influence enormously the final coming out.

2.1.1 From the Beginning of 19th Century, till Great Depression

After the creation of a permanent income tax under the 16th Amendment in 1913, considerable U.S. legislation concerning the gains from exercising an executive stock option focused on the appropriate tax treatment.

At issue was whether the exercising of a stock option provided the executive with additional employee compensation or an ownership stake in the company. If it was simply compensation, then the taxable event would be taxed at the ordinary income-tax rate. If, however, the acquired shares made the executive an owner, then the taxable event would occur when the executive decided to sell the shares and the realized gains could be taxed at the capital-gains rate.

During the 1920s (and still during the 1930s,) the IRS generally held that the taxable income generated by stock options was compensation, not capital gains, and hence should be taxed at the ordinary rate in the year in which the option was exercised.

The CEO was an *employee* to whom the corporation paid compensation in whatever forms that compensation might take.

At the beginning of 19th century, nearly two thousand small manufacturing firms combined to form 157 large corporations. Management responsibility in many of these new firms shifted from owners to professional executives who had management skills but no meaningful equity stakes.

Over the next two decades, the void in incentives was filled by the emergence of bonuses tied to corporate profits. By 1928, nearly two thirds of the largest industrial companies offered executive bonus plans; bonuses

accounted for 42% of 1929 total executive compensation in companies with plans (1938, Baker). While compensation was generally modest, the highest bonuses revealed amounts not seen again until the late 1970s. For example, Bethlehem Steel's CEO Eugene Grace received a bonus of \$1.6 million for 1929 performance (over \$20 million in inflation-adjusted 2011 dollars). These bonuses weren't always disclosed. This huge bonuses, on the hedge of the Great Depression era weren't welcomed by mass media and public opinion.

2.1.2 From Great Depression, till World War II

The initial push for pay disclosure was not driven by shareholders but rather by "New Deal" politicians outraged by perceived excesses in executive compensation.

In the April prior to the 1932 election – in the face of proposed bailout loans from the governments Reconstruction Finance Corporation (RFC) – the Interstate Commerce Commission demanded that all railroads disclose the names of executives making more than \$10,000 per year. The disclosed pay levels outraged the new administration, and in May 1933 the RFC required railroad companies receiving government assistance to reduce executive pay by up to 60%.

Mandated pay disclosures for railroad executives sparked the interest of other US regulators. By mid-1933 the Federal Reserve began investigating executive pay in its member banks, the RFC conducted a similar investigation for non-member banks, and the Power Commission investigated pay practices at public utilities. In October 1933, the Federal Trade Commission (FTC) requested disclosure of salaries and bonuses paid by all corporations with capital and assets over \$1 million (approximately 2,000 corporations).

Following the Securities Act of 1934, the responsibility for enforcing pay disclosures for top executives in publicly traded corporations was consolidated into the newly created Securities and Exchange Commission (SEC). In December 1934, the SEC issued permanent rules demanding that companies disclose the name and all compensation (including salaries, bonuses, stock, and stock options) received by the three highest-paid executives. The securities of companies not complying with the new regulations by June 1935 would be removed from exchanges. Several companies, including U.S. Steel, pleaded unsuccessfully for the SEC to keep the data confidential, arguing that publication would be conducive to disturbing the morale of the organization and detrimental to the best interests of the registrant and its stockholders.

The demand for disclosure reflects both legitimate shareholder concerns and public curiosity. Public disclosure effectively ensures that executive contracts in publicly held corporations are not a private matter between employers and employees but are rather influenced by the media, labour unions, and by political forces operating inside and outside companies. These "uninvited guests" to the bargaining table have no real stake in the companies being managed and no real interest in seeing companies managed well so they serve all the claimants on the firm including consumers, debt and equity holders, employees and communities.

On the taxation side, in 1937, *Palmer v. Commissioner* countered the IRS perspective on managerial corporation by arguing that the stock-option grant gave the executive a “proprietary interest” in the company. The executive would pay taxes in the year in which he sold the acquired shares, and would be eligible for capital-gains tax rates while the employer was not permitted to book the executive’s gains from the sale of the acquired shares as a tax-deductible expense.

Then in 1945, in *Commissioner v. Smith*, the Supreme Court reversed this position, ruling that all stock options were compensatory with the gains determined and taxable at the date the stock option was exercised. Redefined as employment income, the realized gains from the stock option were taxable at the ordinary income-tax rate and deductible to the issuing corporation as a business compensation expense. Given that in 1945 the marginal tax rate on income over \$200,000 was 94 percent while the capital-gains tax rate was 25 percent, this legal decision effectively discouraged stock options as a mode of executive compensation.

The evolution of CEO compensation since WWII can be broadly divided into two distinct periods. Prior to the 1970s, we observe low levels of pay, little dispersion across top managers, and moderate pay-performance sensitivities. From the mid-1970s to the early 2000s, compensation levels grow dramatically, differences in pay across managers and firms’ employees widen, and equity incentives tie (or at least attempt to tie) managers’ wealth closer to firm performance.

2.1.3 From World War II, Till 1970s: The Rise (and Fall) of Restricted Stock Options

By 1950, the tax issue surrounding stock options was a big deal: the highest marginal tax rates on ordinary and corporate incomes had swelled to 91% and 42% (from 25% and 12% in 1928, respectively), compared to a capital gains rate of 25% (from 12.5% in 1928).

Corporate executives, lobbied for capital-gains treatment for stock options, contending that their managerial performance would be enhanced by having a proprietary interest in the corporations that employed them.

The Revenue Act of 1950 acceded to this line of argument, defining a *restricted* stock option⁵¹ on which realized gains would be taxed as a capital gain. In 1950 the capital-gains tax rate was still 25 percent, while the marginal income-tax rate on income over \$200,000 was 84.4 percent. From 1951 through 1964 this top ordinary rate stood at 91 percent.

Given the tax rates at the time, restricted stock options also became a relatively efficient way to convey after tax compensation to executives. For example, at a 91% tax rate on ordinary income and 50.75% corporate tax

⁵¹ Under the 1950 Act, a restricted stock option was non-transferable, had an exercise price of at least 85 percent of the market price of the stock at the time it was granted, and could expire up to ten years from the date of the grant. To be eligible for capital-gains treatment, the exercise price had to be at least 95 percent of the grant-date stock price and the shares acquired through the exercise of the option could not be sold for at least two years from the option grant date and for at least six months from the exercise date.

Data source: Lazonick William; (2009); “*The Explosion of Executive Pay and the Erosion of American Prosperity*”; *Entreprises et Histoire* 57, pp: 141-164.

rate, it cost shareholders \$5.47 in after-tax profit to give the executive \$1 in after-tax income.⁴⁸ In contrast (and for simplicity ignoring the timing issues), when the pay is taxed as capital gains rather than ordinary income, it cost shareholders only \$1.33 to convey \$1 in after-tax income to the executive.

With the income on the exercise of stock options taxed as capital gains, executive stock options became widespread among U.S. corporations in the 1950s. They averaged 36 percent of the total compensation of top executives of 50 large U.S. corporations over 1955-1963⁵².

In a 1960 *Harvard Business Review* article entitled “Are Stock Options Getting Out of Hand?”, Erwin Griswold⁵³, criticized the tax rules on stock options for favouring a special class of people who did not make investments that justified capital gains. He argued that option grants focused the minds of executives more on speculative price movements of the company’s stock than on the job of managing a large corporation.

After that senator Albert Gore launched a campaign that persuaded Congress to eliminate special tax advantages for executives' stock options.

In 1961 Gore introduced a bill in Congress to rescind the tax privileges of executive stock options, arguing that the 1950 legislation created a “glaring loophole” in the tax law that had resulted in “flagrant abuses.” In 1964 Congress revised the tax code pertaining to stock options. The “restricted” stock option of the 1950 Act became a “qualified” stock option; to qualify for capital-gains treatment, the option had to be exercised within five rather than ten years, and, upon exercise, the acquired stock had to be held for three years rather than six months. Qualified options also had to be exercised in the order in which they were granted⁵⁴. Each of these changes reduced the probability that the executive would realize gains from stock options. Nevertheless, in a 1965 *New York Times* article, “How to be rich without paying taxes,” Gore continued his attack on executive stock options, noting that “Congress made some changes in the law last year, but its action fell far short of need.”⁵⁵

In particular, under the new law, the Revenue Act of 1964:

- Executives were required to hold stock acquired through option exercises for three years (rather than six months) in order to be taxed at the lower capital gains rate.
- Exercise prices could be no less than 100% (rather than 85%) of the grant-date market prices.
- The maximum option term was reduced from ten years to five years.
- The option price could not be reduced during the term of the option, nor could an option be exercised

⁵² Lewellen Wilbur; (1968); *Executive Compensation in Large Industrial Corporations*; Columbia University Press; page: 137.

⁵³ Erwin Nathaniel Griswold (July 14, 1904 – November 19, 1994) was an appellate attorney who argued many cases before the U.S. Supreme Court. Griswold served as Solicitor General of the United States (1967–1973) under Presidents Lyndon B. Johnson and Richard M. Nixon. He also served as Dean of Harvard Law School for 21 years.

⁵⁴Ellig Bruce R.; (January-February 2006); *The Evolution of Executives Pay in the United States*; Compensation&Benefits review; page: 57

⁵⁵Gore Albert; (11 April 1965); *How to Be Rich Without Paying Taxes*; New York times; page 29.

while there is an outstanding option issued to the executive at an earlier time. (This provision was designed to halt the practice of repricing options or cancelling out-of-the-money options and replacing them with options with lower exercise prices.)

- Finally, (but perhaps most importantly), the 1964 law reduced the top marginal tax rate on ordinary income from 91% to 70%, and progressively raised the capital gain tax rate, to a high of 39,9% in 1976, which significantly reduced the attractiveness of restricted options over cash compensation.

In August 1971, in an ultimately (and predictably) unsuccessful attempt to control inflation, President Nixon imposed a 90-day freeze on commodity prices and wages (including executive pay). In December 1971 – in what was called Phase Two of the Nixon wage-and-price controls – the Pay Board established by Congress imposed a limit of 5.5% for increases in executive pay (the limit being binding for company-defined groups of executives, but not necessarily for individual executives).

Non-qualified stock options were allowed under the Nixon controls only if the plan was shareholder-approved, if the aggregate number of options granted did not increase from the prior three years, and if the exercise price was at least 100% of the grant-date market price.

Non-qualified options were treated as wages and salaries under the Nixon controls, and were valued at 25% of the fair-market value of the shares underlying the option.

This valuation approach represents an interesting (albeit short-lived) historical footnote, since it was imposed a year before Black and Scholes (1973) and decades before companies began routinely placing a value on options when making compensation decisions.

CEO pay rose significantly after the wage controls were lifted in May 1974. The median continuing CEO in the *Forbes 800* received an 11.1% increase in nominal cash compensation in 1974, double the average limit under the Nixon controls. From 1973 through 1979, the median cash compensation for CEOs in the *Forbes 800* increased by 12.2% each year (doubling from \$162,000 to \$324,000), significantly exceeding the average annual inflation rate of 8.5%⁵⁶.

While cash compensation escalated (at least in nominal terms) during the 1970s, the use of stock options was relatively stagnant. Part of the declining popularity of options reflected the change in tax policies in 1964 and 1969 that made qualified stock options less attractive, coupled with their outright prohibition in 1976. More importantly, though, was the prolonged stagnation in the stock market, driven in part by the oil-price shocks of 1973 and 1977. In particular, the nominal value of the bellwether Dow Jones average was basically flat from the beginning of 1965 through the early 1980s.

⁵⁶ Murphy Kevin J.; (12 August 2012); "Executive Compensation: Where We Are, and How We Got There"; University of Southern California - Marshall School of Business; USC Gould School of Law; page: 56; paper available at: <http://ssrn.com/abstract=2041679>

The void in compensation created by worthless stock options was quickly filled by a plethora of new plans designed to provide more predictable pay-outs, including: book-value plans (where executives receive dividends plus the appreciation in book values); long-term performance plans (with pay-outs based on long-term earnings growth targets); and guaranteed bonuses (with pay-outs guaranteed independent of performance). In addition, since the Nixon wage-and-price controls restricted salaries but not company-provided benefits, companies began relying to a greater extent on shareholder-subsidized perquisites or perks such as low-interest loans, yachts, limousines, corporate jets, club memberships, hunting lodges and corporate retreats at exotic locations.

Then, under the Tax Reform Act of 1976, Congress eliminated capital-gains treatment of all future employee stock-option grants. The argument prevailed that in the absence of a capital investment there was no justification for capital-gains taxes on the income from stock options, however long the shares might be held after exercise.

In August 1977, the SEC issued Interpretive Release #5856 stating that the value of perquisites must be included as compensation in proxy statements.

The disclosures in the 1978 proxy statements fuelled the fire by focusing even more attention on perquisites. The information on perquisites was expanded significantly in 1979 proxy statements.

Also in 1979, the IRS issued significant new auditing guidelines aimed at detecting and taxing executive perquisites. McGahran, some years later (1988) argues that the new SEC disclosures made it easier for the IRS to detect (and tax) fringe benefits, and presents some evidence that fringe benefits decreased, while cash compensation increased, as a result of the SEC and IRS actions.

The ongoing attack on perquisites was reflected in the contemporaneous early academic literature on agency theory. For example, the “agency problem” introduced by Jensen and Meckling (1976) focused on managerial consumption of non-pecuniary benefits such as “the physical appointments of the office” and “the attractiveness of the secretarial staff.”

Similarly, Alchian and Demsetz (1972) conclude that companies allow personal consumption of corporate (or university) property (such as “privileges, perquisites, or fringe benefits”) because the cost of detecting and punishing such “turpitudinal peccadilloes” is larger than the benefits from prohibiting the activity.

The restricted and qualified stock options created by the 1950 and 1964 Revenue Acts were not formally considered compensation and therefore companies did not record an expense for such options for either tax or accounting purposes. The switch to non-qualified options in the 1970s – which were considered compensation for tax purposes – raised a new question: how should options be accounted for in company income statements? One possibility was to follow the tax code by recognizing an accounting expense at the time an option is exercised. But, in spite of its simplicity, this method is inconsistent with the basic tenet of accounting that expenses should be matched to the time period when the services associated with those expenses were

rendered. Rather, the tenet suggested that options should be expensed over their term based on the grant-date value of the option. At the time, however (and for a long time to come) there was no accepted way of placing a value on an employee stock option.

In October 1972, the Accounting Principles Board (APB)⁵⁷ issued APB Opinion No. 25, “Accounting for Stock Issued to Employees.” Under APB Opinion No. 25, the compensation expense associated with stock options was defined as the (positive) difference between the stock price and the exercise price as of the first date when both the number of options granted and the exercise price become known or fixed. The expense for this spread between the price and exercise price – called the intrinsic value – was amortized over the period in which the employee is prohibited from exercising the option. Under this rule, there was no charge for options granted with an exercise price equal to (or exceeding) the grant-date market price, because the spread is zero on the grant date.

The accounting treatment of options cemented the dominance of the traditional stock option (an option granted with a five- or ten-year term with an exercise price equal to the grant-date market price) and discouraged companies from offering more novel option plans⁵⁸.

The Revenue Acts of 1964 and 1969 significantly reduced the attractiveness of restricted/qualified stock options, but did not prohibit new grants. As part of the Revenue Act of 1976, Congress allowed executives to retain and exercise grants made prior to May 20, 1976, but banned all future grants of qualified stock options. Since existing grants had a maximum five-year term, the last grant of qualified options was set to expire on May 19, 1981.

As 1981 approached, Congress resurrected a new form of qualified options (now called Incentive Stock Options or ISOs) as a last-minute addition to the Economic Recovery Tax Act of 1981.

In the Economic Recovery Act of 1981, however, Congress restored the qualified stock option subject to capital-gains treatment, now calling it the “incentive” stock option. To qualify for capital-gains treatment, the stock option had to be:

- awarded under a shareholder approved plan;
- have an exercise price of at least 100 percent of the market value of the stock at the date of the grant;
- expire no more than ten years from the date of the grant;
- when exercised, the acquired stock had to be held for at least two years after the grant date and one year after the exercise date.

⁵⁷ The predecessor to the current Financial Accounting Standards Board (FASB)

⁵⁸ For example, APB Opinion 25 imposes a higher accounting charge for options with an exercise price indexed to the stock-price performance of the market or industry, because the exercise price is not immediately fixed. Similarly, it imposes a higher accounting charge for options that only become exercisable if certain performance triggers are achieved, because the number of options is not immediately fixed. Finally, it imposes an accounting charge for options that are issued in the money but not for options issued at the money – a feature that became especially significant three decades later in the scandals involving backdating.

In bringing back this tax-favoured stock option, however, Congress limited the value of the exercisable grant (that is, the number of shares in the grant times the exercise price) on which the executive could receive capital-gains treatment to no more than \$100,000 in a given year, with the possibility of rolling over half of the unused maximum over the next three years.

Almost half of the cross-sectional variation in cash compensation in the United States between 1970 and 1982 was explained by company size (usually measured by firm revenues), and the highest-paid executives routinely were at the helm of the largest conglomerates and largest steel, automotive, and oil companies. Year-to-year changes in cash compensation were also largely driven by increases in company size. And non-monetary aspects of compensation – including power, prestige, board memberships and community standing – were also positively linked to increases in firm size. The strong relation between CEO pay and company size gave CEOs substantial incentives to increase company size, while the decline of equity-based incentive plans gave them little incentive to increase company share prices. It is noteworthy that the implicit incentives to increase company revenue help explain the unproductive diversification, expansion and investment programs in the 1970s, which in turn further depressed company share prices.

Although CEO pay and bottom-line corporate profitability remained relatively stagnant from 1970-1982, productivity did not. Spurred in part by the oil-price shocks of 1973 and 1977, this period brought significant technological advances that improved productivity, declines in regulation, and increases in global trade significant enough to constitute what Jensen (1993) calls the “Modern Industrial Revolution”. By the early 1980s, most sectors in the U.S. economy were saddled with increasing excess capacity, implying that the sectors had more capital and labour than required to maintain current levels of production. The root causes of the excess capacity differed across industries⁵⁹.

Technological change dramatically increased capacity for computing firms, while increased competition from non-unionized entrants created excess capacity in a variety of industries ranging from steel to groceries.

By definition, investment in an industry with excess capacity is a negative net-presentvalue project, since the industry already has more capital and labour than can be productively employed. Indeed, firms with excess capacity can either increase output with the same workforce, or maintain current output with a smaller workforce. However, the 1970s conglomerates and other large companies typically chose to neither increase output (given low market demands) nor decrease their workforce (since pecuniary and non-pecuniary rewards for CEOs were both tied to company size). Moreover, by the end of the 1970s, most these companies were generating huge amounts of cash, far in excess of that required to fund available positive net present value projects. CEOs, loathe to distribute excess cash back to shareholders, responded by wasting huge amounts of

⁵⁹ In the oil sector, for example, the five-fold increase in the inflation-adjusted price of crude oil let firms to launch massive capacity-increasing exploration and development projects in anticipation of continued price increases; the sector was stuck with the capacity when demand dropped and prices tumbled to pre-shock levels.

free cash flow through unwise diversification and investment programs.

The executive compensation practices of the 1970s provided few incentives for executives to pursue value-increasing reductions in excess capacity and disgorgements of excess cash. Equity-based compensation (mostly in the form of stock options) accounted for only a small fraction of CEO pay, and the options that existed often were underwater or expired worthless. Annual bonuses – the dominant form of compensation-based incentives – were focused on beating annual budget targets rather than creating long-run value. Performance-based terminations were almost non-existent and – since the vast majority of CEO openings were filled by incumbents rather than outside hires – the managerial labour market was similarly ineffective in disciplining poor performance.

Boards of directors, typically dominated by corporate insiders (in influence if not in numbers), had little reason to reduce corporate waste as long as the companies were delivering positive nominal profits. However, pressures to improve performance and disgorge cash were ultimately introduced by the capital markets, including “hostile takeover”.

The takeover market was complemented by the emergence of leveraged buyouts (LBOs): a financial transaction in which a company is purchased with a combination of equity and debt, such that the company's cash flow is the collateral used to secure and repay the borrowed money⁶⁰.

2.1.4 From 1981, till 1992: Regan Decade⁶¹ and Hostile Take-Over Market

In the 1980s, however, the much lower taxes brought on by “Reaganomics” increased the popularity of nonqualified stock options as a mode of employee compensation. The 1981 Act lowered the highest-bracket tax rate to 50 percent on income (initially in 1982) over \$85,600, and in 1988 it was lowered much further to 28 percent on income over \$30,050. It now stands at 39.6 percent on incomes over \$413,050 single and \$466,950 married⁶².

Debt taught executives that capital is costly (since the interest cost of debt capital was more obvious than the implicit, though larger and largely unrecognized, cost of equity capital), leading to reductions in inventories

⁶⁰ The use of debt, which has a lower cost of capital than equity, serves to reduce the overall cost of financing the acquisition. This reduced cost of financing allows greater gains to accrue to the equity, and, as a result, the debt serves as a lever to increase the returns to the equity. The term LBO is usually employed when a financial sponsor acquires a company. However, many corporate transactions are partially funded by bank debt, thus effectively also representing an LBO. LBOs can have many different forms such as management buyout (MBO), management buy-in (MBI), secondary buyout and tertiary buyout, among others, and can occur in growth situations, restructuring situations, and insolvencies. LBOs mostly occur in private companies, but can also be employed with public companies (in a so-called PtP transaction – Public to Private).

⁶¹ Ronald Wilson Reagan (/ˈrɒnəld ˈwɪlsən ˈreɪɡən/; February 6, 1911 – June 5, 2004) was an American politician and actor who was the 40th President of the United States, from 1981 to 1989. Even though its mandate lasted four plus four years, we can extend its influence over a decade in the U.S. political, and non, history.

⁶² Meanwhile Congress lowered the capital gains tax rate to 20 percent in 1982, raised it to 28 percent in 1987, and lowered it again to 20 percent in 1997. The Job and Growth Tax Relief Reconciliation Act of 2003 (the “Bush tax cuts”) further reduced the capital-gains tax rate to 15 percent. The current capital-gains tax rate is 20 percent for upper-income individuals and 15 percent for lower income.

and working capital. The emergence of LBOs and leveraged recapitalizations (in which the firm leverages the capital structure while staying public) created substantial amounts of shareholder value in firms with stable cash flows and no productive alternative uses for their cash, characteristics of many of the mature and declining sectors in the early 1980s.

While employment in companies targeted by hostile takeovers or LBOs was modestly reduced (which was productive given the presumptive excess capacity), the individuals most vulnerable to job losses were incumbent executives opposed to the changes in control.

Innovations designed to thwart takeovers included greenmail payments (repurchase of the raiders' stock at above market prices), standstill agreements (bribes so that the raider does not purchase additional stock), staggered boards (where directors serve overlapping terms, making it difficult for a proxy fight to gain a majority), supermajority rules (requiring more than 50% votes to approve a merger) and poison pills (where shareholders get special rights when there is a takeover bid); but, perhaps the most notorious innovation was the "golden parachute" which provided direct payments to executives following a successful change in control⁶³.

Whether change-of-control agreements facilitate or thwart takeovers remains a matter of debate and rests in the details. On one hand, as emphasized by Jensen (1986b), such agreements facilitate takeovers by providing bribes to existing managers to acquiesce to the change in control. On the other hand, such agreements can significantly increase the cost of takeovers for prospective acquirers, especially if the agreements cover dozens or hundreds of executives who have no plausible influence over the takeover decision. In any case, the existence of the apparent bribes paid to top executives (but not to shareholders in general) attracted the ire of a Congress already sceptical of hostile takeovers and their benefits.

Change-in-control arrangements became controversial following a \$4.1 million payment to William Agee, the CEO of Bendix⁶⁴. The payment sparked outrage in Washington, but Congress could not ban golden parachute payments outright, because such a ban would pre-empt state corporation laws. Congress does, however, control the tax laws, which allow corporations to deduct compensation from income only if the payments represent reasonable compensation for services rendered. By defining particular types or dollar amounts of compensation as unreasonable, Congress can directly determine whether compensation is deductible for corporate tax purposes. Congress attempted to discourage golden parachutes by adding Sections 280(G) and 4999 to the tax code as part of the Deficit Reduction Act of 1984. Section 280(G) of the Code provides that, if change-in-control payments exceed three times the individuals base amount, then all payments in excess of

⁶³ In most cases, the payment required both the change-of-control and the loss of a job (hence, called "double-triggered" since two things had to happen); in other cases ("single-triggered") the change-of-control itself was sufficient to trigger the payment, regardless of job loss.

⁶⁴ In 1982, Bendix launched a hostile takeover bid for Martin Marietta, which in turn made a hostile takeover bid for Bendix. Bendix ultimately found a "white knight" and was acquired by Allied Corp., but only after paying CEO Agee the golden parachute.

the base amount are non-deductible to the employer. In addition, Section 4999 imposes a 20% excise tax on the recipient of a parachute payment on the amount of payment above the base amount⁶⁵.

Suppose an executive with five-year average taxable compensation of \$1 million receives a golden parachute payment of \$2.9 million, which is less than three times the \$1 million base amount. In this case, the entire \$2.9 million parachute payment would be deductible by the company, and would be taxable as ordinary income to the executive. In contrast, suppose that the golden parachute payment was \$3.1 million, which is more than three times the \$1 million base amount. Under Section 280(G), the company would not be able to deduct \$2.1 million (of the \$3.1 million parachute payment) as a compensation expense, and (under Section 4999) the executive would owe \$420,000 in excise taxes (i.e., 20% of \$2.1 million) in addition to ordinary income taxes on the full \$3.1 million parachute payment.

The new Section 280(G) impacted executive compensation in several ways. First, the new law led to a proliferation in change-in-control agreements, which had previously been fairly rare. The Deficit Reduction Act was signed into law on July 18, 1984. By 1987, 41% of the largest 1,000 corporations had golden parachute agreements for its top executives, and the prevalence of golden parachutes increased to 57% in 1995 and to 70% by 1999⁶⁶.

In addition, the standard golden parachute payment quickly became the government prescribed amount of three times base compensation. By 1991, 47.5% of CEO golden parachute arrangements specified a multiple of three times base pay, and by 1999 71% specified three times base pay. Thus, the rule designed to limit the generosity of parachute payments has led to both a proliferation and a standardization of Golden Parachute payments in largest corporations⁵⁷. In fact, although Section 280(G) was meant to reduce the generosity of parachute payments, the government action appears to have increased the prevalence of: (1) change-in control plans; (2) tax gross-ups; (3) early exercise of stock options; (4) short vesting periods for restricted stock and stock options; and (5) employment agreements. Each of these outcomes both reduces the incentive effects of incentive-compensation for CEOs and other executives and increases the costs of these plans to their firms.

The emerging market for corporate control had pronounced effects on the U.S. stock market. After nearly two decades of stagnation, the Dow Jones Industrial Average rallied from below 800 to over 2700 between mid-1982 and mid-1987 (i.e., appreciating nearly 30% per year for five years). While the largest beneficiaries were shareholders in firms that became takeover targets, the rally was broad based and lifted share prices across a wide range of firms and industries. However, executives vigorously (and often successfully) fought takeovers in the 1980s by adopting anti-takeover provisions and by lobbying for political protection (2001, Holmstrom

⁶⁵ The base amount is typically calculated as the individuals average total taxable compensation (i.e., W-2 compensation, which include gains from exercising stock options) paid by the company over the prior five years.

⁶⁶ Murphy Kevin J.; (12 August 2012); *"Executive Compensation: Where We Are, and How We Got There"*; University of Southern California - Marshall School of Business; USC Gould School of Law; page: 66; paper available at: <http://ssrn.com/abstract=2041679>

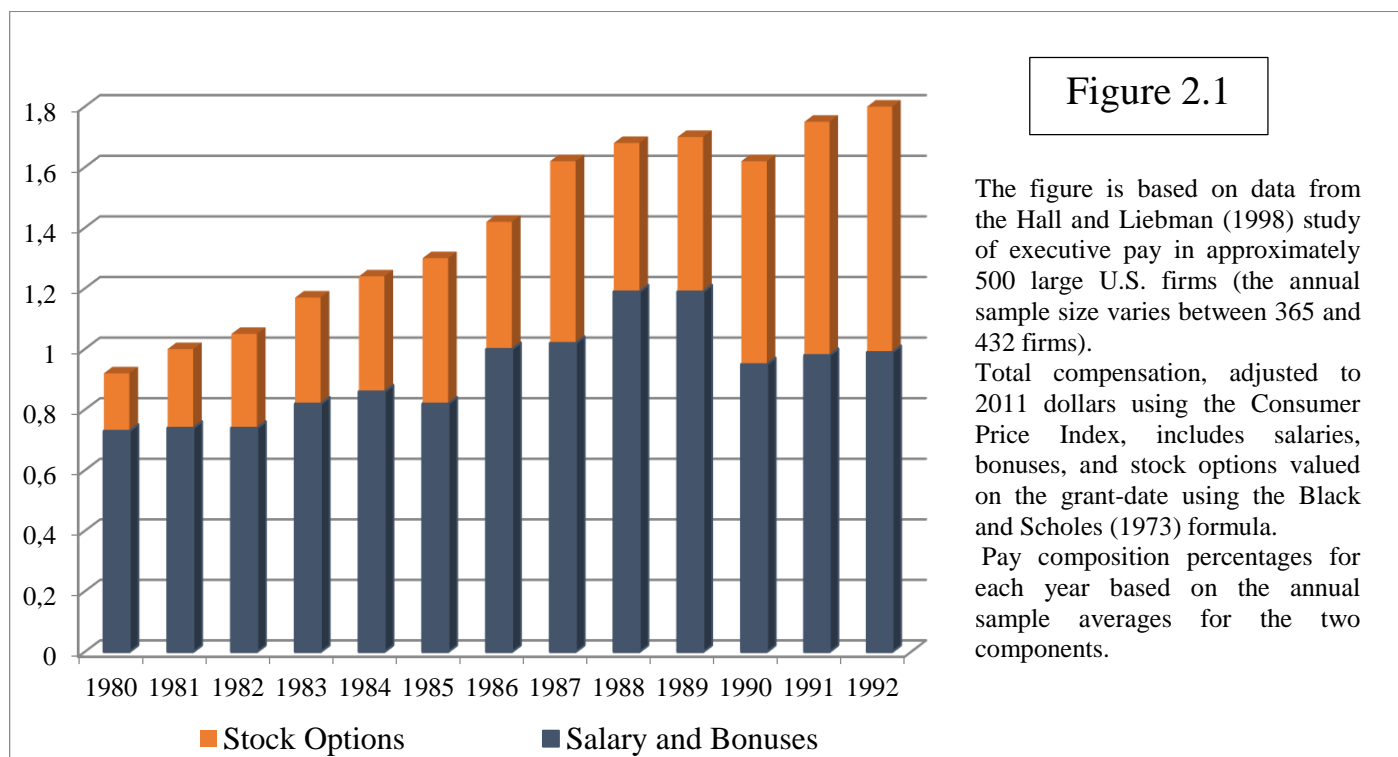
and Kaplan). Court decisions and legislation in the late 1980s (coupled with the October 1987 stock market crash) brought the hostile takeover market in the United States to a virtual halt.

Academics increasingly argued that traditional management incentives that focused on company size, stability, and accounting profitability destroyed rather than created value, and recommended that executive pay be tied more closely to company value through increases in stock options and other forms of equity-based incentives. These pressures began having an impact: non-equity-based CEO pay continued to grow in real terms after the mid-1980s, but became a smaller part of the total compensation package. For the first time since the 1950s, stock options re-emerged as the dominant form of incentives compensation.

Figure 3.4 shows the median level and average structure of CEO compensation from 1980-1992, based on Hall and Liebman (1998). Total grant-date compensation is defined as the sum of salaries, bonuses, and the grant-date value of stock options using the Black and Scholes (1973) formula. The annual sample size varies between 365 and 432 firms, and is representative of the population of the large U.S. firms. The percentage composition is defined by dividing the average salary and bonus (or options) by the average total compensation for each year.

As shown in the figure, inflation-adjusted median pay levels doubled from 1980 to 1992 from \$946,000 to \$1,900,000. The increase in pay primarily reflects the increase in stock option grants, which accounted for nearly half of total aggregate CEO pay by 1992.

Figure 2.1 Median grant-date compensation for CEOs in Hall and Liebman, 1980-1992.



Data source: Hall and Liebman, (1998).

Between October 13-19, 1987, the Dow Jones Average dropped nearly 800 points (from 2508 to 1738), losing 30% of its value in a week. Executive stock options, which had only recently become an important part of pay, were suddenly underwater. Companies responded by repricing existing options or by significantly increasing the size of their post-crash option grants (1994, Saly).

The October 1987 crash turned out to be short-lived: by August 1989, the Dow Jones reached an all-time high of 2735, hitting 3000 by July 1990. Stock options issued both before and after the crash were well in the money and becoming exercisable. Large manufacturing firms – still sorting out the excess capacity issues of the 1970s – were downsizing and laying off workers, to the delight of shareholders but attracting the ire of Congress, labour unions, and the media. The combination of valuable options, robust stock markets, and the 1990-1991 recession provided the perfect recipe for a populist attack on executive pay.

The CEO pay debate achieved international prominence during the 1990-1991 recession.

In response to growing outrage, legislation was introduced in the House of Representatives disallowing deductions for compensation exceeding 25 times the lowest-paid worker, and the Corporate Pay Responsibility Act was introduced in the Senate to give shareholders more rights to propose compensation-related policies. The SEC pre-empted the pending Senate bill in February 1992 by requiring companies to include non-binding shareholder resolutions about CEO pay in company proxy statements and announced sweeping new rules in October 1992 affecting the disclosure of top executive compensation in the annual proxy statement. Among other changes, the SEC's new 1992 disclosure rules required companies to produce:

1. A Summary Compensation Table summarizing the major components of compensation received by the CEO and other highly paid executives over the past three years.
2. Tables describing option grants, option holdings, and option exercises in detail.
3. A chart showing the company's stock-price performance relative to the performance of the market and their peer group over the prior five fiscal years;
4. A report by the compensation committee describing the company's compensation philosophy.
5. Overall, the new rules dramatically increased the information available about stock option grants and holdings, and the performance graph cemented the idea that the objective of the firm was to create shareholder value.

2.1.5 From 1992, till 2001, The “Go-go Nineties” and Stock Option Explosion

The median pay for CEOs in S&P 500 firms more than tripled between 1992 and 2001, driven by an explosion in the use of stock options. CEO incentive compensation in the early 1990s was split about evenly between options and accounting-based bonuses. By 1996, options had become the largest single component of CEO compensation in S&P 500 firms, and the use of options was even greater in smaller firms (and especially high-

tech start-ups). By 2000, stock options accounted for more than half of total compensation for a typical S&P 500 CEO⁶⁷.

The escalation of stock-option grants cannot be explained by a single factor. Instead, I believe that there are six main factors that fuelled the explosion in stock options:

- Shareholder pressure for equity-based pay: the decline in takeover activity in the late 1980s corresponded to the rise in shareholder activism. This new breed of activists – including many of the largest state pension funds – demanded increased links between CEO pay and shareholder returns. The activists were joined by academics such as Jensen and Murphy (1990a) “It’s not how much you pay, but how that matters.” Jensen and Murphy (1990b) showed that CEOs of large companies were paid like bureaucrats in the sense that they were primarily paid for increasing the size of their organizations, received small rewards for superior performance, even smaller penalties for failures, and that the bonus components of the pay packages showed very little variability, less even than the variability of the pay of rank-and-file employees. They concluded that compensation committees and boards should focus primarily on the incentives provided by the pay package rather than the level of pay, and were joined by shareholder activists such as the United Shareholders Association in advocating more stock ownership and more extensive use of stock options.

Companies responded by taking Jensen and Murphy’s mantra a bit too literally: adding increasingly generous grants of stock options on top of already competitive pay packages, without any reduction in other forms of pay and showing little concern about the resulting inflation in pay levels.

- SEC holding-period rules: Before May 1991, the SEC defined the exercise of an option as a “stock purchase” reportable by corporate insiders on Form 4 within 10 days following the month of the transaction. On May 1, 1991, in response to demands for more transparency of option grants, the SEC defined the acquisition rather than the exercise of the option as the reportable stock purchase. Because of this change, the six-month holding period required by the Securities Act’s “short-swing profit” rule now begins when options are granted, and not when executives acquire shares upon exercise. Therefore, as long as the options are exercised more than six months after they are granted, the executive is free to sell shares immediately upon exercise. This ruling significantly increased the value of the option from the standpoint of the recipient.
- SEC option disclosure rules: most widely debated issue surrounding the SEC’s 1992 disclosure rules was how stock options would be valued in both the Summary Compensation Table and in the Option

⁶⁷ Murphy Kevin J.; (12 August 2012); “Executive Compensation: Where We Are, and How We Got There”; University of Southern California - Marshall School of Business; USC Gould School of Law; page: 72; paper available at: <http://ssrn.com/abstract=2041679>

Grant table. The SEC wanted a total dollar cost of option grants so that the components in the Summary Compensation Table could be added together to yield a value for total compensation, and lobbied for calculating option cost using a Black-Scholes (1973) or related approach. High option-granting firms (especially from the Silicon Valley and Boston's 128 corridor) vehemently opposed the SEC's proposal. Ultimately, a compromise was struck: the Summary Compensation Table would include the number, but not the cost, of options granted, thus defeating the SEC's objective of reporting a single number for total compensation. In addition, companies would have a choice in the Option Grant to report either the Black-Scholes grant-date cost or the potential cost of options granted.

The focus on the quantity rather than the cost of options is further solidified by the SEC's 1992 disclosure rule as well as by institutions that monitor option plans⁶⁸. Therefore, boards and top executives often implicitly admit that the number of options granted imposes a cost on the company, while at the same time denying that these options have any real dollar cost to the company.

- Clinton's \$1 million deductibility cap: this in order to end the practice of allowing companies to take unlimited tax deductions for excessive executive pay. Concerns about the loss of deductibility contributed to an unprecedented rush to exercise options before the end of the 1992 calendar year, as companies urged their employees to exercise their options while the company could still deduct the gain from the exercise as a compensation expense. In anticipation of the loss of deductibility, large investment banks accelerated their 1992 bonuses so that they would be paid in 1992 rather than in 1993. In addition, several publicly traded Wall Street firms, including Merrill Lynch, Morgan Stanley, and Bear Stearns, announced that they were considering returning to a private partnership structure if Clinton's plan were implemented.

This political propaganda ended up with Section 162(m)⁶⁹, which was discriminatory, applying only to the compensation received by the top five executive officers, and applying only to publicly traded companies and not to private firms or partnerships. Ultimately, arbitrary and discriminatory tax rules such as Section 162(m) have increased the cost imposed on publicly traded corporations and have made going-private conversions more attractive.

- Accounting rules for options: the 1972 APB Opinion 25 – which defined the accounting treatment for stock options as the spread between the market and exercise price on the grant date – pre-dated Black and Scholes (1973), which offered the first formula for computing the value of a traded call option.

⁶⁸ For example, under the current listing requirements of the New York Stock Exchange and the National Association of Security Dealers (NASD), companies must obtain shareholder approval for the total number of options available to be granted, but not for the cost of options to be granted. Advisory firms (such as Institutional Shareholder Services) often base their shareholder voting recommendations on the option "overhang" (that is, the number of options granted plus options remaining to be granted as a percent of total shares outstanding), and not on the opportunity cost of the proposed plan.

⁶⁹ Proposed by the Treasury Department and eventually approved by Congress as part of the Omnibus Budget Reconciliation Act of 1993, Section 162(m) of the tax code.

Academic research in option valuation exploded over the next decade, and financial economists and accountants became increasingly intrigued with using these new methodologies to value, and account for, options issued to corporate executives and employees. In 1984, the Financial Accounting Standards Board (FASB) floated the idea that companies account for employee stock options using the so-called minimum value approach⁷⁰. By June 1986, the FASB idea had evolved into a proposal with the important change that the accounting charge would be based on the fair market value (e.g., the Black-Scholes value) and not a minimum value. All of the Big Eight accounting firms, the American Electronics Association (including more than 2,800 corporate members), the Financial Executives Institute, the Pharmaceutical Manufacturers Association, vehemently opposed the proposal and the National Venture Capital Association. Many of the criticisms focused on the complexity of the Black-Scholes formula.

In April 1992, FASB endorsed an accounting charge for options, and issued a formal proposal in 1993. In March 1994, more than 4,000 employees from 150 Silicon Valley firms rallied against the accounting change, calling on the Clinton Administration to block the proposal because it would restrict job creation and economic growth.

In 1995, FASB issued a compromise rule, FAS 123, which recommended but did not require that companies expense the fair market value of options granted (using Black-Scholes or a similar valuation methodology). However, while FASB allowed firms to continue reporting under APB Opinion 25, it imposed the additional requirement that the value of the option grant would be disclosed in a footnote to the financial statements. Predictably, only a handful of companies adopted FASB's recommended approach⁷¹.

The accounting treatment of options promulgated the mistaken belief that options could be granted without any cost to the company. This view was wrong, of course, because the opportunity or economic cost. Providing compensation through options allowed the companies to generate cash, since when options were exercised the company received the exercise price and could also deduct the difference between the market price and exercise price from its corporate taxes. The difference between the accounting and tax treatment gave option-granting companies the best of both worlds: no accounting expense on the company's books, but a large deduction for tax purposes.

- NYSE listing requirements: another contributing factor to the explosion in stock options – both to top

⁷⁰ The minimum value approach is identical to the value of a forward contract to purchase a share of stock at some date in the future at a pre-determined price (that is, an option without the option to refrain from buying when the price falls below the exercise price). For example, the minimum value of an option on a non-dividend paying stock is calculated as the current stock price minus the grant-date present value of the exercise price.

Thus, the value of a ten-year option granted with an exercise price of \$30 when the grant-date market price was \$25 would be: $V = \$25 - \$30/(1+r)^{10}$, where r is the risk-free rate.

⁷¹ It was not until the accounting scandals, in the early 2000s that a large number of firms voluntarily began to expense their option grants.

executives and lower-level employees – was a 1998 change to New York Stock Exchange (NYSE) listing requirements. Under listing rules in effect at the time, companies needed shareholder approval for equity plans covering top-level executives, but did not need approval for broad-based plans.

In January 1998, the NYSE quietly filed with the SEC a proposal clarifying definition of a “broad-based” plan as any plan in which (1) at least 20% of the company’s employees were eligible to participate, and (2) at least half of the eligible employees were neither officers nor directors. The definition was a “safe harbour” (i.e., sufficient but not necessary): plans meeting the two criteria were presumed to be broadly based (and therefore could be introduced without shareholder approval), while plans falling outside these parameters would be considered on a case-by-case basis. The SEC received no letters questioning the proposed rule during the “public comment” period, and the ruling was approved and took effect on April 8, 1998.

Many observers speculated that the new rule was designed to lure NASDAQ companies to the NYSE, and most feared it would “open the floodgates” for executive stock options, since companies could avoid a shareholder vote by rolling their management plans into new broader-based plans.

In June 1999, NYSE issued “interim” new rules. Under the revised rules, the majority of the firm’s non-exempt (e.g., non-managerial) employees (rather than 20% of all employees) must be eligible to participate, and the majority of options granted must go to non-officers (rather than the majority of the participants being non-officers). The new rule was an “exclusive test” rather than a safe harbour.

The new rules were enacted as companies faced growing political pressure to push grants to managers and employees at lower levels in the organization. Several bills that encouraged broad-based stock option plans were introduced in Congress⁷². At the same time, employees clamoured for broad-based grants, but only if the company would promise that other components of their compensation would not be lowered. As a result of these pressures, the number and cost of options granted grew substantially.

In 1992, the average S&P 500 company granted its employees options on about 1.1% of its outstanding shares. In 2001, in spite of the bull market that increased share prices (that, in turn, increased the value of each granted option), the average S&P 500 company granted options to its executives and employees on 2.6% of its shares. By 2005, annual grants as a fraction of outstanding shares fell below 1995 levels to 1.3%⁷³.

Broad-based option grants were particularly generous in “new economy” firms and in firms below the S&P 500. Hall and Murphy (2003) show that the average new-economy firm in the S&P 500, S&P

⁷² Employee Stock Option Bill of 1997 (H.R. 2788), for instance, aimed to ease the restrictions on qualified Incentive Stock Options granted to rank-and-file workers.

⁷³ Murphy Kevin J.; (12 August 2012); *“Executive Compensation: Where We Are, and How We Got There”*; University of Southern California - Marshall School of Business; USC Gould School of Law; page: 86; paper available at: <http://ssrn.com/abstract=2041679>

MidCap 400 and S&P SmallCap 600 granted options on 5.8% of its stock annually to employees below the top five between 1993 and 2001 (compared to only 2.3% annually in “old economy” firms). In 2000 alone, the average employee (below the top five) in the new-economy sector received options with a Black-Scholes value of \$32,000⁷⁴.

2.1.6 From 2001, till 2007: The Accounting Scandals, Sarbanes-Oxley Act⁷⁵ and The Option Backdating

Accounting scandals erupted across corporate America during the early 2000s, destroying the reputations of once-proud firms such as Enron, WorldCom, Qwest, Global Crossing, HealthSouth, Cendant, Rite-Aid, Lucent, Xerox, Tyco International, Adelphia, Fannie Mae, Freddie Mac, and Arthur Andersen. In the midst of these scandals, Congress quickly passed the sweeping Sarbanes-Oxley Act in July 2002, setting or expanding standards for accounting firms, auditors, and boards of directors of publicly traded companies. The Act was primarily focused on accounting irregularities and not on compensation. However, Congress could not resist the temptation to use the new law to further regulate executive pay. First, in direct response to the forgiveness of certain corporate loans given to executives at Tyco International, Section 402 of Sarbanes-Oxley prohibited all personal loans to executives and directors, regardless of whether such loans served a useful and legitimate business purpose. Second, Section 304 of Sarbanes-Oxley requires CEOs and CFOs to reimburse the company for any bonus or equity-based compensation received, and any profits realized from selling shares, in the twelve months commencing with the filing of financial statements that are subsequently restated as a result of corporate misconduct. This “clawback” provision of Sarbanes-Oxley – which was subsequently extended in the TARP legislation and Dodd-Frank Financial Reform Act was notable mostly for its ineffectiveness⁷⁶.

Finally, Section 403 of Sarbanes-Oxley required that executives disclose new grants of stock options within two business days of the grant; before the Act options were not disclosed until 10 days after the end of the month when the option was granted. As discussed in the next section, this provision had the unintended but ultimately beneficial effect of curbing option backdating for top executives more than two years before the

⁷⁴ Murphy Kevin J.; (12 August 2012); *“Executive Compensation: Where We Are, and How We Got There”*; University of Southern California - Marshall School of Business; USC Gould School of Law; page: 87; paper available at: <http://ssrn.com/abstract=2041679>

⁷⁵ Also known as the "Public Company Accounting Reform and Investor Protection Act" (in the Senate) and "Corporate and Auditing Accountability and Responsibility Act" (in the House) and more commonly called Sarbanes–Oxley, Sarbox or SOX, is a United States federal law that set new or expanded requirements for all U.S. public company boards, management and public accounting firms. There are also a number of provisions of the Act that also apply to privately held companies, for example the wilful destruction of evidence to impede a Federal investigation.

The bill, which contains eleven sections, was enacted as a reaction to a number of major corporate and accounting scandals, including Enron and WorldCom. The sections of the bill cover responsibilities of a public corporation’s board of directors, adds criminal penalties for certain misconduct, and required the Securities and Exchange Commission to create regulations to define how public corporations are to comply with the law.

⁷⁶ The first individual clawback settlement under Section 304 did not occur until more than five years later, when UnitedHealth Groups former CEO William McGuire was forced to return \$600 million in compensation. The SEC became more aggressive in 2009, launching two clawback cases (CSK Auto and Diebold, Inc.) where the targeted executives were not accused of personal wrongdoing.

existence of backdating was discovered.

In 2005, academic research by University of Iowa professor Erik Lie and subsequent investigations by the Wall Street Journal unearthed a practice that became known as option backdating. The Wall Street Journal's crusade against backdating triggered SEC investigations into more than 140 firms. By August 2009, the SEC had filed civil charges against 24 companies and 66 individuals for backdating-related offenses, and at least 15 people had been convicted of criminal conduct⁷⁷. The SEC prosecuted backdating cases with a zeal usually reserved for hardened criminals. Executives associated with backdating schemes were charged with myriad crimes, including filing false documents, securities fraud, and conspiracy to commit securities fraud.

Under this practice, companies deliberately falsified stock option agreements so that options granted on one date were reported as if granted on an earlier date when the stock price was unusually low – commonly the lowest price in the quarter or in the year. Thus, options that were reported as granted at the money (that is, with an exercise price equal to the market price on the reported grant date) were in reality granted in the money (that is, with an exercise price well below the market price on the actual grant date). This unsavoury practice violates federal disclosure rules⁷⁸, accounting and tax laws⁷⁹, and often violated the company's own stock-option policies⁸⁰.

Changes in reporting requirements in 2002 essentially put an end to option backdating for top-level executives more than two years before academics and the media uncovered the practice. Between May 1992 and August 2002, option grants for corporate insiders were typically not disclosed until 10 days after the end of the month when the option was granted, providing substantial opportunity for manipulating grant dates. In August 2002, as part of the Sarbanes-Oxley Act, the SEC required executives receiving options to disclose those grants within two business days after the grant was made.

Meanwhile, as a direct response to Enron scandal, Section 409(A) was added to the Internal Revenue Code as part of the American Jobs Creation Act of 2004. In essence, the objectives of Section 409(A) were to limit the flexibility in the timing of elections to defer compensation in nonqualified deferred compensation programs,

⁷⁷ Data source: Maremont Mark; (18 August 2009); *"Backdating Likely More Widespread"*; Wall Street Journal.

⁷⁸ Under SEC rules in effect since 1993, companies granting options with an exercise price different from the fair market price on the grant date are required to disclose this information to shareholders. Thus, companies backdating options should have informed shareholders that the options were actually issued with an exercise price less than the fair market value on the actual grant date.

⁷⁹ Under FASB rules in effect before 2006, companies would typically face an accounting charge for stock options only if the exercise price was set lower than the grant-date market price. Thus, companies that backdated options reported no accounting expense when the actual accounting expense should have been the spread between the market and exercise price (amortized over the vesting period of the option).

Compensation for proxy-named executives in excess of \$1 million is deductible only if the compensation is performance based under the definition of IRS Section 162(m). In order to be considered performance based, the options must meet several criteria including having an exercise price that is at least as high as the grant-date market price. Thus, assuming that the affected executives are subject to the \$1 million threshold, companies that backdated options are taking deductions for compensation that is not deductible.

⁸⁰ To be considered performance based, the options must meet several criteria including having an exercise price that is at least as high as the grant-date market price.116 Thus, assuming that the affected executives are subject to the \$1 million threshold, companies that backdated options are taking deductions for compensation that is not deductible.

to restrict withdrawals from the deferred accounts to pre-determined dates (and to prohibit the acceleration of withdrawals), and to prevent executives from receiving severance-related deferred compensation until six months after severance. Section 409(A) imposes taxes on individuals with deferred compensation as soon as the amounts payable under the plan are no longer subject to a substantial risk of forfeiture. Individuals failing to pay taxes in the year the amounts are deemed to no longer be subject to the substantial forfeiture risk owe a 20% excise tax and interest penalties on the amount payable (even if the individual has not received or may never receive any of the income). One of the notable features of Section 409(A) is that it significantly broadens the definition of deferred compensation⁸¹.

The first decade of the new century brought several important changes in the level and composition of CEO pay: median grant-date total CEO pay in the S&P 500 declined from \$9.3 million in the peak year of 2001 to \$9.0 million in 2011, representing the first prolonged stagnation in CEO pay since the early 1970s.

The decrease in pay primarily reflects both a substantial decline in the grant-date value of stock options, and a shift in the industry composition of the S&P 500. In 2001, the value of stock options at the award date accounted for 53 percent of the pay for the typical S&P 500 CEO. By 2011, options accounted for only 21 percent of total pay. Moreover, the decline in stock option grants in the early 2000s has been associated with an increase in stock grants, which accounted for 36% of average pay by 2011 (up from only 8% in 2001). The stock grants include a mixture of traditional restricted stock (vesting only with the passage of time) and performance shares (where vesting is based on performance criteria)⁸².

The percentage of companies granting options to their CEOs in each year increased from about 63% in 1992 to 87% by 2001, falling to 68% in 2011. Over the same time period, the percentage of companies making restricted stock or performance-share grants more than tripled from 25 percent to 82 percent. The trend suggests a substitution of stock grants for stock options, although more than half of the S&P 500 CEOs have received both options and restricted stock annually since 2006⁸³.

One obvious explanation for the drop in stock options and the rise in restricted stock since the early 2000s is the stock market crash associated with the burst of the Internet Bubble in 2000 and exacerbated by the terrorist attacks on the World Trade Centre in 2001. In particular, the sharp market-wide decline in stock prices in the

⁸¹ For example, annual bonuses or reimbursement of expenses paid more than two and a half months after the close of the fiscal year are considered deferred compensation subject to Section 409(A). Similarly, supplemental executive retirement plans (SERPs), phantom stock awards, stock appreciation rights, split-dollar life insurance arrangements, and individual employment agreements allowing deferral of compensation or severance awards are also (under some circumstances) considered deferred compensation subject to Section 409(A).

⁸² Murphy Kevin J.; (12 August 2012); *"Executive Compensation: Where We Are, and How We Got There"*; University of Southern California - Marshall School of Business; USC Gould School of Law; page: 97; paper available at: <http://ssrn.com/abstract=2041679>

⁸³ Murphy Kevin J.; (12 August 2012); *"Executive Compensation: Where We Are, and How We Got There"*; University of Southern California - Marshall School of Business; USC Gould School of Law; page: 98; paper available at: <http://ssrn.com/abstract=2041679>

early 2000s left many outstanding options underwater and lowered executive expectations for the future increases in their company's stock prices. Indeed, in many cases, including Microsoft and Cablevision, current outstanding (but out-of-the-money) options were cancelled and replaced with restricted stock, often at terms very favourable to executives.

The scandals that erupted across corporate America during the early 2000s focused attention on the quality of accounting disclosures, which in turn renewed pressures for companies to report the expense associated with stock options on their accounting statements. Before 2002, only a handful of companies had elected to expense options under FAS123; the remainder elected to account for options under the old rules (where there was typically no expense). In the summer of 2002, several dozen firms announced their intention to expense options voluntarily; more than 150 firms had elected to expense options by early 2003 (2004, Aboody, Barth and Kasznik). Moreover, shareholder groups (most often representing union pension funds) began demanding shareholder votes on whether options should be expensed; more than 150 shareholder proposals on option expensing were submitted during the 2003 and 2004 proxy season (2009, Ferri and Sandino). By late 2004, about 750 companies had voluntarily adopted or announced their intention to expense options. In December 2004, FASB announced FAS123R which revised FAS123 by requiring all U.S. firms to recognize an accounting expense when granting stock options, effective for fiscal years beginning after June 15, 2005. In addition to requiring an accounting expense for all options granted after June 15, 2005, FAS123R required firms to record an expense for options granted before this date that were not yet vested (or exercisable) as of this date. To avoid taking an accounting charge for these outstanding options, many firms accelerated vesting of existing options so that all options were exercisable by June 15, 2005 (2009, Choudhary, et al.).

Under the accounting rules in place since 1972 (and continuing under FAS123R), companies granting traditional restricted stock (vesting only with the passage of time) recognize an accounting expense equal to the grant-date value of the shares amortized over the vesting period. Under FAS123R, the expense for stock options is similar to that of shares of stock: companies must recognize an accounting expense equal to the grant-date value of the options amortized over the period when the option is not exercisable. Option expensing significantly levelled the playing field between stock and options from an accounting perspective. The new accounting rules also facilitated another change long-desired by shareholder advocates: a switch from traditional time-lapse restricted stock to "performance shares" that vest only upon achievement of accounting- or market-based performance goals.

2.1.7 From 2008, till Nowadays: TARP, EESA, ARRA, Dodd-Frank Act and Final Rules

On September 15, 2008, Lehman Brothers, a financial services firm filed for Chapter 11 bankruptcy

protection⁸⁴. Other institutions were close to collapse, so on September 19, 2008 Treasury Secretary Paulson asked Congress to approve the Administration's plan to use taxpayers' money to purchase "hundreds of billions" in illiquid assets from U.S. financial institutions. Congress rejected the bailout bill on September 30, but reconsidered three days later after a record one-day point loss in the Dow Jones Industrial Average and strong bipartisan Senate support. The Emergency Economic Stabilization Act (EESA) was passed by Congress on October 3rd, and signed into law by President Bush on the same day.

The Emergency Economic Stabilization Act of 2008 (Division A of Pub. L. 110-343, 122 Stat. 3765, enacted October 3, 2008), commonly referred to as a bailout of the U.S. financial system, is a law enacted in response to the subprime mortgage crisis authorizing the United States Secretary of the Treasury to spend up to \$700 billion to purchase distressed assets, especially mortgage-backed securities, and supply cash directly to banks. The funds for purchase of distressed assets were mostly redirected to inject capital into banks and other financial institutions while the Treasury continued to examine the usefulness of targeted asset purchases. Both foreign and domestic banks are included in the program. The Act gives the Treasury Secretary the authority to buy up to \$700 billion of troubled assets, in order to improve liquidity in the market, stabilize economy and restore investors' confidence. It required financial institutions, to sell their assets to TARP in order to issue equity warrants (a type of security that entitles its holder to purchase shares in the company issuing the security for a specific price), or equity or senior debt securities (for non-publicly listed companies) to the Treasury⁸⁵. This measure is designed to protect the government by giving the Treasury the possibility of profiting through its new ownership stakes in these institutions. Ideally, if the financial institutions benefit from government assistance and recover their former strength, the government will also be able to profit from their recovery. When Treasury invited (or, in some cases, coerced) the first eight banks to participate in TARP⁸⁶, a critical hurdle involved getting the CEOs and other top executives to waive their rights under their existing compensation plans.

While applying only to TARP recipients the October 2008 EESA covered the top-five executives (and not just the CEO and CFO), and covered a much broader set of material inaccuracies in performance metrics when compared to Sarbanes-Oxley Act. In addition, EESA lowered the IRS cap on deductibility for the top-five executives from \$1 million to \$500,000, and applied this limit to all forms of compensation (and not just non-

⁸⁴ The filing remains the largest bankruptcy filing in U.S. history, with Lehman holding over \$600 billion in assets.

⁸⁵ In the case of warrants, the Treasury will only receive warrants for non-voting shares, or will agree not to vote the stock.

⁸⁶ The Troubled Asset Relief Program (TARP) is a program of the United States government to purchase toxic assets and equity from financial institutions to strengthen its financial sector that was signed into law by U.S. President George W. Bush on October 3, 2008. It was a component of the government's measures in 2008 to address the subprime mortgage crisis.

The TARP program originally authorized expenditures of \$700 billion. The Dodd-Frank Wall Street Reform and Consumer Protection Act, signed into law in 2010, reduced the amount authorized to \$475 billion. By October 11, 2012, the Congressional Budget Office (CBO) stated that total disbursements would be \$431 billion, and estimated the total cost, including grants for mortgage programs that have not yet been made, would be \$24 billion.

On December 19, 2014, the U.S. Treasury sold its remaining holdings of Ally Financial, essentially ending the program. TARP revenue has totalled \$441.7 billion on \$426.4 billion invested.

performance-based pay). EESA also prohibited new golden parachutes agreements for the Top 5 executives, and capped payments under existing plans to 300% of the executives' average taxable compensation over the prior five years.

In January 2009, reports began surfacing that Merrill Lynch distributed \$3.6 billion in bonuses to its 36,000 employees just before the completion of the merger with Bank of America: the top 14 bonus recipients received a combined \$250 million, while the top 149 received \$858 million (2009, Cuomo). The CEOs of Bank of America and the former Merrill Lynch (neither of whom received a bonus for 2008) were quickly hauled before Congressional panels outraged by the payments, and the Attorney General of New York launched an investigation to determine if shareholders voting on the merger were misled about both the bonuses and Merrill's true financial condition. The SEC joined in with its own civil complaint, which sued the Bank of America but not its individual executives, and the bank agreed to settle for \$33 million. However, a few weeks later a federal judge threw out the proposed settlement, insisting that individual executives be charged and claiming that the settlement did not comport with the most elementary notions of justice and morality. In February 2010, the judge relented and reluctantly approved the settlement after it had been increased to \$150 million⁸⁷.

By the time the Merrill Lynch bonuses were revealed, the country had a new President, a new Congress, and new political resolve to punish the executives in the companies perceived to be responsible for the global meltdown. On February 4, 2009, President Obama's administration responded with its own proposal for executive-pay restrictions that distinguished between failing firms requiring exceptional assistance and relatively healthy firms participating in TARP's Capital Purchase Program. Most importantly, the Obama Proposal for exceptional assistance firms (which specifically identified AIG, Bank of America, and Citigroup) capped annual compensation for senior executives to \$500,000, except for restricted stock awards (which were not limited, but could not be sold until the government was repaid in full, with interest). In addition, for exceptional-assistance firms the number of executives subject to clawback provisions would be increased from 5 under EESA to 20, and the number of executives with prohibited golden parachutes would be increased from 5 to 10⁸⁸.

In mid-February 2009, separate bills proposing amendments to EESA had been passed by both the House and Senate, and it was up to a small conference committee to propose a compromise set of amendments that could be passed in both chambers. On February 13th – as a last-minute addition to the amendments – the conference chairman (Senator Chris Dodd) inserted a new section imposing restrictions on executive compensation that

⁸⁷ Scannell, Rappaport and Bravin, Kara, Liz and Jess; (2009); "*Judge Tosses Out Bonus Deal – SEC Pact with BofA Over Merrill Is Slammed; New York Weighs Charges Against Lewis*"; Wall Street Journal.

⁸⁸ Murphy Kevin J.; (12 August 2012); "Executive Compensation: Where We Are, and How We Got There"; University of Southern California - Marshall School of Business; USC Gould School of Law; page: 105; paper available at: <http://ssrn.com/abstract=2041679>

were opposed by the Obama administration and severe relative to both the limitations in the October 2008 version and the February 2009 Obama Proposal. Nonetheless, the compromise was quickly passed in both chambers with little debate and signed into law as the American Recovery and Reinvestment Act of 2009 by President Obama on February 17, 2009 (ARRA).

Table 2.1 compares the pay restrictions under the original 2008 EESA bill, the 2009 Obama Proposal, and the

Table 2.1; Comparison of Pay restrictions in EESA (2008), Obama Proposal (2009), and ARRA (2009).

Legislation/Proposal	Restrictions on Executive Compensation
<i>A. Limits on Pay Levels and Deductibility</i>	
Pre-EESA (IRS §162(m) (1994))	Limits deductibility of top-5 executive pay to \$1,000,000, with exceptions for performance-based pay.
EESA (2008) All TARP Recipients	Limits deductibility of top-5 executive pay to \$500,000, with no exceptions for performance-based pay.
Obama (2009) Exceptional Assistance Firms	In addition to deductibility limits, cash pay is capped at \$500,000; additional amounts can be paid in restricted shares vesting after government paid back.
Obama (2009) Other TARP recipient	Same as exceptional assistance firms, but pay caps can be waived if firm offers full disclosure of pay policies and a non-binding Say-on-Pay vote.
ARRA (2009) All TARP Recipients	In addition to deductibility limits, disallows all incentive payments, except for restricted stock capped at no more than one-half base salary. No caps on salary.
<i>B. Golden Parachutes</i>	
Pre-EESA (IRS §280G (1986))	Tax penalties for change-in-control-related payments exceeding 3 times base pay.
EESA (2008) Auction Program	No new severance agreements for Top 5.
EESA (2008) Capital Purchase Program	No new severance agreements for Top 5, and no payments for top 5 executives under existing plans exceeding 3 times base pay.
Obama (2009) Exceptional Assistance Firms	No payments for Top 10; next 25 limited to 1 times base pay.
Obama (2009) Other TARP Recipients	No payments for top 5 executives under existing plans exceeding 1 times base pay.
ARRA (2009) All TARP Recipients	No payments for Top 10 Disallows all payments (not just excess payments).

C. Clawbacks

Pre-EESA (Sarbanes-Oxley (2002))	Covers CEO and CFO of publicly traded firms following restatements.
EESA (2008) Auction Program	No new provisions.
EESA (2008) Capital Purchase Program	Top 5 executives, applies to public and private firms, not exclusively triggered by restatement, no limits on recovery period, covers broad material inaccuracies (not just accounting restatements).
Obama (2009) All TARP Recipients	Same as above, but covers 20 executives.
ARRA (2009) All TARP Recipients	Covers 25 executives for all TARP participants, retroactively.

Data source: Murphy Kevin J.; (12 August 2012); "*Executive Compensation: Where We Are, and How We Got There*"; University of Southern California - Marshall School of Business; USC Gould School of Law; page: 107; paper available at: <http://ssrn.com/abstract=2041679>

2009 ARRA (which amended Section 111 of the 2008 EESA).

While the clawback provisions under the original EESA covered only the top five executives (up from only two in SOX), the Dodd Amendments extended these provisions to 25 executives and applied them retroactively. In addition, while the original ESSA disallowed severance payments in excess of 300% of base pay for the top five executives, the Dodd Amendments covered the top 10 executives and disallowed all payments (not just those exceeding 300% of base). Most importantly, the Dodd Amendments allowed only two types of compensation: base salaries (which were not restricted in magnitude), and restricted stock (limited to grant-date values no more than half of base salaries). The forms of compensation explicitly prohibited under the Dodd amendments for TARP recipients include performance-based bonuses, retention bonuses, signing bonuses, severance pay, and all forms of stock options.

Finally, the Dodd amendments imposed mandatory Say-On-Pay resolutions for all TARP recipients. In early 2009 – not long after the Dow Jones Industrial Average hit its crisis minimum at about 6500 – shareholders had an opportunity to provide a non-binding vote of approval on the 2008 compensation received by the top executives at the TARP recipients (i.e., compensation for the year when these firms allegedly dragged the economy into a financial crisis). As an interesting historical footnote, none of the TARP recipients received a majority vote against its executive compensation levels and policies.

In June 2009, Treasury issued its rulings, along with the simultaneous creation of the Office of the Special Master of Executive Compensation. The Special Master (colloquially known as the Pay Czar) had wide-ranging authority over all TARP recipients, but was particularly responsible for all compensation paid to the

top 25 executives in the seven firms deemed to have required special assistance from the US government: Bank of America, Citigroup, AIG, General Motors, Chrysler, and the financing arms of GM and Chrysler. In July 2010, President Obama signed into law the Dodd-Frank Wall Street Reform and Consumer Protection Act or Dodd-Frank Act, which was the culmination of the President and Congress's controversial and wide-ranging efforts to regulate the financial services industry. In spite of its enormous length⁸⁹ the Act leaves most of the details to be promulgated by a variety of government entities.

Passed as a response to the Great Recession, it brought the most significant changes to financial regulation in the United States since the regulatory reform that followed the Great Depression. It made changes in the American financial regulatory environment that affect all federal financial regulatory agencies and almost every part of the nation's financial services industry. As the extensive title of the Act declaims, its intents are to promote the financial stability of the United States by improving accountability and transparency in the financial system, to end "too big to fail", to protect the American taxpayer by ending bailouts and to protect consumers from abusive financial services practices.

While the pay restrictions in the TARP legislation apply only to banks receiving government assistance, the Dodd-Frank Act goes much further by regulating pay for all financial institutions (public or private, TARP recipients and non-recipients) including broker-dealers, commercial banks, investment banks, credit unions, savings associations, domestic branches of foreign banks, and investment advisors.

Specifically, Part (a) of Section 956 of the Dodd-Frank Act requires all financial institutions to identify and disclose (to their relevant regulator) any incentive-based compensation arrangements that could lead to material financial loss to the covered financial institution, or that provides an executive officer, employee, director, or principal shareholder of the covered financial institution with excessive compensation, fees, or benefits.

In addition, Part (b) of Section 956 of the Dodd-Frank Act prohibits financial institutions from adopting any incentive plan that regulators determine encourages inappropriate risks by covered financial institutions, by (1) providing an executive officer, employee, director, or principal shareholder of the covered financial institution with excessive compensation, fees, or benefits; or (2) that could lead to material financial loss to the covered financial institution.

The responsibility for implementing Section 956 of the Dodd-Frank Act fell jointly to seven agencies: the Securities and Exchange Commission (SEC), the Federal Reserve System, the Office of the Comptroller of the Currency, the Office of Thrift Supervision, the Federal Deposit Insurance Corporation, the National Credit Union Administration, and the Federal Housing Finance Agency. In March 2011, the seven agencies issued a joint proposal for public comment.

While the proposal stops short of explicitly limiting the level of executive compensation, it prohibits

⁸⁹ The bill itself spans 848 pages!

compensation that is unreasonable or disproportionate to the amount, nature, quality, and scope of services performed. In addition, the proposal calls for firms to identify individuals who have the ability to expose the firm to substantial risk, and demands that (for the larger institutions) such individuals have at least 50% of their bonuses deferred for at least three years; deferred amounts would be subject to forfeiture if subsequent performance deteriorates. Final rules were expected in late 2012.

The Dodd–Frank Act has several provisions that call upon the Securities and Exchange Commission (SEC) to implement several new rules and regulations that affect corporate governance issues surrounding public corporations in the United States. Many of the provisions put in place by Dodd–Frank require the SEC to implement new regulations, but intentionally do not give specifics as to when regulations should be adopted or exactly what the regulations should be. This allowed the SEC to implement new regulations over several years and make adjustments as it analyses the environment. Public companies worked to adopt new policies in order to adapt to the changing regulatory environment they face every year⁹⁰.

Table 2.2 analyses the different sections regarding corporate governance issues and U.S. public corporations.

Table 2.2, analyses the different sections regarding corporate governance issues and U.S. public corporations.

Sect.	Title	Provisions	In Effect
951	<i>Say-on-Pay</i>	SEC regulations require that at least once every three years shareholders have a non-binding say-on-pay vote on executive compensation ⁹¹ . In addition, companies are required to disclose any golden parachute compensation that may be paid out to executives in the case of a merger, acquisition, or sale of major assets.	April 2011
952	<i>Compensation Committee Independence</i>	National stock exchanges are prohibited from listing public companies that do not have an independent compensation committee. To insure that compensation committees remain independent, the SEC is required to identify any areas that may create a potential conflict of interest and work to define exactly what requirements must be met for the committee to be considered independent.	June/July 2011
953	<i>Additional Disclosure</i>	It required that compensation paid to executives be directly linked to financial performance including consideration of any changes in the value of the company's stock price or value of dividends paid out. The compensation of executives and the financial performance justifying it are both required to be disclosed. In addition, regulations require that CEO compensation be disclosed alongside the median employee compensation ⁹² along with ratios comparing levels of compensation between the two.	August 2015

⁹⁰ Cogut, Casey; (June 2011); "*Corporate Governance and Reform – The Impact of the Dodd–Frank Act*"; Who's Who Legal. Who's Who Legal.

⁹¹ While shareholders are required to have a say-on-pay vote at least every three years, they can also elect to vote annually.

⁹² Excluding CEO compensation.

954	<i>Clawbacks</i>	Clawback of compensation policies work to ensure that executives do not profit from inaccurate financial reporting. These policies require executives to return inappropriately awarded compensation, as set forth in section 953 regarding pay for performance, in the case of an accounting restatement due to noncompliance with reporting requirements. If an accounting restatement is made then the company must recover any compensation paid to current or former executives associated the three years prior to the restatement.	July 2015
955	<i>Additional Disclosure</i>	It required public companies to disclose in proxy statements whether or not employees and directors of the company are permitted to hold a short position on any equity shares of the company ⁹³ . Companies must disclose its policies regarding hedging by employees to protect against reductions in company stock prices.	February 2015
956	<i>Adoption of Incentive Plan</i>	It prohibits financial institutions from adopting any incentive plan that regulators determine encourages inappropriate risks by covered financial institutions, by (1) providing an executive officer, employee, director, or principal shareholder of the covered financial institution with excessive compensation, fees, or benefits; or (2) that could lead to material financial loss to the covered financial institution.	March 2011
957	<i>Brokers' Vote Limitations</i>	It requires national exchanges to prohibit brokers from voting on executive compensation. In addition, the provisions in this section prevent brokers from voting on any major corporate governance issue as determined by the SEC including the election of board members. This gives shareholders more influence on important issues since brokers tend to vote shares in favour of executives. Brokers may only vote shares if they are directly instructed to do so by shareholders associated with the shares.	September 2010
971	<i>Proxy Access</i>	Provisions in the section allow shareholders to use proxy materials to contact and form groups with other shareholders in order to nominate new potential directors ⁹⁴ . Any shareholder group that has held at least three percent of voting shares for a period of at least three years is entitled to make director nominations. However, shareholder groups may not nominate more than twenty-five percent of a company's board and may always nominate at least one member even if that one nomination would represent over twenty-five percent of the board. If multiple shareholder groups make nominations then the nominations from groups with the most voting power will be considered first with additional nominations being considered up to the twenty five percent cap.	---

⁹³ This applies to both employees and directors who are compensated with company stock as well as those who are simply owners of company stock.

⁹⁴ In the past, activist investors had to pay to have materials prepared and mailed to other investors in order to solicit their help on issues.

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*Additional
Disclosure*

The Dodd-Frank Act authorized the SEC to issue rules allowing certain shareholders to nominate their own director candidates in the company's annual proxy statements. It required public companies to disclose in proxy statements reasons for why the current CEO and chairman of the board hold their positions. The same rule applies to new appointments for CEO or chairman of the board. Public companies must find reasons supporting their decisions to retain an existing chairman of the board or CEO or reasons for selecting new ones to keep shareholders informed.

2.1.8 Conclusion over Historical Perspective

Executive compensation has evolved over time in response to changes in both economic and political environments. Government intervention has been both a response to and a major driver of time trends in executive compensation over the past century, and any explanation for pay that ignores political factors is critically incomplete. The literature has largely ignored the importance of political factors. However, the initial popularity of stock options was a direct result of government policies in the 1950s (Paragraph 2.1.3), as was the explosion (and subsequent implosion) of options in the 1990s and 2000s (Paragraph 2.1.6). Similarly, the contrasting evolution of stock options for U.S. CEOs and their foreign counterparts is largely explained by political rather than economic factors (Paragraphs 2.1.7 and 2.1.8).

In introducing plans that tie pay more strongly to performance as demanded by shareholders, directors routinely agree to pay more than necessary to compensate for the increased risk. Self-interested CEOs seek employment protection through overly generous severance provisions; directors acquiesce believing that the probability of failure is low (and because it is not their money anyway). When compensation failures occur (such as those overly generous severance payments), Congress gets outraged, triggering disproportionate reforms with little regard for shareholders or value creation. In turn, companies and their executives respond by circumventing or adapting to the reforms, usually in ways that increase pay levels and produce other unintended (and typically unproductive) consequences⁹⁵.

Measuring average pay of CEOs from 1980 to 2004, Vanguard mutual fund founder John Bogle found it grew almost three times as fast as the corporations the CEOs ran - 8.5 percent/year compared to 2.9 percent/year.

So other explanations, further than government interventions, should be taken into account.

Indeed, what makes CEO pay both interesting and complicated is the fact that the efficient contracting, managerial power, and political paradigms co-exist, interact, and are plausible at the same time.

⁹⁵Murphy Kevin J.; (12 August 2012); *"Executive Compensation: Where We Are, and How We Got There"*; University of Southern California - Marshall School of Business; USC Gould School of Law; page: 156; paper available at: <http://ssrn.com/abstract=2041679>

As illustrated in the introduction, the rapid rise in CEO pay over the past 30 years has sparked a lively debate about the determinants of executive compensation. At one end of the spectrum, CEO pay is viewed as the efficient outcome of a labour market in which firms optimally compete for managerial talent. At the other end of the spectrum, the high levels of CEO pay are seen as the result of executives' ability to set their own pay and extract rents from the firms they manage. Many other explanations for the rise in CEO pay have emerged in recent years, and the debate is too extensive to be all mentioned in this work. We divide the theories into those that view rising compensation as the efficient outcome of a market mechanism, and those that view it as a rent extraction problem. We briefly summarize the main theoretical arguments for these two views and then discuss the empirical evidence.

2.2 “Optimal Contracting” view: Executive Pay at an Arm’s Length Transactions

An arm’s length transaction is one in which the buyer/tenant and seller/owner act independently and have no relationship (by blood, marriage or unrelated business dealings) to each other, ensuring that all parties in the deal are acting in their own self-interest, are not subject to any pressure or duress from the other parties, and are dealing from equal bargaining positions.

Since both shareholders and executives are equally informed and acting in their own interest, according to the optimal contracting view, incentive contracts, while aligning executives' and shareholders' objectives, encourage managers to maximize profits, and so shareholders return (MSV Theory). The bargain between (and the successive monitoring activity, operated by one of) the two parts happens at an arm’s length, thus eliminating unwise compensation practices.

Recent increased transparency for CEO pay (required by the SEC), increased shareholder activism, and the increased prevalence of majority voting indirect or elections should further reduce any remaining unwise compensation practices.

According to Kaplan (2008), and others, while corporate governance and CEO pay are not perfect, a great deal of evidence suggests that CEO pay is largely determined by market forces. CEOs have been affected by the same forces that have increased income inequality, and so they have not performed better than several similar groups⁹⁶. Many reasons have been adduced in order to explain the rise in executive pay.

According to supporters of this approach, rising in CEO pay, therefore, appears to be part of (not the cause of)

⁹⁶ Kaplan and Rauh (2008) found that while CEO pay has increased substantially since the early 1990s, the pay of other talented and fortunate groups has increased by at least as much. For example, hedge fund, private equity, and venture capital investors have seen fees increase by a factor of five to 10 times from 1994 to 2005. These increases have translated into very high pay for those groups. By one estimate, the top 20 hedge fund managers earned more in 2005 than all 500 CEOs in the S&P 500. The number of professional baseball, basketball, and football players earning more than \$5 million a year increased by a factor of almost 10 from 1994 to 2004. Even top lawyers saw their pay increase by more than two and a half times since 1994. In line with these other groups, the pay of S&P 500 CEOs has increased by roughly three to four times over the same period.

Data source: Kaplan Steven N.; (May 2008); “*Are U.S. CEOs Overpaid?*”; Academy of Management; page: 1.

the general increase in economic inequality that we have seen in the last several decades. Market forces (and arm's-length bargaining) have driven the large increase in pay of this as well as the other groups. It is difficult to understand how the CEO pay increase could have been driven largely by nonmarket forces (and cozy board arrangements) when the pay of the other groups has increased by at least as much.

Main points of the supporters of this view are that CEOs are strongly paid for performance and boards do monitor CEOs; CEO tenures are lower than they have been since tenures began to be measured in the 1970s; CEO turn-over is more closely tied to stock performance than it has been since turn over began to be studied in the 1970s. All of these factors suggest that the CEO job has become increasingly difficult and less pleasant.

2.2.1 Arguments in Favour of "Optimal Contracting" View

In its famous article (May 2008) "*Are U.S. CEOs Overpaid?*", Kaplan points out four main reasons, which may justify the rise of U.S.' executives' pay:

1. U.S. economy has performed well: Over the last 15 or 20 years, the period in which corporate governance and CEO pay have been criticized, the U.S. economy has done extremely well—both on an absolute basis and relative to other developed countries. Productivity growth in the United States has been unexpectedly good, and despite the tech bust, the stock market has performed well. So, as one considers CEO and top executive pay, the starting point is one in which U.S. companies and their executives appear to have been successful on average in delivering productivity growth and shareholder returns.
2. CEOs are not alone in the compensation explosion: while there have clearly been abuses and unethical CEOs, the evidence suggests that pay for the typical CEO is largely driven by market forces. What are those market forces? Kaplan best guess is that changes in technology along with a large increase in the scale of enterprises and finance have allowed the most fortunate and talented to increase their productivity relative to others. Kaplan and Rauh (2008) found that while CEO pay has increased substantially since the early 1990s, the pay of other talented and fortunate groups has increased by at least as much. The increase in pay at the top appears to be systemic. In other words, while CEOs earn a great deal, they are not unique. Other groups with similar backgrounds and talents have done at least as well over the last 10 or 15 years. The increase in pay at the top appears to be systemic. Rising CEO pay, therefore, appears to be part of (not the cause of) the general increase in economic inequality that we have seen in the last several decades.
3. Higher compensation is tied to higher returns: critics contend that CEOs are not paid for performance. critics confuse theoretical pay - what the boards give to the CEOs as estimated pay – and actual pay. The key question is whether CEOs who perform better earn more in actual pay. And the answer is yes.

There are two ways to measure CEO and top executive pay: the first measure is the estimated or ex ante value of CEO pay. This includes the CEO's salary, bonus, the value of restricted stock issued, and the estimated value of the options issued that year (usually calculated with Black-Scholes). This is a good estimate of what the board expects to give the CEO that year. It is not a measure of what the CEO actually gets to take home. The CEO takes his or her salary and bonus, but does not get to cash in the options. The second measure is realized or actual CEO pay. This includes the CEO's salary, bonus, the value of restricted stock, and the value of the options the CEO exercised that year.

Kaplan and Rauh (2008) looked at actual CEO pay in a given year. Firms with CEOs in the top quintile (top 20%) of actual pay generate stock returns 60% greater than those of other firms in their industries over the previous three years. Firms with CEOs in the bottom quintile of actual pay underperform their industries by almost 20% over the previous three years. The results are qualitatively similar if we look at performance over the previous five years or the previous year. There can be absolutely no doubt that the typical CEO in the United States is paid for performance⁹⁷.

4. Independency (or dependency) of boards of directors: Bernadette Minton and Kaplan studied CEO turnover in Fortune 500 firms from 1992 to 2005 (Kaplan & Minton, 2008). They found turnover levels since 1998 that were substantially higher than those found in previous work that studied previous periods. In any given year, one of six Fortune 500 CEOs loses his or her job. This compares to one of 10 in the 1970s.

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

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

Some additional reasons have been pointed out by others academics and non:

5. Larger firm size and scale effects increase the returns on hiring a more productive CEO: one set of theories in this vein attributes the rise in CEO pay to increasing firm sizes and scale effects. If higher CEO talent is more valuable in larger firms, then larger firms should offer higher levels of pay and be matched with more competent CEOs by an efficient labour market (1981-82, Rosen). Small increments

⁹⁷ Data source: Kaplan Steven N.; (May 2008); "*Are U.S. CEOs Overpaid?*"; Academy of Management; page: 2.

in CEO talent can imply large increments in firm value and compensation due to the scale of operations under the CEO's control (2000, Himmelberg & Hubbard).

Gabaix and Landier (2008), developed this idea further, showing, in a simple competitive model that as firms get bigger, CEOs will get paid more: a talented CEO creates more value as a firm becomes larger. In a competitive market, CEO pay will be bid up as firms become larger. They then showed empirically that the market values of large U.S. firms have increased by a factor of four to seven times since 1980.

Under the assumption that managerial talent has a multiplicative effect on firm output, using specific assumptions about the distribution of CEO talent, Gabaix & Landier found out that that CEO pay should move one-for-one with changes in the size of the typical firm. Thus, they argue that the six-fold increase in average CEO pay between 1980 and 2003 can be fully explained by the six-fold increase in average market capitalization over that period⁹⁸.

6. Changes in firms' characteristics, technologies, and product markets: over the last 30 years have increased the effect of CEO effort and talent on firm value, and therefore also the optimal levels of incentives and pay. For example, an increase in firm size raises the optimal level of CEO effort, and thus incentives, if the marginal product of CEO effort increases with the size of the firm (2000, Himmelberg & Hubbard; 2004, Baker & Hall). Alternatively, the productivity of managerial effort and talent may have increased because of more intense competition due to deregulation or entry by foreign firms (1995, Hubbard & Palia), because of improvements in the communications technologies used by managers (2006, Garicano & Rossi-Hansberg), or because of higher volatility in the business environment (2005, Dow & Raposo; 2001, Campbell et al.). Finally, moral hazard problems may be more severe in larger firms, resulting in stronger incentives for CEOs as firms grow (2009, Gayle & Miller). Independently of their cause, higher-powered incentives have to be accompanied by higher levels of expected pay to compensate managers for the greater risk in their compensation.
7. Stricter corporate governance and improved monitoring by boards and large shareholders: Hermalin (2005) shows that, if CEO job stability is negatively affected by an increase in monitoring intensity, firms optimally respond by increasing the level of CEO pay. According to this theory, the observed rise in pay should be accompanied by more CEO turnover, a stronger link between CEO turnover and firm performance, and more external CEO hires. However, an economy-wide strengthening of governance may not lead to higher pay in equilibrium if the change also causes CEOs' outside opportunities to become less appealing (2010, Edmans & Gabaix)⁹⁹.

⁹⁸ As predicted by their model, CEO pay has increased by a similar factor over this period.

⁹⁹ Frydman and Jenter, Carola and Dirk; (29 September 2010); "*CEO Compensation*"; Annual Review of Financial Economics; page: 21; paper available at:

2.2.2 Evidences in Favour of "Optimal Contracting" View

Market-based and optimal contracting explanations for the rise in CEO pay have received considerable empirical support. For example, the stock market tends to react positively to announcements of compensation plans that introduce long-term incentive pay or link pay to stock prices (1983, Larcker; 2001, Morgan & Poulsen).

Consistent with a competitive labour market, CEOs of higher ability (identified through better performance) tend to receive higher compensation (2009, Graham et al.). Moreover, changes in product markets appear to have increased the demand for managerial talent and raised CEO pay. Hubbard & Palia (1995) and Cuñat & Guadalupe (2009a) document higher pay levels and pay-performance sensitivities following industry deregulations, and Cuñat & Guadalupe (2009b) show that pay levels and incentives increase when firms face more import penetration. While these exogenous changes in the contracting environment have the predicted effects on managerial pay, the estimated magnitudes are modest, leaving a large fraction of the sharp rise in CEO pay unexplained¹⁰⁰.

Hermalin (2005) argues that rising CEO pay is the result of stricter monitoring of CEOs by boards and large shareholders. This view is broadly consistent with the empirical evidence. The fraction of outside directors on boards and the level of institutional stock ownership have increased since the 1970s (2001, Huson et al.), while CEO turnovers have become more frequent (2008, Kaplan & Minton) and closely linked to firm performance (2010, Jenter & Lewellen). While these trends are suggestive, there is no direct evidence that changes in governance caused the surge in CEO pay, or that added pressure on CEOs can account for the magnitude of the pay increase. Finally, theories based on the interaction of firm scale with the demand for CEO talent find their strongest empirical support in the correlated increases in firm value and CEO pay since the 1970s.

Gabaix & Landier (2008) calibrate their competitive model of CEO talent assignment and find that the growth in the size of the typical firm (measured by the market value of the median S&P 500 firm) can explain the entire growth in CEO compensation from 1980 to the present.

2.2.3 Counterarguments in Contrast of "Optimal Contracting" View

Many authors disagree with Kaplan arguments. Most notably John C. Bogle¹⁰¹ argues that:

1. U.S. economy has performed well: of course that's true, but corporate profits have, over time, grown at about the rate our economy has grown—no more, no less. So it's hard to see that the CEOs of these

<http://www.annualreviews.org/doi/pdf/10.1146/annurev-financial-120209-133958>

¹⁰⁰ Frydman and Jenter, Carola and Dirk; (29 September 2010); "*CEO Compensation*"; Annual Review of Financial Economics; page: 24; paper available at:

<http://www.annualreviews.org/doi/pdf/10.1146/annurev-financial-120209-133958>

¹⁰¹ Bogle, John C.; (May 2008); "*Reflections on CEO Compensation*"; Academy of Management; page 21.

corporations, as a group, have added much value. corporations as a group have provided a steady share of GDP, not a growing share that might justify some rise in CEO compensation—to say nothing of the leap from 42 times the average worker’s compensation to 280 times¹⁰².

During the 15-year period selected by Kaplan, corporate profits have grown at a much faster rate than U.S. economy. From 1992 through 2007, earnings of the large companies represented in the Standard & Poor’s 500 Stock Index have grown at an 8.7% rate, compared to a 5.4% growth rate for U.S. GDP. But that relationship appears to be period-dependent. For example, in the decade since 1997, S&P earnings have grown at a 5.2% nominal rate, actually a hair short of the GDP growth rate of 5.3%¹⁰³.

2. CEOs are not alone in the compensation explosion: It is said that soaring CEO compensation was in part a reflection of the enormous, and increasingly public, compensation paid to star athletes, entertainment personalities, and movie stars. Such comparisons are absurd, since these celebrities are essentially paid by their fans or supporters or the owners of teams or networks out of their own pockets. CEOs are paid by directors, not out of their own pockets but with other people’s money, a clear example of the “agency problem” in our investment system¹⁰⁴. The fact is that corporate shareholders have played little, if any, role in setting executive pay. Benjamin Graham (1949) observed that in terms of legal rights, shareholders, acting as a majority they can hire and fire managements and bend them completely to their will, but in terms of the assertion of these rights in practice, “stockholders are a complete washout...[T]hey show neither intelligence nor alertness...and vote in sheep-like fashion for whatever the management recommends no matter how poor the management’s record of accomplishment may be”¹⁰⁵.
3. Higher compensation is tied to higher returns: there is no doubt that Kaplan’s conclusion CEOs managing companies whose stocks have provided higher returns have received systematically higher compensation given the heavy role played by stock options in compensation packages.

The short-term and momentary price of a stock, as we must now know, is as illusory as it is precise. CEO performance should be based on the long-term and enduring building of intrinsic value, which is as real as it is imprecise. Stock prices correlate nicely with business results, but only over the very long run. In the short term, correlation seems random at best. Simply put, stock prices are a flawed measure of corporate performance. Prices (using Lord Keynes’s classic formulation) involve both enterprise - the yield on an investment over the long term - and speculation - betting on the psychology of the market.

¹⁰² Bogle, John C.; (May 2008); “*Reflections on CEO Compensation*”; Academy of Management; page 22.

¹⁰³ Bogle, John C.; (May 2008); “*Reflections on CEO Compensation*”; Academy of Management; page 21.

¹⁰⁴ Bogle, John C.; (November 2005); “*The Battle for the Soul of Capitalism*”; Wharton School Publishing Paperbacks; page 21.

¹⁰⁵ Bogle, John C.; (May 2008); “*Reflections on CEO Compensation*”; Academy of Management; page 23.

4. Independency (or dependency) of boards of directors: the managerial power approach recognizes (2003, Bebchuk and Fried) that boards of publicly traded companies with dispersed ownership do not bargain at arms' length with managers, and that managers are able to influence their own pay arrangements. Just as there is no reason to presume that managers automatically seek to maximize shareholder value, there is no reason to expect a priori that directors will either. Indeed, an analysis of directors' incentives and circumstances suggests that directors' behaviour is also subject to an agency problem. The director agency problem undermines the board's ability to effectively address the agency problems in the relationship between managers and shareholders. Because the CEO's influence over the board gives her significant influence over the nomination process, directors have an incentive to "go along" with the CEO's pay arrangement, a matter dear to the CEO's heart, at least as long as the compensation package remains within the range of what can be defended and justified. Finally, directors usually lack easy access to the independent information and advice on compensation practices that would be necessary to do so.

2.2.3 Evidences in Contrast of "Optimal Contracting" View

Frydman & Saks (2010) show that the relationship between firm size and CEO pay is highly sensitive to the time period chosen, as this correlation is almost non-existent from the 1940s to the early 1970s. Moreover, the post-1970s relationship may not be robust to different sample selection choices (2010, Nagel). Furthermore, since both the size of the typical firm and CEO compensation have trended upwards since the 1970s, it is difficult to determine whether the relationship between these two variables is causal. A second difficulty for models of frictionless CEO assignment is the empirical scarcity of CEOs moving between firms. The models of Gabaix & Landier (2008) and Terviö (2008) predict that, at any point in time, a more talented CEO should run a larger firm. Consequently, any changes in the size-rank of firms should lead to CEOs switching firms. In reality, CEOs stay at one firm for several years and rarely move directly from one CEO position to the next. Although it is straightforward to augment a competitive assignment model with a fixed cost of CEO replacement, the fixed cost would need to exceed the effects of differences in CEO talent. A large fixed cost of CEO replacement creates large match-specific rents that a powerful CEO could capture, fundamentally changing the explanation for high levels of CEO pay to one related to managerial power (2004, Bebchuk & Fried; 2009, Kuhnen & Zwiebel).

2.3 “Rent Extracting” View, or the “Managerial Power Hypothesis¹⁰⁶”

Another approach to study executive compensation, the “managerial power approach,” focuses on a different link between the agency problem and executive compensation. Under this approach, executive compensation is viewed not only as a potential instrument for addressing agency problems, but also as part of the agency problem itself. As a number of researchers have recognized, some features of pay arrangements seem to reflect managerial rent seeking rather than the provision of efficient incentives (e.g.: 1994, Blanchard, Lopez-de Silanes, and Shleifer; 1997, Yermack; 2001, Bertrand and Mullainathan)

The rent extraction view posits that weak corporate governance and acquiescent boards allow CEOs to (at least partly) determine their own pay, resulting in inefficiently high levels of compensation. Managerial power theory attempts to explain high executive pay, arguing that executive compensation is often excessive when compared against a hypothetical, economically efficient compensation contract. The theory also argues that executive pay does not correlate to performance: in other words, high earners are not necessarily high performers.

Disconnect between ownership and control poses a risk that the people who control the company may not have the same interests as the people who own the corporation. Whenever shareholders are too dispersed to take action against non-value maximization behaviour, insiders may deploy corporate actions to obtain personal benefits, such as shirking and perquisite consumption. Thus, it's important that there are sufficient means of corporate governance, ensuring that the executives behave and act in the best interests of the shareholders.

Managerial theory insists that these managers may not necessarily do so. This conflict of interest may create poor decision-making such as seeking short term gain regardless of long-term risks¹⁰⁷.

What are the costs imposed on shareholders by managers’ influence over their own pay? To begin with, there is the excess pay managers receive as a result of their power - the difference between what managers’ influence enables them to obtain and what they would get under an arm’s length arrangement.

Furthermore, and perhaps more importantly, managers’ ability to influence their pay leads to compensation arrangements that generate worse incentives than those that would be provided under an arm’s length bargain. Managers have an interest in schemes that camouflage the extent of their rent extraction and in schemes that put less pressure on them to reduce slack. As a result, managerial influence might lead to the adoption of compensation arrangements that provide weak or even perverse incentives. In our view, the reduction in shareholder value caused by these inefficiencies, rather than the excess rent captured by managers, could be the biggest cost arising from managers’ ability to influence their compensation.

Kuhnen & Zwiebel (2009) model CEOs who set their own pay, with both observable and unobservable

¹⁰⁶ By Lucian Bebchuk & Jesse Fried (2004).

¹⁰⁷ We can see such poor decision-making in the decisions made leading up to the financial crisis of 2008, which led to the Great Recession.

components, subject to the constraint that too much rent extraction will get them ousted. Rent extraction survives in equilibrium because firing is costly and because a replacement CEO can also extract rents. Others have explored how CEO compensation is determined if there are both firms with strong and weak governance in the economy. Acharya & Volpin (2010) and Dicks (2010) show that firms with weak governance (and therefore higher compensation) impose a negative externality on better governed firms, through the competition for managers, inducing inefficiently high levels of pay in all firms.

One important building block of the managerial power approach is that of “outrage” costs and constraints. The tightness of the constraints managers and directors confront depends, in part, on how much “outrage” the proposed arrangement is expected to generate among relevant outsiders. Outrage might cause embarrassment or reputational harm to directors and managers, and it might reduce the willingness of shareholders to support incumbents in proxy contests or takeover bids.

The more outrage a compensation arrangement is expected to generate, the more reluctant directors will be to approve the arrangement, and the more hesitant managers will be to propose it in the first instance. Thus, whether a compensation arrangement that is favourable to executives but suboptimal for shareholders is adopted will depend on how it is perceived by outsiders. There is evidence that the design of compensation arrangements is indeed influenced by how they are perceived by outsiders.

The potential significance of whether compensation is perceived as justified and of outrage costs explains the importance of yet another building block of the managerial power approach – “camouflage.” To avoid or minimize outrage resulting from outsiders’ recognition of the presence of rent extraction, managers have an incentive to obscure and try to legitimize – or, more generally, to camouflage – their extraction of rents. The desire to camouflage might lead to the adoption of inefficient compensation structures that hurt managerial incentives and firm performance. The importance of how compensation arrangements are perceived indicates that, in the executive compensation area, the extent to which disclosures are transparent matters.

2.3.1 Arguments in Favour of " Managerial Power Hypothesis" View

In order to illustrate some arguments in favour of the managerial power approach by discussing four patterns and practices that can be at least partly explained by power and camouflage:

1. The relationship between power and pay: the problem with current arrangements, however, is that the generous compensation provided executives is linked only weakly to managerial performance. This pay-performance disconnect is puzzling from an optimal contracting view. The substantial part of compensation that is not equity-based has long been criticized as weakly linked to managerial performance. There is no significant connection between salary and bonus and the firm’s industry-adjusted performance (1999, Murphy). Non-equity compensation also increases when firm profits

increase for a reason having nothing to do with managers' efforts (1994, Blanchard, Lopez-de-Silanes, and Shleifer), Bertrand and Mullainathan (2001). Furthermore, managers receive substantial non-equity compensation in ways that have received less attention from financial economists¹⁰⁸ which also appears to be relatively insensitive to managerial performance (2004, Bebchuk and Fried).

According to "managerial power" approach pay will be higher and/or less sensitive to performance in firms in which managers have relatively more power. Other things being equal, managers would tend to have more power when: (1) the board is relatively weak or ineffectual; (2) there is no large outside shareholder; (3) there are fewer institutional shareholders; or (4) the managers are protected by antitakeover arrangements. There is evidence indicating that each of these factors affects pay arrangements in the way predicted by the managerial power approach. Executive compensation is higher when the board is relatively weak or ineffectual vis-à-vis the CEO.

Core, Holthausen, and Larcker (1999), examining 205 large public firms during the years 1982-84, find that CEO compensation is higher under the following conditions: when the board is large, making it more difficult for the directors to organize in opposition to the CEO; when more of the outside directors have been appointed by the CEO, and thus might feel a sense of gratitude or obligation to the CEO; and when outside directors serve on three or more boards, and thus are likely to be relatively distracted. Their findings imply that if the CEO added another member to a 12-person board his compensation would be 8% higher. Also, CEO pay is 20-40% higher if the CEO is the chairman of the board (2002, Cyert, Kang, and Kumar; 1999, Core, Holthausen, and Larcker). Finally, CEO pay is negatively related to the share ownership of the board's compensation committee; doubling the compensation committee ownership reduces non-salary compensation by 4-5% (2002, Cyert, Kang, and Kumar)¹⁰⁹.

The presence of a large outside shareholder is likely to result in closer monitoring (1986, Shleifer and Vishny) and thus can be expected to reduce managers' influence over their compensation. Consistent with this observation, Cyert, Kang, and Kumar (2002) find a negative relationship between the equity ownership of the largest shareholder and the amount of CEO compensation; doubling the percentage ownership of the outside shareholder reduces non-salary compensation by 12-14%. Bertrand and Mullainathan (2000) find that CEO's in firms that lacked a 5 percent (or larger) external shareholder tended to receive more "luck-based" pay.¹¹⁰ They also find that, in firms that lack large external shareholders, the cash compensation of CEO's is reduced less when their options-based compensation

¹⁰⁸ Such as through favourable loans, pension and deferred benefits, and perks, as just discussed above.

¹⁰⁹ Bebchuk and Fried, Lucian and Jesse; (April 2003); "*Executive Compensation as an Agency Problem*"; Discussion Paper N. 421; Harvard Law School, Cambridge; page: 6.

¹¹⁰ Pay associated with profit increases that are entirely generated by external factors (e.g., changes in oil prices and exchange rates) rather than by managers' efforts.

is increased. Relatedly, in an examination of S&P 500 firms during the period 1992-97, Benz, Kucher, and Stutzer (2001) find that a higher concentration of shareholders results in a significantly reduced number of options granted to top executives.

A larger concentration of institutional shareholders might result in greater monitoring and scrutiny of the CEO and the board. Examining CEO pay in almost 2000 firms during the period 1991-1997, Hartzell and Starks (2002) find that the more concentrated institutional ownership is, the lower is executive compensation¹¹¹.

They also find that a larger institutional presence results in more performance-sensitive compensation. Examining CEO compensation in the 200 largest companies during 1990-1994, David, Kochar and Levitas (1998) find that the effect of institutional shareholders on CEO pay depends on the types of relationships they have with the firm. They divide institutional shareholders into: (1) those that have no other business relationship with the firm and are thus concerned only with the firm's share value ("pressure-resistant" institutions); and (2) those that have other business relationships with the firm (e.g., managing a pension fund) and are thus vulnerable to management pressure ("pressure-sensitive" institutions). As the managerial power approach predicts, CEO pay is negatively correlated with the presence of pressure-resistant institutional investors and positively correlated with the presence of pressure-sensitive ones.

The adoption of antitakeover provisions makes CEO's less vulnerable to a hostile takeover. Borokhovich, Brunarski and Parrino (1997), examining 129 firms that adopted anti-takeover provisions (such as a supermajority rule) during the period 1979-1987, find that CEO's of firms adopting such provisions enjoy above market compensation before adoption of the anti-takeover provisions and that adoption of these provisions increases their excess compensation significantly. This pattern is not readily explainable by optimal contracting; indeed, if managers' jobs are more secure, shareholders should be able to pay managers a lower risk premium (1998, Agrawal and Knoeber).

In another study, Cheng, Nagar, and Rajan (2001) find that CEO's of Forbes 500 firms that became protected by new state antitakeover legislation enacted during the period 1984-1991 reduced their holdings of shares by an average of 15%, apparently because the shares were not as necessary for maintaining control. Optimal contracting might predict that a CEO protected by anti-takeover legislation would be required to buy more shares to restore her incentive to increase shareholder

¹¹¹ Examining S&P 500 companies during the period 1987-1992, Wade, Porac and Pollack (1997) find that companies that pay their CEO's larger base salaries, and firms with more concentrated and active outside ownership, are more likely to cite the use of surveys and consultants in justifying executive pay in their proxy reports to shareholders. This study also finds that, when accounting returns are high, firms emphasize the accounting returns and downplay market returns. These findings are also consistent with the view that executives use compensation consultants to generate and justify higher compensation.

value¹¹².

2. The use of compensation consultants: U.S. public companies typically employ outside consultants to provide input into the executive compensation process (2000, Bizjack, Lemmon, and Naveen). The consultants conduct compensation surveys and provide access to industry pay data. Although compensation consultants can sometimes play a useful role, they are often used to justify executive pay rather than to optimize it.

The consultant is usually hired by the firm's human resources department, which is subordinate to the CEO. Providing advice that hurts the CEO's pocketbook is hardly a way to enhance the consultant's chances of being hired in the future by this firm as well as by other firms. Moreover, executive pay specialists often work for consulting firms that have other, larger assignments with the hiring company, which further distorts their incentives (1991, Crystal). It must be clear that compensation consultants who consistently recommend lower pay or tougher standards for CEO compensation will likely not be in business for long. Pay consultants favour the CEO by providing the compensation data that are most useful for justifying a high level of pay¹¹³. To make matters worse, the well-known methodology of consultants - grouping CEOs into peer groups measured in quartiles - leads inevitably to a ratchet effect.

After the compensation consultant has collected the "relevant" comparative data¹¹⁴, the board generally sets pay equal to or higher than the median CEO pay in the comparison group. The combination of helpful compensation consultants and sympathetic boards is in part responsible for the widely recognized "ratcheting up" of executive salaries (1999, Murphy).

3. Executive loans: another practice that has been used to camouflage rents is firm loans to top executives on very favourable terms. While the Sarbanes-Oxley Act of 2002 now prohibits executive loans, prior to the Act's adoption more than 75 percent of the 1,500 largest U.S. firms used such loans (2002, King). It is not readily apparent what efficiency benefits are produced by having firms (rather than banks) provide loans to executives, or by providing compensation in the form of favourable interest rates (rather than cash or other forms of compensation). But loans can clearly play a role in helping to camouflage compensation. To begin with, the implicit compensation provided by below-market rate loans often does not appear in the compensation disclosure section¹¹⁵.

¹¹² Bebchuck and Fried, Lucian and Jesse; (April 2003); *"Executive Compensation as an Agency Problem"*; Discussion Paper N. 421; Harvard Law School, Cambridge; page: 8.

¹¹³ For example, when firms do well, consultants push for high compensation, arguing that pay should reflect performance and should be higher than the average in the industry - and certainly higher than that of CEO's who are doing poorly. In contrast, when firms do poorly, the consultants look not to performance but rather to peer group pay norms to argue that the salary of the CEO should be higher to reflect prevailing salaries (2001, Gillan).

¹¹⁴ Which are likely to be tilted in favour of the CEO

¹¹⁵ The SEC ruled that firms must disclose in the category of "other annual compensation" the difference between the interest actually paid on executive loans and "the market rate." However, the SEC did not define "market rate," and firms have often interpreted the term in a manner that enabled them to exclude these benefits from the compensation tables.

A second manner in which loans can provide camouflage is through the practice of loan forgiveness. A firm that has provided an executive with a loan to buy a large amount of stock will often not demand full repayment of the loan if the stock value falls below the amount due on the loan.

Finally, loans enabled managers to camouflage their unloading of shares. In recent years, hundreds of executives have made stock-for-loan exchanges under which loans were repaid with company stock (2002, Leonhardt). When executives sold stock in the open market, they had to report the sale by the 10th day of the following month. But when they sold stock back to the company, they had to report such transactions only within 45 days after the end of the fiscal year in which the exchange took place, thus enabling insiders to hide their stock sales for up to a year¹¹⁶.

4. Golden good-bye payments to departing executives: it refers to the practice of the board giving departing CEO's payments and benefits that are gratuitous - not required under the terms of the CEO's compensation contract. Such golden goodbyes are common even when CEO's perform so poorly that the board feels compelled to push them out. Compensation contracts usually provide executives with generous severance arrangements even when they depart following very dismal performance. Such "soft landing" provisions provide executives with insurance against being fired due to poor performance. It is far from clear that these arrangements reflect optimal contracting; after all, such provisions reduce the very difference in managerial payoffs between good and poor performance that firms spend so much trying to create. The making of such gratuitous payments, however, is quite consistent with the existence of managerial influence over the board: these payments reflect the existence and significance of managerial influence.

In light of the historically weak link between managerial performance and their non-equity compensation (as we have just previous seen through pages 68-70 of this work), shareholders and others have increasingly looked to equity-based compensation to provide the desired link between pay and performance. In the early 1990's, institutional investors and federal regulators sought to encourage the use of such compensation, and the last decade has indeed witnessed a dramatic growth in the use of stock options.

We should emphasize our strong support for the general idea of equity-based compensation which, if well designed, can provide managers with very desirable incentives. Unfortunately, however, managers have been able to use their influence to obtain option plans that appear to deviate substantially from optimal contracting in ways that favour managers. As Fried and Bebchuk pointed out, the devil is in the details.

Below we discuss several important features of option compensation plans that are difficult to justify from

¹¹⁶ For example, in 2001, Tyco's CEO Dennis Kozlowski returned \$70 million of shares of stock to the company, partly to repay loans, even as he continued to say publicly that he rarely sold his Tyco shares.

an optimal contracting perspective but can readily be explained by the managerial power approach:

5. The failure of option plans to filter out windfalls: persistent feature of stock option plans is that they do not filter out stock price rises that are due largely to industry and general market trends and thus are unrelated to managers' performance. Under conventional option plans, when the market or sector rises substantially, even executives whose companies are performing poorly relative to the market or sector average can make large profits. Paying managers substantial compensation for stock price increases that have nothing to do with their performance is difficult to explain under optimal contracting (2003, Bebchuk and Fried). Given the wide variety of reduced-windfall options available and their potential benefits, it is likely that in a considerable number of firms it would be optimal to filter out at least some of the increase in the stock price that has nothing to do with the managers' efforts. Yet almost all U.S. firms use conventional stock options under which managers capture the full increase in stock price. In 2001, only about 5 percent of the 250 largest U.S. public firms used some form of reduced windfall options (2001, Levinsohn).

Compensation schemes are designed with an eye to benefiting executives while ensuring that the schemes are not perceived as clearly unreasonable. Given that using conventional options is clearly legitimate and acceptable (most firms use them), and that moving to indexing or any other form of reduced-windfall options is likely to be costly or inconvenient for managers, the lack of any real movement toward such options is consistent with the managerial power approach.

6. The almost-uniform use of at-the-money options: almost all stock options used to compensate executives are "at-the-money" - that is, their exercise price is set to the market price at the time the options are granted (1999, Murphy). An optimally designed scheme would seek to provide risk-averse managers with cost-effective incentives to exert effort and make value-maximizing decisions. The optimal exercise price under such a scheme should depend on a multitude of factors that are likely to vary from executive to executive, from company to company, from industry to industry, and from time to time.

Since (as we are going to illustrate in Chapter 3) the use of out-of-the-money option can offer much higher pay-for-performance sensitivity per dollar of expected value than conventional options (1999, Hall), the almost uniform use of at-the-money options is thus difficult to explain from an optimal contracting perspective. Indeed, economists working within optimal contracting have called this practice a "puzzle" (1999, Hall). The near-uniform use of at-the-money options is not puzzling, however, when examined under the managerial power approach. All else equal, executives prefer a lower exercise price. Because at-the-money options might sometimes be optimal and are employed by almost every other firm, their use in any given case will not generate outrage. Therefore, there is little reason for plan designers to increase the exercise price above the grant-date market price. Executives

would be even better off, of course, if stock options were issued with an exercise price below the grant-date market price. However, such in-the-money options would create a salient windfall and might generate some outrage costs. Furthermore, in-the-money options would trigger a charge to accounting earnings¹¹⁷.

7. Managers' freedom to unload options and shares: executives are typically permitted to cash out of these instruments as soon as they vest, as well as to choose the precise time of the unwinding. The widespread lack of restrictions on exercising vested options, which reduces the performance sensitivity of managers' compensation, is difficult to explain under optimal contracting, while easy under the "managerial power" approach.

When managers unwind their equity incentives, restoring pay-performance sensitivity requires giving them new options or shares. Thus, such unwinding either (1) weakens managers' incentives or (2) forces the firm to give them new equity incentives to restore the level of incentives to the pre-unwinding level.

Managers also typically have freedom to determine the precise time of unwinding, a practice that is also difficult to explain under optimal contracting. Although it is illegal for managers to trade on "material" inside information, it is often difficult to prove that a manager used particular items of information in deciding to trade. Thus managers frequently can trade on valuable inside information with little fear of liability (1998, Fried). As a result, managers are able to obtain abnormal returns trading in their firm's shares (1998, Seyhun). Although managers' freedom to unwind equity incentives early and to control the precise timing of their unwinding cannot easily be explained under optimal contracting, it can be explained under the managerial power approach.

2.3.2 Evidences in Favour of " Managerial Power Hypothesis" View

The managerial power view of CEO compensation is supported by several pieces of anecdotal and systematic evidence. For example, the widespread use of "stealth" compensation is difficult to explain if compensation were simply the efficient outcome of an optimal contract. Even though perks, pensions, and severance pay can be part of optimal compensation, hiding these compensation elements from shareholders is suggestive of rent extraction (2004, Bebchuk & Fried; 2009, Kuhnen & Zwiebel). Similarly, the widespread practice of executives hedging exposures to their own firm, again with minimal disclosure, is difficult to justify (2001; 2010b, Bettis et al.). Rent-extraction is also suggested by the observation that CEOs are frequently rewarded for lucky events that are not under their control (such as an improving economy) but not equally penalized for

¹¹⁷ Bebchuk and Fried, Lucian and Jesse; (April 2003); *"Executive Compensation as an Agency Problem"*; Discussion Paper N. 421; Harvard Law School, Cambridge; page: 16.

unlucky events (2001, Bertrand & Mullainathan; 2006, Garvey & Milbourn).

Finally, CEO pay increases following exogenous reductions in takeover threats (1998, Bertrand & Mullainathan) and decreases following regulatory changes that strengthen board oversight (2009, Chhaochharia & Grinstein).

A further suggestive piece of evidence for the managerial power hypothesis is the revelation of widespread options backdating and spring loading. Yermack (1997) observes that stock prices tend to rise subsequent to option grants, suggesting that powerful CEOs are awarded options right before the release of positive news (so called “spring loading”). Recent evidence shows that spring loading alone is not sufficient to explain the stock price patterns around option grants. Instead, many grants must have had their “grant dates” chosen ex-post to minimize the strike price of at-the-money options and maximize their value to executives (2005, Lie; 2007, Heron & Lie; 2008, Narayanan & Seyhun). Such backdating of options appears to have been widespread, affecting about 30% of firms from 1996 to 2005 (2009, Heron & Lie), and was more prevalent in firms with weak boards and strong chief executives (2010, Bebchuk et al.). However, option backdating may also arise due to boards’ desire to avoid accounting charges and earnings dilution.

2.3.3 Counterarguments in Contrast of “ Managerial Power Hypothesis” View

Financial economists have made substantial efforts to develop optimal contracting explanations, nor counter arguments.

Consider, for example, Himmelberg and Hubbard (1999), who offer an explanation for why firms do not use reduced-windfall options, based on the correlation between market booms and scarcity of talented managers. On their theory, when the economy booms, the demand for executives rises and companies must pay CEO’s more to retain them. Allowing stock option pay to increase with rising market levels during boom periods responds to this need. One problem with this explanation is that, under conventional options plans, a stock market boom increases the value of an executive’s vested options as well as of her unvested options. Much of this increase transfers wealth to the executive with little or no effect on her incentive to remain with the company. For example, the executive can exercise her fully vested options immediately, whether she remains with the firm or not; increasing the value of these options transfers value to the manager without affecting her decision to remain with the firm. If it were desirable to have an automatic mechanism that provides managers with greater incentive to remain in the company during stock market booms, it would be more cost-effective to provide executives with reduced-windfall options and to automatically issue them new and completely unvested (reduced-windfall) options. These new options would benefit managers only if they remain with the company until the end of the vesting period. To consider another example, Aggarwal and Samwick (1999) suggest that conventional options might be useful to facilitate profit-maximizing collusion among firms in the same industry. Screening out industry-wide effects, they argue, would provide managers an incentive to lower

industry-wide returns by engaging in excessive competition, which would in turn lower profits. But even if fostering collusion among firms could explain the failure to filter out sector-wide price increases in some oligopolistic markets, the theory cannot explain why the 95% of firms that do not use reduced-windfall options fail to filter out broader market-wide price increases¹¹⁸.

2.3.4 Evidences in Contrast of " Managerial Power Hypothesis" View

There is scarce evidence that corporate governance has weakened over the last 30 years; instead, most indicators show that governance has considerably strengthened over this period (2001, Holmström & Kaplan; 2005, Hermalin; 2008, Kaplan). Moreover, "awarding" pay by allowing managers to extract some rents can be optimal if monitoring is costly. In equilibrium, rent extraction may be compensated for through reductions in other forms of pay, thus not leading to higher total compensation. Consequently, observing that a CEO receives forms of pay usually associated with rent extraction does not necessarily imply that the CEO's compensation exceeds the competitive level.

2.4 Brief Summary

Our reading of the evidence suggests that all three the approaches, governmental intervention, managerial power and competitive market forces are important determinants of CEO pay, and that neither approach alone is fully consistent with the available evidence.

On the one hand, several compensation practices, as well as specific cases of outrageous and highly publicized pay packages, indicate that (at least some) CEOs are able to extract rents from their firms. Under the theory that sunlight is the best disinfectant, the SEC's disclosure rules have long been a favourite method used by the SEC and Congress in attempts to curb perceived abuses and excesses in executive compensation. During the years Government intervention over executive pay has become more prominent and strict (as we have seen in the whole Paragraph 2.1), creating specific laws or sections.

On the other hand, efficient contracting explanations are arguably more successful at explaining differences in pay practices across firms and at explaining the evolution of CEO pay since the 1970s. However, none of theories provides a fully convincing explanation for the apparent regime change in CEO compensation that occurred during the 1970s. Moreover, both approaches fail to explain the explosive growth of options in the 1990s and their recent decline in favour of restricted stock, which may be in part a response to changes in accounting practices. While it is possible that a combination of the proposed explanations can explain the changes in CEO pay in recent decades, the relative importance of the different theories remains an open

¹¹⁸ Bebchuck and Fried, Lucian and Jesse; (April 2003); "*Executive Compensation as an Agency Problem*"; Discussion Paper N. 421; Harvard Law School, Cambridge; page: 15.

question.

Although one approach is conceptually quite different from the other two approaches, they should not be proposed as a unique possibility nor complete replacement to the others. Compensation arrangements might be shaped both by market forces that push toward value-maximizing arrangements, and by the influence of managerial power, leading to departures from these arrangements in directions favourable to managers, which are then mitigated by government intervention. The managerial power approach simply claims that these departures from value-maximizing arrangements are substantial and that compensation practices thus cannot be adequately explained by optimal contracting alone. The optimal contracting view recognizes that managers suffer from an agency problem and do not automatically seek to maximize shareholder value. Thus, providing managers with adequate incentives is important. Under the optimal contracting view, the board, working in shareholders' interest, attempts to cost-effectively provide managers such incentives through their compensation packages. Optimal compensation contracts could result either from effective arm's length bargaining between the board and the executives, or from market constraints that induce players to adopt such contracts even in the absence of arm's length bargaining. However, neither of these forces can be expected to constrain effectively departures from arm's length outcomes: market forces are not sufficiently strong and fine-tuned to assure optimal contracting outcomes.

The ability (or the desire) of managers to extract rents (and increase their total pay) only emerged as social norms against unequal pay weakened. Piketty & Saez (2003) argue that such a shift in social norms helps explain the rise in CEO pay and the widening income inequality in the past three decades, and Levy & Temin (2007) relate this change in norms to the dismantling of institutions and government policies that prevented extreme pay outcomes from World War II to the 1970s. Alternatively, the increasing popularity of stock options, coupled with boards' limited understanding of option valuation, may have allowed managers to camouflage their rent extraction as efficient incentive compensation (2003, Hall & Murphy; 2004, Bebchuk & Fried).

3.1 Agency Theory: Problem or Solution? My Point of View

Corporate scandals, reflected in excessive management compensation and fraudulent accounts, cause great damage. Agency theory's insistence to link the compensation of managers and directors as closely as possible to firm performance is a major reason for these scandals.

Agency theory can be subdivided in two categories: (1) In adverse selection models, the agent has private information about his type (say, his costs of exerting effort or his valuation of a good) before the contract is written. (2) In moral hazard models, the agent becomes privately informed after the contract is written. Hart and Holmström (1987) divide moral hazard models in the categories "hidden action" (e.g., the agent chooses an unobservable effort level) and "hidden information" (e.g., the agent learns his valuation of a good, which is modelled as a random draw by nature).

The agency problem is a conflict of interest inherent in any relationship where one party is expected to act in another's best interests. In corporate finance, the agency problem usually refers to a conflict of interest between a company's management and the company's stockholders. The manager, acting as the agent for the shareholders, or principals, is supposed to make decisions that will maximize shareholder wealth even though it is in the manager's best interest to maximize his own wealth.

A principal-agent model of CEO pay permeates almost all works on CEO compensation. According to this model, principals (shareholders and the directors that represent them) must delegate control of the firm to an agent (the CEO) who may be unwilling to work hard and whose objectives may not be fully aligned with those of the firm's principals. Incentive contracts, where pay is in part determined by company performance, offer a partial solution to this agency problem.

CEOs that are imperfectly monitored by boards and/or somewhat isolated from takeover pressures not only may influence their own pay, but also may make corporate decisions that are not fully aligned with shareholders' interests. Firms are seen as a nexus of contracts between shareholders and CEOs pursuing their own interests. Because of so-called rational apathy on the part of minority shareholders in public corporations, the control of management is transferred to the board of directors as a second level of agency (e.g. 1992, Black).

In fact, this agency problem, while bearing a major responsibility for the rise in CEO compensation, it also permeates corporate governance at all its levels.

Three primary factors have driven the growing lack of accountability of corporate boards to shareholders:

1. The indifference of the institutional money managers (themselves highly paid), who in the aggregate

now hold effective voting control of corporate America¹¹⁹.

2. The conflicts of interest faced by these managers, in which their fiduciary interest in representing the mutual fund shareholders and pension beneficiaries they are duty-bound to serve seems to have been overwhelmed by their financial interest in gathering and managing the assets of these mutual funds and pension funds. (Managers, unsurprisingly, don't wish to offend their large corporate clients).
3. The fact that most institutional shareholders no longer practice long-term investing (which logically demands attention to corporate governance issues). They have turned instead to short-term speculation in which they hold corporate shares for an average of a year or less (which logically leads to indifference about governance issues)¹²⁰.

When ownership and control is divided within a company, agency costs arise. The deviation from the principal's interest by the agent is called "agency costs". These costs arise because of core problems, such as conflicts of interest, between shareholders and management.

Managerial power and rent extraction behaviours are likely to have an important influence on the design of compensation arrangements; they impose substantial costs on shareholders – beyond the excess pay executives receive – by diluting and distorting managers' incentives and thereby hurting corporate performance.

Solutions adopted so far have used incentive pay (mainly in the form of equity-based contracts), to try to overcome the shortcomings deriving from this information asymmetry.

On first instance, if on one hand, giving to CEOs a stake in the company, can align their objectives with those of shareholders, on the other hand, given ownership to a manager within a company may translate into greater voting power which makes the manager's work place more secure. Hence, they gain protection against takeover threats and the current managerial market.

Furthermore, another problem arises due to an issue with incentives. An agent may be motivated to act in a manner that is not favourable for the principal (or to distort reality), if the agent is presented with an incentive to act in that way.

The extent to which managerial influence can move compensation arrangements away from optimal contracting outcomes depends on the extent to which market participants, especially institutional investors, are aware of, and on guard against, these issues.

Much research has focused on how executive compensation schemes can help alleviate the agency problem in publicly traded companies. To adequately understand the landscape of executive compensation, however, it is necessary to recognize that compensation schemes are also partly a product of this same agency problem.

Compensation arrangements currently provide as weak incentives to reduce managerial slack and increase

¹¹⁹ The 100 largest managers alone now own 58% of all stocks.

¹²⁰ Bogle, John C.; (May 2008); "*Reflections on CEO Compensation*"; Academy of Management; page 23.

shareholder value as would be provided by arm's length arrangements. As explained, both the non-equity and equity components of managers' compensation are substantially more decoupled from the managers' contribution to firm performance than superficial appearances might suggest. Prevailing practices not only fail to provide cost-effective incentives to reduce slack but also create perverse incentives. For one thing, they provide managers incentives to change firm parameters in a way that would justify increases in pay.

Most major contributors to agency theory, which tend to defend the existing system of CEO compensation, admit major weaknesses in the approach. Today, Jensen (2002, Fuller & Jensen) accepts that the existing system of managing compensation, especially by the use of stock options, is seriously deficient; he argued that it has proven to be "managerial heroin," encouraging a focus on short term highs, with destructive long-term consequences.

However, he believed that the system can be salvaged by better designed share options. Also Bebchuk and Fried (2003), though arguing that executive compensation is part of the agency problem itself, still believe in the basic message of agency theory: in the opinion of Bebchuk and Fried, to overcome the failures identified, pay for performance must be improved.

To curb opportunistic behaviour, agency theory argues that the CEOs' and directors' incentives need to be aligned with shareholders by tying pay to performance and by providing managers and directors with equity-based stakes in their firms. Corporate policy has widely followed this prescription. The share of variable performance pay in S&P 500 firms amounts to about 75% of total compensation, mostly in the form of stocks and stock options (1999, Murphy). In 2001, equity-based pay constituted about two thirds of the median annual pay of U.S. top executives, compared to zero in 1984 (2003, Hall). In recent years, it has also become common practice to pay the board member at least, in part, according to the same principles (2003, Stout). The idea is to bond managers' and directors' financial interests with those of the shareholders¹²¹.

My point of view is that, despite its dominance, since it has been always used as unique remedy, the agency model (and its solutions adopted so far) has proved to be seriously incomplete, and to partly work as a detrimental force to impede executives' rent extractions.

High-powered incentive compensation, even if it could be optimally designed, does not solve the problems in the corporate sector identified but aggravates it, when considered alone.

Frey and Osterloh suggest a model based on a new concept, based on intrinsic and extrinsic incentives.

3.2 Extrinsic Motivation and Incentive Theory, VS or A/S¹²² Intrinsic Motivation

A central tenet of economics is that individuals respond to incentives. Psychologists have proposed some

¹²¹ Frey and Osterloh, Bruno S. and Margit; (March 2005); "Yes, Managers Should be Payd Like Bureaucrats"; Journal of Management Inquiry; vol. 14, n° 1; Sage Publications; page: 98.

¹²² Versus or alongside.

different ways of thinking about motivation, including one method that involves looking at whether motivation arises from outside (extrinsic) or inside (intrinsic) the individual: in fact, human beings derive utility from the activity itself, or because they wish to comply to given normative standards, or for the reward associated.

Theorists define extrinsic motivation as "engaging in an activity to obtain an outcome that is separable from the activity itself" (1968, deCharms; 1978, Lepper and Greene).

Extrinsic motivation occurs when we are motivated to perform a behaviour or engage in an activity to earn a reward or avoid punishment.

Incentive theory is based on the idea that behaviour is primarily extrinsically motivated. It argues that people are more motivated to perform activities if they receive a reward afterward, rather than simply because they enjoy the activities themselves.

Intrinsically motivated behaviours are performed because of the sense of personal satisfaction that they bring. According to Deci (1971), these behaviours are defined as ones for which the reward is the satisfaction of performing the activity itself. Intrinsic motivation thus represents engagement in an activity for its own sake.

Extrinsic motivation can be beneficial in some situations, however:

- External rewards can induce interest and participation in something in which the individual had no initial interest.
- Extrinsic rewards can be used to motivate people to acquire new skills or knowledge. Once these early skills have been learned, people may then become more intrinsically motivated to pursue the activity.
- External rewards can also be a source of feedback, allowing people to know when their performance has achieved a standard deserving of reinforcement.

Some data suggest that intrinsic motivation is diminished when extrinsic motivation is given – a process known as the over-justification effect. If extrinsic incentives are used to stimulate behaviours that an individual already finds motivating (even without external reinforcement), intrinsic motivation for that behaviour may decrease over time. In those cases, extrinsic motivators can backfire: instead of serving as an incentive for the desired behaviour, they undermine a previously held intrinsic motivation. This can lead to extinguishing the intrinsic motivation and creating a dependence on extrinsic rewards for continued performance (1999, Deci et al.)¹²³.

Researchers have arrived at three primary conclusions with regards to extrinsic rewards and their influence on

¹²³ A classic research study of intrinsic motivation illustrates this problem clearly. In the study, researchers asked university students to perform two activities - solving puzzles and writing newspaper headlines - that they already found interesting. Some of the students were paid to do these activities, the others were not. Under these conditions, the students who were paid were less likely to continue to engage in these activities after the experiment, while the students who were not paid were more likely to continue - even though both groups had been equally interested in the activities to begin with (Deci, 1971). The extrinsic reward of payment, it seemed, interfered with the intrinsic reward of the activity itself.

intrinsic motivation:

1. Unexpected external rewards typically do not decrease intrinsic motivation¹²⁴. However, this needs to be done with caution because people will sometimes come to expect such rewards.
2. Praise can help increase internal motivation: researchers have found that offering positive praise and feedback when people do something better in comparison to others can improve intrinsic motivation.
3. Intrinsic motivation will decrease, however, when external rewards are given for completing a particular task or only doing minimal work. For example, if parents heap lavish praise on their child every time he completes a simple task, he will become less intrinsically motivated to perform that task in the future.

So what are the things that actually motivate us to act? Psychologists have proposed different theories to explain motivation:

- **Instincts:** the instinct theory of motivation suggests that behaviours are motivated by instincts. An instinct is a fixed and inborn pattern of behaviour. Psychologists including William James, Sigmund Freud, and William McDougal have proposed a number of basic human drives that motivate behaviour. Such instincts might include biological instincts that are important for an organism's survival such as fear, cleanliness and love.
- **Incentive:** incentive theory suggests that people are motivated to do things because of external rewards. It proposes that people intentionally pursue certain courses of action in order to gain rewards. The greater the perceived rewards, the more strongly people are motivated to pursue those reinforcements.
- **Arousal Levels:** the arousal theory of motivation suggests that people are motivated to engage in behaviours that help them maintain their optimal level of arousal. A person with low arousal needs might pursue relaxing activities while those with high arousal needs might be motivated to engage in exciting, thrill-seeking behaviours.
- **Cognitive reasons:** humanistic theories of motivation are based on the idea that people also have strong cognitive reasons to perform various actions. This is famously illustrated in Abraham Maslow's¹²⁵ hierarchy of needs which presents different motivations at different levels. Abraham Maslow believed that man is inherently good and argued that individuals possess a constantly growing inner drive that has great potential. He developed the hierarchy of needs consisting of five hierarchic classes.

¹²⁴ For example, if you get a good grade on a test because you enjoy learning about the subject and the teacher decides to reward you with a gift card to your favourite pizza place, your underlying motivation for learning about the subject will not be affected.

¹²⁵ Abraham Harold Maslow (April 1, 1908 - June 8, 1970) was an American psychologist who was best known for creating Maslow's hierarchy of needs, a theory of psychological health predicated on fulfilling innate human needs in priority, culminating in self-actualization.

According to Maslow, people are motivated by unsatisfied needs. The needs, listed from basic (lowest-earliest) to most complex (highest-latest) are as follows:

1. Physiology (hunger, thirst, sleep, etc.).
2. Safety/Security/Shelter/Health.
3. Social/Love/Friendship.
4. Self-esteem/Recognition/Achievement.
5. Self-actualization/achievement of full potential.

Individuals look for the gratification of higher-level psychological needs having to do with achievement, recognition, responsibility, advancement, and the nature of the work itself.

This four theory can be very useful in shaping executives' contracts. Other things to take into consideration are the components of motivation. There are three major components to motivation: activation, persistence, and intensity:

1. Activation involves the decision to initiate a behaviour.
2. Persistence is the continued effort toward a goal even though obstacles may exist.
3. Intensity can be seen in the concentration and vigour that goes into pursuing a goal.

In the next Paragraphs we will show how performance incentives offered by an informed principal (shareholder, boards of director) can profitably impact an agent's (CEOs) perception of the task, or of his own abilities, bearing in mind that incentives alone are then only weak reinforces in the short run, and negative reinforces in the long run.

3.3 Executive Contracting and Its Design: General Thoughts

The design of an efficient incentive system, needs the use of an approach capable to consider either the characteristics of the business, and of the much wider habitat-industry in which it is operating, either the functions and the role, as well as the social and psychological identikit and inclinations of the person involved. Contingency approach¹²⁶, also known as situational approach, is a concept in management stating that there is no one universally applicable set of management principles, neither rules, nor solutions by which to manage organizations (no one size fits all answer). Many factors have to be taken into account when designing

¹²⁶ It emphasized the importance of situational influences on the management of organizations and questioned the existence of a single, best way to manage or organize. Today, the contingency approach dominates theory and research in the management literature. Contingency approach challenged the classic process and models designed by management theorists such as Frederick Winslow Taylor (Scientific management) and Henri Fayol (Fayolism).

executive incentives. Such factors might include the degree of managerial risk aversion, which in turn might be affected by the manager's age and wealth, the project choices available to the company, the volatility of the company's stock, the expected rate of inflation, and the length of the executive's contract, among other things. There is no reason to expect that "one size fits all" – that the same exercise price level is optimal for all executives at all firms, in all industries, and at all times.

Thus, the implementation of the same incentive plan within enterprises which present a different corporate culture, or structure, or operative system or within people asked to perform different tasks, and having different attitude toward risk, decision making, future expectations, may have very different result.

In fact, individual characteristics of the collaborators, the different tasks and the different degrees of decision autonomy attributed to them are crucial variables to take into consideration when designing an incentive plan. Incentives can be restructured through individual contracts, by connecting as closely as is optimal the information available about executives' performance, and the compensation for that performance. Because of differences in the quantity and quality of information available about the performance of individual employees, the ability of employees to bear risk, and the ability of employees to manipulate evaluation methods, the structural details of individual contracts vary widely, including such mechanisms as discretionary bonuses, promotions, profit sharing, efficiency wages, deferred compensation, stock grants, stock-options grants and so on.

Part of this variation in incentive structures and supervisory mechanisms may be attributable to variation in the level of intrinsic psychological satisfaction to be had from different types of work. Sociologists and psychologists frequently argue that individuals take a certain degree of pride in their work, and that introducing performance-related pay can destroy this "psycho-social compensation", because the exchange relation between employer and employee becomes much more narrowly economic, destroying most or all of the potential for social exchange. Evidence for this is inconclusive (1971, Deci; 1973, Lepper, Greene and Nisbett) find support for this argument.

Drago and Garvey (1997) use Australian survey data to show that when agents are placed on individual pay-for-performance schemes, they are less likely to help their co-workers.

This negative effect is particularly important in those jobs that involve strong elements of "team production" (1972, Alchian and Demsetz), where output reflects the contribution of many individuals, and individual contributions cannot be easily identified, and compensation is therefore based largely on the output of the team. In other words, pay-for-performance increases the incentives to free-ride, as there are large positive externalities to the efforts of an individual team member, and low returns to the individual (1982, Holmström; 1994, McLaughlin).

Milgrom and Roberts (1992) identify four principles of contract design:

1. When perfect information is not available, Holmström (1979) developed the Informativeness principle

to solve this problem. This essentially states that any measure of performance that (on the margin) reveals information about the effort level chosen by the agent should be included in the compensation contract. This includes, for example, Relative Performance Evaluation - measurement relative to other, similar agents, so as to filter out some common background noise factors, such as fluctuations in demand. By removing some exogenous sources of randomness in the agent's income, a greater proportion of the fluctuation in the agent's income falls under his control, increasing his ability to bear risk. If taken advantage of, by greater use of piece rates, this should improve incentives.

2. The Incentive-Intensity principle states that the optimal intensity of incentives depends on four factors: the incremental profits created by additional effort, the precision with which the desired activities are assessed, the agent's risk tolerance, and the agent's responsiveness to incentives.
3. The Monitoring Intensity principle, is complementary to the second; in that situations in which the optimal intensity of incentives is high, corresponds highly to situations in which the optimal level of monitoring is also high. Thus employers effectively choose from a "menu" of monitoring/incentive intensities. This is because monitoring is a costly means of reducing the variance of employee performance, which makes more difference to profits in the kinds of situations where it is also optimal to make incentives intense.
4. Equal Compensation Principle, which essentially states that activities equally valued by the employer should be equally valuable (in terms of compensation, including non-financial aspects such as pleasantness of the workplace) to the employee. This relates to the problem that employees may be engaged in several activities, and if some of these are not monitored or are monitored less heavily, these will be neglected, as activities with higher marginal returns to the employee are favoured. This can be thought of as a kind of "disintermediation" – targeting certain measurable variables may cause others to suffer.

The four principles can be summarized in terms of the simplest (linear) model of incentive compensation, resumed by formula 3.1a and b:

$$\text{Formula 3.1a: } \mathbf{W} = \mathbf{A} + \mathbf{b} (\mathbf{e} + \mathbf{x} + \mathbf{gY})$$

$$F. 3.1b: \text{ Wage} = (\text{Base Salary}) + (\text{Incentives}) \times ((\text{Unobserved}) \text{ Effort} + (\text{Unobserved}) \text{ Effects}) + (\text{Weight Y}) (\text{Observed ex Effects})$$

Contracts would create the linear incentive structures summarised in the model above. But while the combination of normal errors and the absence of income effects yields linear contracts, many observed contracts are nonlinear. To some extent this is due to income effects as workers rise up a tournament/hierarchy: "Quite simply, it may take more money to induce effort from the rich than from the less well off!" (1999, Prendergast).

3.4 Performance Evaluation

The major problem in measuring performance in cases where it is difficult to draw a straightforward connection between performance and profitability is the setting of a standard by which to judge the performance.

Generally, it is convenient within the field of performance evaluation, the use some form of relative performance evaluation. Typically, this takes the form of comparing the performance of a CEO to that of his peers in the firm or industry, perhaps taking account of different exogenous circumstances affecting that.

I believe that another form of relative performance to take into account is the one prevised by Section 953 of the Dodd-Frank act, which requires corporates to disclose CEOs compensation alongside median-worker/employee compensation, along with ratios comparing the level between the two.

Subjective performance is typically used for jobs with a high degree of complexity. Problems with subjective performance evaluation have resulted in a variety of incentive structures and supervisory schemes.

The effects of this incentive structure are dealt with in what is known as “tournament theory”¹²⁷ (1981, Lazear and Rosen; 1983, Green and Stokey).

Workers are motivated to supply effort by the retribution increase they would earn if they win a promotion.

A major problem with tournaments is that individuals are rewarded based on how well they do relative to others. Co-workers might become reluctant to help out others and might even sabotage others' effort instead of increasing their own effort (1989, Lazear; 1997, Rob and Zemsky). This is supported empirically by Drago and Garvey (1997). Firstly, because it is difficult to determine absolutely differences in worker performance. Tournaments merely require rank order evaluation.

Furthermore, when the measurement of workers' productivity is difficult, making it hard to measure effort and/or performance contributions of each participant, it can be hard if not even impossible task, to distinguish

¹²⁷ Under conventional systems workers are paid a piece rate - an amount of money that relates to their output, rather than the time they input. Tournament theory suggests that workers can be rewarded by their rank in an organization, suggesting why large salaries are given to senior executives: to provide a 'prize' to those who put in enough effort to garner one of the top positions. consider the lifetime output of a worker at a firm. This output is dictated by two things - chance and skill. The worker can control his lifetime output by investing in skills early on in life, like studying hard at school and getting good qualifications, but a part of that output will be determined by chance. Participants in the tournament commit their investment early on in life and are unlikely to know each other previously, within the firm they work in, and may not even know each other within the firm. This prevents collusion or cheating in the tournament.

Looking at the tournament in its simplest form, a two player tournament, where there is a prize for the winner and a smaller consolation for the loser. The incentive to win increases as the difference between the losing and winning prize increases, and therefore the investment of the worker is increased as the difference between the winning and losing prizes is increased. It is in the interest of the firm to increase the spread of prizes. However, there is a drawback for the firms. As the workers invest more their costs rise. Competing firms could offer a tournament with a lower spread and attract more workers because they would have to invest less. Therefore, there is an optimal prize spread that firms set, high enough to induce investment but low enough so that the investment is not too expensive for the worker. The prize may take the form of extra cash or a promotion - which means more money, as well as entering a higher level of tournament, where the stakes may be higher.

Data source: Lazear and Sherwin, Edward P. and Rosen; (October 1981); “*Rank-Order Tournaments as Optimum Labor Contracts*”; Journal of Political Economy; vol. 89, n° 1; The University of Chicago Press.

between single contributions and effects or output they are going to generate.

In fact, if the objective of performance evaluation is to induce a precise behaviour, results must be:

1. **Accountable:** accountability is the acknowledgment and assumption of responsibility for actions, outputs, decisions, and policies including the administration, governance, and implementation within the scope of the role or employment position and encompassing the obligation to report, explain and be answerable for resulting consequences.
2. **Measurable:** the results should be quantifiable, either with quantitative or qualitative indicators¹²⁸.

These two variables are not always of an easy understanding.

For the moment, this discussion has been conducted almost entirely for self-interested rational individuals. In practice, however, the incentive mechanisms and their evaluation, which successful firms use takes account of the socio-cultural context they are embedded in (1985, Granovetter; 1995, Fukuyama), in order not to destroy the social capital they might more constructively mobilise towards building an organic, social organization, with the attendant benefits from such things as "*worker loyalty and pride (...) [which] can be critical to a firm's success ...*" (1991, Sappington).

3.5 Solutions: Extrinsic Motivation

A different set of solutions is now considered and proposed according to the different tools, or actions or tenant/s considered;

3.5.1 Incentive Plan Design and Remedies to Shortcomings

Incentive plan which in any way (through stock granting or option granting) use equity based system of executives' compensation should:

1. Basing compensation on increasing the intrinsic value of business would be a far better way of rewarding executives for durable long-term performance, rather than the merely achievement of financial indicators.

For example, CEO compensation might be based on corporate earnings growth, corporate cash-flow (even better, for it is far more difficult to manipulate), and dividend growth, and on return on corporate capital relative to peers and relative to corporations as a group (say, the S&P 500). Such measurements should be taken only over an extended period of time, and only after deducting the corporation's cost of capital.

¹²⁸ See Chapter 1, Paragraph 1.3, page 22.

Financial indicators, such as stock price, or earnings per share, should be used to counterbalance the effects of rewarding executives for durable long-term performance, in the short run, in order to encourage them to bear the appropriate quantity of risks.

2. CEOs' incentive plan should be designed on a contingency approach, considering various factors such as the degree of managerial risk aversion, which in turn might be affected by the manager's age and wealth, the project choices available to the company, the volatility of the company's stock, the expected rate of inflation, and the length of the executive's contract, among other things.

Furthermore, executives' incentive plan should encourage long term thinking and discourage pursuit of short-term profits through different techniques (bearing in mind that the creation of a strong link between compensation and performance, measured over the time horizon of a year, may induce executives into managerial myopia¹²⁹ behaviours):

3. Incentive pay should be spread out over an extended period of years (definitely longer than the permanence of the CEO in the firm), and it should be phased in as well – for example, 50% exercisable on the first exercise date, with 10% exercisable annually over the subsequent five or ten years.

The vesting period, and the timing of exercisability (as well as the unwinding) of stock grants and options grants should be carefully planned in advanced, and shouldn't be left to managerial freedom.

Enabling executives to capture extra profits by controlling the timing of their sales is unlikely to be an efficient compensation mechanism. The profits executives make by selling or hedging large quantities of shares when they know undisclosed bad news are decoupled from performance.

Indeed, managers' ability to control the timing of their sales also produces counterproductive effects on their incentives. Firms could easily prevent executives from selling before bad news is released. Firms could require stocks' sales to be carried out gradually over a specified period, perhaps pursuant to a prearranged plan. Alternatively, executives could be required to publicly disclose in advance their intended trades (1998, Fried). Announcements of unusually large sales would signal the possibility that executives know bad news about the firm, driving the price down and reducing executives' ability to make profits trading on their inside information. Yet firms generally do not impose any such restrictions.

Although an executive becomes entitled to options once they have vested, the compensation contract could preclude the executive from "cashing out" the vested options - that is, from exercising the options and then selling the acquired shares - for a specified period after the vesting date. Such a limitation would maintain incentives for an additional period and thus avoid the need to grant new options to

¹²⁹ At best!

replace the ones that have been cashed out.

Because a firm can be held liable if it fails to take reasonable steps to prevent insider trading by its employees, a number of firms have adopted “trading windows” and “blackout periods” to restrict the times during the year that a manager can sell or buy shares (2000, Bettis, Coles, and Lemmon). But many firms have not put such restrictions in place. Even in firms that have imposed such restrictions, managers who know undisclosed bad news at a time they are permitted to trade may use that trading opportunity to unwind a substantial amount of their holdings.

To be sure, restrictions on executives’ ability to cash out vested incentive instruments impose liquidity and diversification costs on managers that must be balanced against the incentive benefits of restricting unwinding. The efficient arrangement is likely to vary from case to case, depending, among other things, on the magnitude of the executive’s non-equity compensation. But there is no reason to expect that optimal contracts would generally make the vesting date and the cash-out date identical¹³⁰.

Yet, in practice the date on which options vest and the date on which the executives can exercise them are almost always the same.

A minority of firms have created “target ownership plans” that require managers to hold a certain amount of shares, for a certain period (2002, Core and Larcker). But the targets tend to be rather low and there often appears to be no penalty imposed for missing the target. As a result of these weak restrictions, managers exercise many of their options well before the options expire, and sell almost all of the shares thereby acquired (1998, Carpenter; 2000 Ofek and Yermack). Shares that are not sold after option exercise are often hedged or partially hedged in transactions that are not reported to the SEC (2001, Bettis, Bizjack, and Lemmon).

In conclusion Managers’ freedom to unwind incentives and to determine the precise timing of their trades allows them to receive considerable compensation even when the firm ends up doing rather poorly¹³¹.

Furthermore, and perhaps most importantly, managers’ freedom to unwind incentives as soon as they vest and their practice of doing so provides a convenient justification for giving managers additional equity-based compensation: the need to restore the strength of managers’ incentives.

4. There should also be “clawback¹³²” provisions for returning incentive compensation to the company if an accounting restatement of earnings is made. These should be extended far beyond the three year-prevision of Section 954 of the Dodd-Frank Act.

¹³⁰ Yet, in practice the date on which options vest and the date on which the executives can exercise them are almost always the same.

¹³¹ In one notorious case, Enron insiders sold hundreds of millions of shares in the company before the release of information about Enron’s actual financial condition and the resulting collapse of its stock price.

¹³² A clawback is an action whereby an employer or benefactor takes back money that has already been disbursed, sometimes with an added penalty.

The employees' bonuses are, in a clawback scheme, tied specifically to the performance (or lack thereof) of the financial product(s) the individual(s) may have created and/or sold as part of his or her job expecting a high profit. If the product does indeed do well over a long period of time, and permanently improves the nature of the firm, the bonuses paid to the individual are allowed to be retained by the individual. However, if the product fails, and damages the nature of the firm - even years down the line from the product's inception - then the firm has the inherent right to revoke, reclaim, or otherwise repossess some or all of the bonus amount(s).

The usual objective of a clawback provision is to deter managers from publishing incorrect accounting information. Academic research finds that voluntarily adopted clawback provisions appear to be effective at reducing both intentional and unintentional accounting errors¹³³.

5. Factor out windfalls unrelated to the managers' own efforts in calculating bonuses or granting stock or stock options through reduced “wind-fall” provisions: there are many different ways of designing what we call “reduced-windfall” incentive plans – plans that filter out all or some of that part of the stock price increase which is unrelated to managers' performance – including use of “indexed” stock and options to limit “windfalls”, or tougher limits on executives' freedom to sell shares.

One approach could be to relatively evaluate the CEO's performance with the ones of direct competitors, eventually rewarding excess spread surpluses, and punishing spread deficit, basing evaluation on different parameters (such as earnings per share, dividends, ROE, ROA¹³⁴, relative stock price increase, etc.).

Another approach discussed frequently by academics, regarding options, is linking the exercise price of options to a market-wide index or a sector index (1999, e.g. Rappaport). One way is Indexing Operating Performance to exclude market and sector-wide share price movements.

Another strategy is to condition the “vesting” of options on the firm meeting specified performance targets. These targets can be linked to the stock price, earnings per share, or any other measure of firm performance. When the exercise price of an indexed option is linked to market or sector averages, there is a substantial probability that the manager will receive no payoff from the option plan¹³⁵.

6. Set a price to the stock grants, or the option grants out-of-the-money. Out-of-the-money options have a lower expected value than at-the-money options because they are less likely to pay off than at-the-

¹³³ deHaan, Hodge, and Shevlin, Ed, Frank and Terry J.; (2012); *"Does Voluntary Adoption of a Clawback Provision Improve Financial Reporting Quality?"*; Contemporary Accounting Research, forthcoming; paper available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2049442

¹³⁴ Always computed after debt.

¹³⁵ If this possibility is regarded as undesirable, reduced-windfall options can easily be designed to produce a high likelihood of pay-out. For example, the exercise price could be indexed not to changes in the industry or market average but rather to a somewhat lower benchmark - say, the change in the stock price of the firm which is at the bottom 20th percentile of the industry or market. Under such an option plan, executives would have on average an 80 percent probability of outperforming the benchmark and receiving a pay-out. But – at least! - the executives would not be able to profit, as they could under conventional plans, when their performance places them in the bottom 20th percentile.

money options, and if they do pay off the holder receives less value. Thus, for every dollar of expected value a firm can give more out-of-the money options than at-the-money options. By giving more out-of-the money options, the firm can increase the reward to the manager for doing particularly well: these options can hence offer much higher pay-for-performance sensitivity per dollar of expected value than conventional options (1999, Hall). There is even evidence suggesting that giving managers out-of-the-money options rather than at-the-money-options would boost firm value on average (2000, Habib and Ljungqvist).

7. Prevent executives from hedging their stock or stock options in the company, since hedging can weaken or eliminate the incentive effects that these instruments are intended to have on the manager.
8. Including Debt or Debt-Like compensation along with cash and equity based compensation. Equity based compensation encourages risk taking by executives. Making part of an executive compensation in the form of a debt-like instrument should reduce this tendency since debt value does not benefit from successful gambling of company income and more closely align managers with all investors, both shareholders and bondholders.

3.5.2 Shareholders

Robert E. Wright argues in *Corporation Nation* (2014) that the governance of early U.S. corporations, of which over 20,000 existed by the Civil War of 1861-1865, was superior to that of corporations in the late 19th and early 20th centuries because early corporations governed themselves like "republics", replete with numerous "checks and balances" against fraud and against usurpation of power by managers or by large shareholders¹³⁶. In the first half of the 1990s, the issue of corporate governance in the U.S. received considerable press attention further enhanced, in the early 2000s, by the massive bankruptcies (and criminal malfeasance) of Enron and Worldcom, as well as lesser corporate scandals (such as those involving Adelphia Communications, AOL, Arthur Andersen, Global Crossing, and Tyco).

These and other corporate scandals switched on again outraged-shareholders' attention – as well as public opinion and mass media, and thus government – toward the delicate matter of executives' compensation. Stockholders should be constantly aware of their power and should act jointly to ensure that corporate value would not be eventually destroyed by distortion and misuse of managerial power, through:

1. Encourage long term thinking and discourage pursuit of short-term profits through the various techniques of incentive planning expressed just above (Paragraph 3.5.1), integrated by intrinsic rewards and motivations techniques, as will be explained in Paragraph 3.6.

¹³⁶ Wright Robert E.; (2014); *“Corporation Nation”*; Philadelphia: University of Pennsylvania Press.

2. Join themselves into different groups according to the different need of investment they are satisfying: “unity is strength”.

Acting together as a group it’s obviously easier and more efficient (even though a free riding problem may overcome, which could be eventually avoided through the delegation to an independent - from the firm/corporate – auditor). Further monitoring or the undertake of legal action would be more effective and more immediate, and their costs would clearly decrease, as the more the shareholder act as a class, and join into groups.

Furthermore, by acting like a group (we will dedicate two Paragraphs, 3.5.3 and 3.5.4, to this) shareholders can exercise more pressure:

- to turn in their favour regulations, as well as government’s and regulatory authorities’ opinion (Paragraph 3.5.3);
 - to monitor (and let monitor) boards of director, and compensation committee (Paragraph 3.5.4).
3. Take advantage of "say-on-pay" requirements to cast shareholder votes against excessive or otherwise ill-advised pay packages.
 4. Make mandatory the audit of executive pay by an independent firm. These would play a role similar to public accounting firms reporting on corporate financial results. Since executive pay is an extremely technical and complex issue, without an audit to guide shareholders, the power to approve executive pay by vote won't be much help.

In conclusion I want to give a general thought about institutional investors¹³⁷, and their changing investments’ trend in recent years.

In the past institutional investors have been oriented and devoted to long term investments; since the time horizon was usually extended, they were paying lots of attention (through analysing, monitoring, intervening and controlling) and efforts toward the maintenance of correct and sound corporate’s balances.

Nowadays, as a result of many different factors, and among this, surely as a result of executives’ perverse incentive schemes adopted in the financial sector, institutional investors switched their investment horizon toward the middle-short (and sometimes very short either!) term, adopting the “hit and run” technique, which may effectively generate some profit in the imminent, but this at the cost of dismantling corporate’s balances, and undermine future firm’s performance.

¹³⁷ Institutional investor is a term for entities which pool money to purchase securities, real property, and other investment assets or originate loans. Institutional investors include banks, insurance companies, pensions, hedge funds, REITs, investment advisors, endowments, and mutual funds. Operating companies which invest excess capital in these types of assets may also be included in the term.

3.5.3 Government and Regulatory Authorities

The subsequent set of actions I am going to propose, could either be put in place by the government and its regulatory agency without the push of external forces, either the shareholders acting as a group, or some other exogenous event (for instances, scandals) may induce the government to introduce them:

1. Have congress pass a law that sets a ratio of pay between a firm's CEO and its most typical workers or median workers (25X for example) and encourages corporations not to exceed it:
 - by denying them government contracts if they do or,
 - denying corporate income tax deductions on executive compensation in excess of the ratio. The Institute for Policy Studies estimates that capping "tax deductibility at no more than 25 times the pay of the lowest-paid worker could generate more than \$5 billion in extra federal revenues per year.¹³⁸" In 2009, California Representative Barbara Lee was pushing legislation that would cap deductibility at that ratio.
2. Set a maximum wage or maximum compensation for executives. This was enacted in early 2008 – 2009, first \$1,000,000, subsequently \$500,000 per year being the maximum - for companies receiving extraordinary financial assistance from US taxpayers.
3. Increases in compulsory disclosure:
 - Require that board put a monetary value on all forms of compensation and compensation from all sources, and include this information in the compensation tables the SEC requires companies provide, to put an end to stealth compensation.
 - Require that shareholders be provided with information on how much of the gain on the executive stock options comes from general market performance and industry sector performance.
 - Require that shareholders be provided with information on a regular basis of the unloading by the top five executives of any equity instruments received as part of their compensation.
 - Require that shareholders be provided with information on the "performance formulas" used by compensation committees. Business journalist Clive Crook emphasizes this would highlight the awarding of bonuses when a company's performance is "well below the median of the chosen measure of success", i.e. "doing worse than most of the firms in its segment".
 - Take further advantage of the provision requiring corporations to disclose the gap between their

¹³⁸ Anderson and Pizzigati, Sarah and Sam; (12 February 2009); *"The CEO Pay Debate: Myths v Facts"*; The Institute for Policy Studies.

CEO and most typical workers, found in the Dodd–Frank law, by making it more prominent.

4. Increases in transparency, accomplished in part by new SEC rules requiring annual corporate disclosure that provides “the dollar value of all forms of compensation” (including “stealth compensation” in the form of pensions and other post-retirement benefits) and an analysis of the relationship between the past year's pay and performance, as well as more timely and informative disclosure of insider stock purchases and sales;
5. Intervene on the personal income conjunctively with capital gain as well as corporate income tax rates, in order to counterbalance, dis-equilibrative forces which may cause frictions in the market, and generate social disequilibrium¹³⁹.

3.5.4 Boards of Directors (and/or Compensation Committee)

Improvements in board accountability to shareholders, including limits on the use of staggered boards and increased transparency and accountability, granting shareholders the right to nominate directors and propose changes to governance arrangements in the corporate charter. Many strategies have been proposed to empower shareholders to have more control over board of directors by:

1. getting rid of "staggered" boards (where only a fraction of directors are elected each time directors are elected, making it more time consuming and expensive to challenge directors) which offers directors insulation from disgruntled shareholders and resulting proxy contests and hostile acquisition.
2. give any shareholder or group of shareholders who have owned more than 5 percent (or similar significant number) of shares for at least one year, and want to field a slate of directors in board elections, an even playing field with incumbent directors. Distribute proxy statements for them just as the incumbents' statements are, and reimburse reasonable "campaign" costs incurred by them¹⁴⁰.
3. Abolish the practice of having a joint chief executive and chairman of board of directors. Install independent bosses to oversee boards instead. Former Walt Disney Co. chief financial officer and director Gary Wilson states he saw "*boards transformed overnight from supplicants to independents*" when the two roles were separated at companies where he was a director.
4. remove the board's veto power over changes to the company's basic governance arrangements and give

¹³⁹ For instance, raise the tax paid by private equity managers by eliminating the "carried interest" loophole which taxes the profit share portion of their compensation at only 15 percent (the long term capital gains rate). Although private equity managers make up only a fraction of all executives, this costs the US Treasury an estimated \$2.7 billion, according to Congress's Joint Committee on Taxation.

¹⁴⁰ Bebchuck and Fried, Lucian and Jesse; (February 2004); "*Pay without Performance: The Unfulfilled Promise of Executive Compensation*"; Harvard University Press: Cambridge and London.

shareholders the power to initiate and approve by vote proposals to reincorporate or to adopt a charter amendment to corporate charters.

Quietly aware of the “Bebchuk critique” in his testimony, and explicitly aware of it in his AMP paper (2002, Bebchuk, Fried and Walker), Professor Kaplan asks what boards do and if their work is compromised by CEOs. Answering those questions before Congress, he shared results from two of his working papers. If we see evidence that CEO pay is tied to performance and that CEOs are dismissed for poor performance, he argued, then all is well in the boardroom. With respect to the dismissal question, we learn that the CEO turnover rate in the 1970s, 1980s, and 1990s (through 1997) was 10% per year. He reports that the rate increased to 12.8% in the 1998 - 2005 horizon. He views that jump as “substantial” and offers it as evidence of admirable board discipline.

Can we take comfort in knowing that CEOs are now more likely to be fired for poor performance? Again, I don’t think so. Those 10% and 12.8% figures account for retirements, deaths, and voluntary departures of all kinds, as well as any performance-induced involuntary turnover. Given how difficult it was to be fired for poor performance in the 1970s and 1980s, I doubt that a 2.8% increase is meaningful.

Let’s look at the evidence for CEO discipline back when the annual turnover rate was 10%. Gilson (1989) examined the dismissal patterns for two groups of CEOs who led 381 firms in the bottom 5% of the NYSE and AMEX for three consecutive years in the 1979–1984 period. One group led these bottom-dwelling firms absent any other extraordinary signs of distress; the other group led these same bottom-dwelling firms but their firms also defaulted on their debt obligations, restructured their debt outside of bankruptcy, or went into bankruptcy. He found that neither group of CEOs was necessarily destined to lose their jobs. Only 19% of companies in the first group changed their CEO, while 52% of the firms in the second group of even more distressed firms did so. Gilson showed us that CEOs who preside over three straight years of abysmal performance and lead their firms into default or bankruptcy faced only a 50 - 50 chance of losing their jobs back then. That is the kind of board discipline that was associated with a 10% annual turnover rate. I wonder how much more exacting our management discipline is today now that the base rate of dismissal inched up a few notches to 12.8%. The CEO’s job is not as contingent upon performance as Professor Kaplan implies¹⁴¹.

The Gilson (1989) study is just one of hundreds of studies of corporate governance practices. Shleifer and Vishny (1997) and, most recently, Dalton, Hitt, Certo, and Dalton (2007) provided comprehensive reviews of this research. There is also a huge literature on executive compensation, and comprehensive reviews of it (2008, Devers, Cannella, Reilly, & Yoder; 1999, 2002, Murphy; 2000, Tosi, Werner, Katz, & Gomez-Mejia).

¹⁴¹ Walsh, James P.; (May 2008); “*CEO Compensation and the Responsibilities of the Business Scholar to Society*”; Academy of Management Perspectives; page: 31.

3.5.5 Academics and Their Role

On March 1, 2007, Representative Barney Frank and 27 co-sponsors, all fellow Democrats, introduced House Resolution 1257.3 Representative Frank would like a firm's shareholders to approve or disapprove, in a nonbinding fashion, the compensation arrangements for their firm's senior executives. One week later, Steven Kaplan, a distinguished finance professor from the University of Chicago, offered testimony in sharp disagreement with the plan. Unmoved, the House passed the resolution the following month (on April 20, 2007) by a vote of 269 - 134 - 30; 214 Democrats and 55 Republicans supported what is known as the Shareholder Vote on Executive Compensation Act (or more colloquially, the "Say on Pay" initiative).

Professor Kaplan vigorously defends U.S. corporate governance practices.

Scholars, especially social scientists, hold a special place in society. Supported by tax dollars, private giving, or both, they are asked to live in society and, at the same time, somehow examine it as though they live apart from it. It is from that insider/outsider perspective that they can see what others, caught in the pressures of their daily lives, cannot see. Society trusts them to ask and answer questions that matter. And when they are asked to share their expertise with society, it is incumbent upon them to honour that trust and share all that they know about the topic. No matter the question, their answers are more often than not equivocal, bounded, or contested. Weick (1979) reminded us years ago that no theory can be at once simple, accurate, and generalizable¹⁴².

Acknowledging the trade-offs among simplicity, accuracy and generalizability, Weick cautioned us to be realistic, and not arrogant, when we do our research. This caution needs to be emphasized when we offer advice to others¹⁴³.

Academics and financial economists can thus make an important contribution to improve compensation arrangements and in turn shareholder value by analysing the extent to which current compensation practices and new proposal deviate or may deviate from those suggested by optimal contracting and from those associated with the lower level of costs for the principal.

As the world becomes a more complicated place, as economic and environmental conditions become more unforgiving, and as partisan political passions intensify, business scholars may find themselves increasingly asked to share their expertise in support of or opposition to all manner of initiatives. They must neither shy away from this challenge nor numb the public with endless "on the one hand, on the other hand" disquisitions. But as they step up to serve, a real academic must acknowledge the limitations of its own findings and the biases that may shape its conclusions.

I believe that it is academics' duty to honour society's trust by sharing a complete picture of the matter at hand,

¹⁴² Walsh, James P.; (May 2008); "CEO Compensation and the Responsibilities of the Business Scholar to Society"; Academy of Management Perspectives; page: 32.

¹⁴³ Whether it is before Congress or in our classrooms.

no matter its complexities and complications.

3.6 Solutions: Intrinsic Motivation, Prosocial Preferences and Common Pool Approach

High-powered incentive compensation, even if optimally designed and carefully planned, does not solve the problems identified so far in the corporate sector, but can also aggravate them. Preferences are not given but shaped by markets (1998, Bowles). Self-serving behaviour is influenced by the organizational environment (1997, Davis, Schoorman, & Donaldson), thus reflecting the theories of their designers (1996, Ferraro, Pfeffer, & Sutton, in press; Ghoshal & Moran; 1999, Lane, Canella, & Lubatki; 2003, Sundaramurthy & Lewis).

Frey and Osterloh (2005) suggest a model based on a new concept.

The firm is analysed as a bundle of common pool resources. These are collective goods in the form of firm specific investments, generating a joint surplus that cannot be attributed to single actors. The production of such collective goods is based on extrinsic and intrinsic incentives.

In contrast, agency theory assumes that manager's additional or marginal effort is solely motivated by one factor, extrinsic incentives. However, social psychology, as well as psychological economics, indicates that individuals' motivations are more broadly based. Individuals derive utility from the activity itself or because they wish to comply to given normative standards for their own sake. The extent of intrinsically motivated behaviour systematically depends on conditions that can be shaped by appropriate institutions.

Common pool approach emphasises firms as a nexus of firm-specific investments rather than a nexus of individual contracts, with the crucial insight that mediating fiduciaries are required to induce employees to make firm- or team-specific investments.

corporate activities are characterized by a high degree of complex interdependencies (2000 Grandori; 2002, Langlois; 1967, Thompson). Simon (1991), made this point very clear, "*the greater the interdependence among various members of the organization, the more difficult it is to measure their separate contributions to the achievement of organizational goals. But of course, intense interdependence is precisely what makes it advantageous to organize people instead of depending wholly on market transactions*".

Intensive interdependencies for selfish individuals create three problems:

1. The option to free ride,
2. to exploit information asymmetries,
3. and to under invest in firm-specific resources.

Thus, social dilemmas are at the heart of firms' activities, in contrast to competitive markets (2002, Frey & Osterloh; 1992, Miller). Social dilemmas arise if the actions of self-interested individuals do not lead to socially desirable common pools. As has been widely discussed within the knowledge-based theory of the

firm, the most important common pools in companies are accumulated organizational knowledge and organizational routines. For these common resources to become a sustainable, hard-to-imitate competitive advantage, they must be firm-specific (e.g. 1996, Grant; 1996, Kogut & Zander; 1995, Nonaka & Takeuchi; 1996, Spender).

Today, after the occurrence of so many corporate scandals, corporate virtue has proved to be another crucial common pool resource in the firm. Dishonest behaviour was by no means restricted to the top echelon but filtered down through many layers within the corporation (2003, Spector). Corporate virtue entails a generally shared notion of what business honesty is about. It originates from a sufficient number of persons with prosocial preferences who are prepared to not only behave honestly themselves but also to contribute to observing norms of honesty by sanctioning the norm violators.

Social dilemmas can be solved if the good of the community enters into the preferences of the individual, therewith becoming prosocial preferences. The social dilemma is turned into a coordination game where defection is no longer the dominant solution (1974, Sen).

Prosocial preferences are a special case of intrinsic motivation. In the case of intrinsic motivation, an activity or its outcome is valued for its own sake and is self-sustained (1975, Calder & Staw; 1975, Deci). The work content itself produces direct satisfaction or utility without any compensation. In contrast, extrinsic motivation works through indirect satisfaction of needs, most important through monetary compensation.

Many people are indeed prepared to contribute to the common good of their company and community (2002, Frey & Meier). Three major instances have been discussed in the literature:

1. Voluntary rule following: people are prepared to follow rules and regulations that limit their self-interest without sanctions as long as they accept their legitimacy (1999, Tyler; 2000, Tyler & Blader).
2. Extra-role behaviour: according to research in organizational citizenship behaviour, employees do not only observe rules voluntarily but also exert proactive behaviour on behalf of the organization. They provide voluntary inputs, going far beyond the duties stipulated in their employment contracts (1988, Organ; 1995, Organ & Ryan).
3. Open source software production: production is largely based on a gift relationship (e.g. Linux¹⁴⁴), to a large extent without any monetary compensation and private property.

People are prepared to behave in a prosocial way, however prosocial behaviour varies considerably across cultures. Several institutional factors can influence intrinsically motivated prosocial behaviour: the effects can be subdivided (1997, Frey) into crowding-out (Paragraph 3.6.1) and crowding-in (Paragraph 3.6.2).

¹⁴⁴ It is a Unix-like computer operating system assembled under the model of free and open-source software development and distribution. The defining component of Linux is the Linux kernel, an operating system kernel first released on September 17, 1991 by Linus Torvalds.

3.6.1 Crowding-Out Effect

It is treated in two theories:

1. Self-determination theory: according to this theory (1985, 2000, Deci & Ryan), crowding out takes place when perceived self-determination suffers from external interventions in the form of monetary incentives or control. As a result, individuals shift their “locus of causality” from inside to outside. Their attention shifts from the activity itself to the reward or sanction. The content of the activity loses its importance.
2. Theory of conditional cooperation: as people contribute more to common goods, the more they expect others to do so. They are conditional co-operators (2001, Fischbacher, Gächter, & Fehr; 1988, Levi; 2000, Ostrom). On the other hand, many people are conditional defectors. As a consequence, prosocial intrinsic motivation deteriorates if too many people free ride. Employees’ honesty is undermined if they observe that their superiors feather their own nests. They are no longer prepared to solve the first-order social dilemma by, for example, investing in team firm-specific knowledge. Nor do they contribute to the solution of the second-order dilemma by whistleblowing or blaming colleagues who misbehave. Equity-based compensations, as long as they are restricted to the top echelons, contradict what Hansmann (1980) called the no-distribution constraint, which is a major precondition for voluntary donations to organizations: Voluntary contributions cannot be redistributed among those in charge of the organization. Empirical evidence shows that making profit sharing not only available to managers but also to all employees reduces the probability of crime in firms by 34% (2003, Schnatterly). This indicates a greater commitment to corporate virtue if people do not feel exploited.

3.6.2 Crowding-In Effect

A positive effect on intrinsic motivation of an institutional factor is called crowding in.

1. Instructions. People seem to be inclined to do what they are asked to do, especially when the suggestion comes from someone who is perceived as a legitimated authority. Instructions to cooperate in public good games raise the cooperation rate as much as 40% (1995, Sally). In real-life settings, it is shown that people adhere to laws (1990, Tyler,) and accept the decisions of authorities they believe to be legitimate (2002, Tyler & Huo), even if it is not in their self-interest to do so.
2. Framing of socially appropriate behaviour: people are highly sensitive to signals about socially appropriate behaviour.
3. Personal contacts and incomplete contracts. Communication, or other conditions reducing social distance between persons, increases contribution in public good games (1988, Dawes, van de Kragt, &

Orbell; 1995, Frey & Bohnet; Ledyard).

4. Procedural fairness greatly affects the willingness to contribute to common goods and to follow rules that are not in favour of own self-interest (2003, Tyler & Blader; 1992, Tyler & Lind). The characteristics that lead to perceived procedural fairness can be summarized as participation, treatment with dignity and respect, and neutrality. A precondition of neutrality is the belief that authorities do not allow their personal advantages and biases to enter into their decisions.

Those persons who set the regulations should not be given an incentive to manipulate the corresponding criteria in their own favor (2003, Frey). This is exactly what Weber (1978) believed to be essential for the efficiency of bureaucracy¹⁴⁵.

5. Avoiding the self-serving bias: there is strong empirical evidence that even honest people are subject to an unconscious self-serving bias. In situations characterized by ambiguity or discretion, it is typical that managerial decision-making judgments of what is beneficial for others conflates with what one considers beneficial for oneself. Unlike conscious corruption, such conflation cannot be deterred by sanctions (1997, Babcock & Loewenstein; 2002, Bazerman, Loewenstein, & Moore). Instead, it can be reduced by lowering the incentives to take care of one's own interests.

3.7 Conclusions

Since the work as already been so long end extensive, I conclude with few lines.

Agency theory as the dominant approach to corporate governance is faced with widely publicized corporate scandals. High powered incentive compensation, aggravates the problems in the corporate sector. Pay for performance gives managers and directors incentives to manipulate performance criteria and to resort to fraudulent accounts to the disadvantage of the long-term interests of the firm.

Even if equity-based compensation provides managers and directors with desirable monetary incentives, the system of pay for performance needs to be improved and supported by prosocial motivations.

I have the strong believe that these policies should be set up in practice, and evaluated. Their implementation costs would be relatively modest, and it would force all actors - government, boards of directors, compensation committee, executives, compensation advisors, etc - and the shareholders, especially institutional shareholders - to consider compensation issues with greater care.

¹⁴⁵ In management, the exact opposite took place: The top executives were given the opportunity to manipulate the criteria by which they were evaluated and compensated. Under these circumstances, neutrality is hard to suppose.

Employment, productivity and earnings in U.S. and Western economies depend heavily on resource allocations decisions made by the CEOs and their senior management teams, at a relatively small number of large companies. A company's senior executives, with the support and under the advice of boards of directors, are responsible to decide the proportion of resources to allocate to investments in productive capability, and the residual distributions to shareholders. Central to corporate resource-allocation decisions are the modes of compensation that incentivize and rewards CEOs.

Senior management or executive management is generally a team of individuals, at the highest level of management of an organization, who have the day-to-day tasks of managing that organization. Senior managers hold specific executive powers delegated to them with and by authority of a board of directors and/or the shareholders: usually the senior management of a company is appointed by the corporation's board of directors and approved by shareholders. A management team is usually composed by: Chief Executive Officer (CEO), Chief Financial Officer (CFO), Chief Marketing Officer (CMO), General Counsel.

In many countries, there is a separate executive board for day-to-day business and supervisory board (elected by shareholders) for control purposes. The board of directors is technically not part of management itself (since it should be independent from the latter, to be able to supervise it better), although there are frequent.

Most CEO compensation packages contain five main, basic components: salary, benefits, incentive pay, with a short-term focus (they measure performance over a period of one, or less than one, year. Usually are formula-driven and have some performance criteria attached), incentive pay, with a long-term focus (3-5 years is common, they are projected to counterbalance short term incentives, in order to better align managers' and shareholders' objectives, and to avoid the risk of over-incentivize managers to enhance current performance, at expenses of long term one - short termism) and, last but not least, severance, or pensions or, more in general deferred compensation. In addition, CEOs often receive contributions to extra-defined-benefit, such as Supplemental Executive Retirement Plan (SERP), various perquisites, and other several single-payments.

We now introduce the four more common stock grants and stock option grants.

- Stock grants and restricted stock grants: employer pays a part or all of the compensation in the form of corporate stock. Restricted stock is not fully transferable until certain conditions (restrictions) have been met.
- Stock Option grants and restricted option grants: usually, a restricted "call option." It gives the recipient the right (but not the obligation) to buy, if determined condition (restrictions) have been met, the company's stock at a predetermined price.

As regards to tax purposes, in United States there are two class of stock options:

- Non-qualified stock option (NSO) grants are tax deductible by the company that provides them. Employee pays income tax on the difference between these two prices upon purchase. It's important to note that employees are not subject to taxes when the option becomes available to them; rather, they only pay taxes when they purchase a stock option.
- Qualified stock option (ISO): taxed at a capital gain rate, instead of paying ordinary income taxes upon it, and require a plan document that clearly outlines how many options are to be given to which employees, and those employees must exercise their options within 10 years of receiving them. Furthermore, the option exercise price cannot be less than the market price of the stock at the time the option was granted. Statutory stock options cannot be sold until at least a year after the exercise date and two years after the date the option was granted.

Incentive stock options are similar to non-qualified stock options in terms of form and structure: schedule, vesting and exercise period and/or methods, bargain element, clawback provisions, U.S. taxation.

The controversy over CEO compensation has reached new heights with labour unions, media, and even political candidates from both major parties (like in the US), expressing public criticism. According to Democratic candidate Hillary Clinton, the average CEO "... is now earning 200 times the average hourly wage. Twenty years ago the ratio was about forty times. People all over this country are really upset about this."

According to Republican candidate Donald Trump, CEO compensation is a "total and complete joke.... They get whatever they want." On its website, the AFL-CIO cites a CEO-to-worker pay ratio of 331:1, underlying how, in recent decades, corporate CEOs have been taking a greater share of the economic pie while wages have stagnated and unemployment remains high. Executive pay packages in the United States have been taken to task as excessive, lacking transparency, controlled by their beneficiaries rather than shareholders, and rewarding the executive behaviour that ought to be discouraged.

Both the level and the composition of CEO pay have changed dramatically over time.

The post-WWII era can be divided into at least two distinct periods. Prior to the 1970s, we observe low levels of pay, little dispersion across top managers, and only moderate levels of equity compensation. From the mid-1970s to the end of the 1990s, all compensation components grow dramatically, and differences in pay across executives and firms widen. By far the largest increase comes in the form of stock options, which become the single largest component of CEO pay in the 1990s.

Between 1980 and 2004, Mutual Fund founder John Boogle estimates total CEO compensation grew 8.5 percent per year compared to corporate profit growth of 2.9 percent per year and per capita income growth of 3.1 percent. Forbes reports that from 1989 through 2008 total compensation for CEOs of Fortune 500 firms increased at 9.5% per year, while S&P 500 index increased at a rate of 8,2%, and the average wages for

workers, increased by only 4.3%. By comparison, in 2007 CEOs made 344 times what the average worker made, up from 71 times in 1989.

On a much wider scale, as reported (2012) by J. Bakija, A. Cole and B.T. Heim, share of the nation's income going to the top percentiles of the income distribution in the United States has increased dramatically over the past three decades.

They found out that, executives, managers, supervisors, and financial professionals account for about 60 percent of the top 0.1 percent of income earners in recent years, and can account for 70 percent of the increase in the share of national income going to the top 0.1 percent of the income distribution between 1979 and 2005. Chapter 2 introduces different views over the evolution and the composition of executive compensation. We will first give an historical-perspective view, analysing the works of Hopkins and Lazonick (2016) and Murphy (2012), to then approach the "optimal contracting" view (2000, Hubbard; 2008, Kaplan), and finally evaluate the "managerial power" approach (2004, Fried and Bebchuck, et al.).

Most recent analyses of executive compensation have focused on efficient-contracting and managerial-power rationales for pay, while ignoring or downplaying the causes and consequences of disclosure requirements, tax policies, accounting rules, legislation, and the general political climate. Government intervention has been both a response to and a major driver of time trends in executive compensation over the past century, and any explanation for pay that ignores political factors is critically incomplete.

Two broad patterns for government intervention into CEO pay. The first can be described as knee-jerk reactions to isolated perceived abuses in pay, leading to disproportionate responses and a host of unintended and undesirable consequences. The second pattern – best described as “populist” or “class warfare” – arises in situations where CEOs (and other top executives) are perceived to be getting richer when lower-level workers are suffering. The associated attacks on wealth in these situations gave rise to disclosure rules in the 1930s, limits on tax deductibility for CEO pay in the early 1990s, and wide-ranging pay regulations in the 2010 Dodd-Frank Act. Beyond these two broad patterns, indirect intervention in the form of accounting rules, securities laws, broad tax policies, and listing requirements have also had direct impact on the level and composition of CEO pay.

After the creation of a permanent income tax under the 16th Amendment in 1913, considerable U.S. legislation concerning the gains from exercising an executive stock option focused on the appropriate tax treatment.

At issue was whether the exercising of a stock option provided the executive with additional employee compensation or an ownership stake in the company. If it was simply compensation, then the taxable event would be taxed at the ordinary income-tax rate. If, however, the acquired shares made the executive an owner, then the taxable event would occur when the executive decided to sell the shares and the realized gains could be taxed at the capital-gains rate. During the 1920s the IRS generally held that the taxable income generated by stock options was compensation, not capital gains, and hence should be taxed at the ordinary rate in the

year in which the option was exercised.

The initial push for pay disclosure was not driven by shareholders but rather by “New Deal” politicians outraged by perceived excesses in executive compensation. Following the Securities Act of 1934, the responsibility for enforcing pay disclosures for top executives in publicly traded corporations was consolidated into the newly created Securities and Exchange Commission (SEC). In December 1934, the SEC issued permanent rules demanding that companies disclose the name and all compensation (including salaries, bonuses, stock, and stock options) received by the three highest-paid executives. The securities of companies not complying would be removed from exchanges. The demand for disclosure reflects both legitimate shareholder concerns and public curiosity. Public disclosure effectively ensures that executive contracts in publicly held corporations are not a private matter between employers and employees but are rather influenced by the media, labour unions, and by political forces operating inside and outside companies.

The evolution of CEO compensation since WWII can be broadly divided into two distinct periods. Prior to the 1970s, we observe low levels of pay, little dispersion across top managers, and moderate pay-performance sensitivities. From the mid-1970s to the early 2000s, compensation levels grow dramatically, differences in pay across managers and firms’ employees widen, and equity incentives tie (or at least attempt to tie) managers’ wealth closer to firm performance.

By 1950, the tax issue surrounding stock options was a big deal: the highest marginal tax rates on ordinary and corporate incomes had swelled to 91% and 42% (from 25% and 12% in 1928, respectively), compared to a capital gains rate of 25% (from 12.5% in 1928). Corporate executives, lobbied for capital-gains treatment for stock options, contending that their managerial performance would be enhanced by having a proprietary interest in the corporations that employed them.

The Revenue Act of 1950 acceded to this line of argument, defining a *restricted* stock option. In 1950 the capital-gains tax rate was still 25 percent, while the marginal income-tax rate on income over \$200,000 was 84.4 percent. From 1951 through 1964 this top ordinary rate stood at 91 percent.

In 1961 Gore introduced a bill in Congress to rescind the tax privileges of executive stock options, arguing that the 1950 legislation created a “glaring loophole” in the tax law that had resulted in “flagrant abuses.” In 1964 Congress revised the tax code pertaining to stock options.

Under the Revenue Act of 1964:

- Executives were required to hold stock acquired through option exercises for three years (rather than six months) in order to be taxed at the lower capital gains rate.
- Exercise prices could be no less than 100% (rather than 85%) of the grant-date market prices.
- The maximum option term was reduced from ten years to five years.
- The option price could not be reduced during the term of the option, nor could an option be exercised while there is an outstanding option issued to the executive at an earlier time.

- Finally, (but perhaps most importantly), the 1964 law reduced the top marginal tax rate on ordinary income from 91% to 70%, and progressively raised capital gain tax rate, to a high of 39,9% in 1976.

While cash compensation escalated (at least in nominal terms) during the 1970s, the use of stock options was relatively stagnant. Part of the declining popularity of options reflected the change in tax policies in 1964 and 1969 that made qualified stock options less attractive, coupled with their outright prohibition in 1976. More importantly, was the prolonged stagnation in the stock market. The void in compensation created by worthless stock options was quickly filled by a plethora of new plans designed to provide more predictable pay-outs, including: book-value plans, long-term performance plans, guaranteed bonuses and various perquisites such as low-interest loans, yachts, limousines, corporate jets, club memberships retreats at exotic locations, etc. etc. In August 1977, the SEC issued Interpretive Release #5856 stating that the value of perquisites (and other forms of compensation) must be included as compensation in proxy statements and in 1979 IRS issued significant new auditing guidelines aimed at detecting and taxing executive perquisites.

On the taxation side, the switch to non-qualified options in the 1970s – which were considered compensation for tax purposes – raised a new question: how should options be accounted for in company income statements? One possibility was to follow the tax code by recognizing an accounting expense at the time an option is exercised. But, in spite of its simplicity, this method is inconsistent with the basic tenet of accounting that expenses should be matched to the time period when the services associated with those expenses were rendered. Rather, the tenet suggested that options should be expensed over their term based on the grant-date value of the option. At the time, however (and for a long time to come) there was no accepted way of placing a value on an employee stock option. In October 1972, the Accounting Principles Board issued APB Opinion No. 25, “Accounting for Stock Issued to Employees.” Under APB Opinion No. 25, the compensation expense associated with stock options was defined as the (positive) difference between the stock price and the exercise price as of the first date when both the number of options granted and the exercise price become known or fixed. The expense for this spread between the price and exercise price – called the intrinsic value – was amortized over the period in which the employee is prohibited from exercising the option.

Although CEO pay and bottom-line corporate profitability remained relatively stagnant from 1970-1982, productivity did not. Spurred in part by the oil-price shocks of 1973 and 1977, this period brought significant technological advances that improved productivity, declines in regulation, and increases in global trade, what Jensen (1993) calls the “Modern Industrial Revolution”. By the early 1980s, most sectors in the U.S. economy were saddled with increasing excess capacity: technological change dramatically increased capacity for computing firms, while increased competition from non-unionized entrants created excess capacity in a variety of industries. The executive compensation practices of the 1970s provided few incentives for executives to pursue value-increasing reductions in excess capacity and disgorgements of excess cash. Equity-based compensation accounted for only a small fraction of CEO pay, and the options that existed often were

underwater or expired worthless. Annual bonuses were focused on beating annual budget targets rather than creating long-run value. Performance-based terminations were almost non-existent and the managerial labour market was similarly ineffective in disciplining poor performance. Boards of directors typically dominated by corporate insiders (in influence if not in numbers), had little reason to reduce corporate waste as long as the companies were delivering positive nominal profits. However, pressures to improve performance and disgorge cash were ultimately introduced by the capital markets, including “hostile takeover”.

The takeover market was complemented by the emergence of leveraged buyouts (LBOs). The emergence of LBOs and leveraged recapitalizations created substantial amounts of shareholder value in firms with stable cash flows and no productive alternative uses. The emerging market for corporate control had pronounced effects on the U.S. stock market. After nearly two decades of stagnation, the Dow Jones Industrial Average rallied from below 800 to over 2700 between mid-1982 and mid-1987 (i.e., appreciating nearly 30% per year for five years). While the largest beneficiaries were shareholders in firms that became takeover targets, the rally was broad based and lifted share prices across a wide range of firms and industries.

Academics recommended that executive pay be tied more closely to company value through increases in stock options and other forms of equity-based incentives. These pressures began having an impact: non-equity-based CEO pay continued to grow in real terms after the mid-1980s, but became a smaller part of the total compensation package. For the first time since the 1950s, stock options re-emerged as the dominant form of incentives compensation. The CEO pay debate achieved international prominence during the 1990-1991 recession, ending up with SEC’s new 1992 disclosure rules, which required companies to produce:

- A Summary Compensation Table summarizing the major components of compensation received by the CEO and other highly paid executives over the past three years.
- Tables describing option grants, option holdings, and option exercises in detail.
- A chart showing the company’s stock-price performance relative to the performance of the market and their peer group over the prior five fiscal years;
- A report by the compensation committee describing the company’s compensation philosophy.
- Overall, the new rules dramatically increased the information available about stock option grants and holdings, and the performance graph cemented the idea that the objective of the firm was to create shareholder value.

The median pay for CEOs in S&P 500 firms more than tripled between 1992 and 2001, driven by an explosion in the use of stock options. CEO incentive compensation in the early 1990s was split about evenly between options and accounting-based bonuses. By 2000, stock options accounted for more than half of total compensation for a typical S&P 500 CEO. Six main factors that fuelled the explosion in stock options: (1) Shareholder pressure for equity-based pay; (2) SEC holding-period rules; (3) SEC option disclosure rules; (4) Clinton’s \$1 million deductibility cap; (5) New accounting rules for options; (6) NYSE listing requirements.

Accounting scandals erupted across corporate America during the early 2000s: in the midst of these scandals, Congress quickly passed the Sarbanes-Oxley Act in July 2002, setting or expanding standards for accounting firms, auditors, and boards of directors of publicly traded companies. The Act was primarily focused on accounting irregularities and not on compensation. However, Congress could not resist the temptation to use the new law to further regulate executive pay. First, Section 402 of Sarbanes-Oxley prohibited all personal loans to executives and directors. Second, Section 304 of Sarbanes-Oxley requires CEOs and CFOs to reimburse the company for any bonus or equity-based compensation received, and any profits realized from selling shares, in the twelve months commencing with the filing of financial statements that are subsequently restated as a result of corporate misconduct. This “clawback” provision of Sarbanes-Oxley – which was subsequently extended in the TARP legislation and Dodd-Frank Financial Reform Act was notable mostly for its ineffectiveness. Finally, Section 403 of Sarbanes-Oxley required that executives disclose new grants of stock options within two business days of the grant.

In 2005, academic research by University of Iowa professor Erik Lie and subsequent investigations by the Wall Street Journal unearthed a practice that became known as option backdating. The Wall Street Journal’s crusade against backdating triggered SEC investigations into more than 140 firms. The SEC prosecuted backdating cases with a zeal usually reserved for hardened criminals. Changes in reporting requirements in 2002 essentially put an end to option backdating for top-level executives more than two years before academics and the media uncovered the practice.

Meanwhile, as a direct response to Enron scandal, Section 409(A) was added to the Internal Revenue Code as part of the American Jobs Creation Act of 2004. In essence, the objectives of Section 409(A) were to limit the flexibility in the timing of elections to defer compensation in nonqualified deferred compensation programs, to restrict withdrawals from the deferred accounts to pre-determined dates, and to prevent executives from receiving severance-related deferred compensation until six months after severance. Section 409(A) imposes taxes on individuals with deferred compensation as soon as the amounts payable under the plan are no longer subject to a substantial risk of forfeiture.

The first decade of the new century brought several important changes in the level and composition of CEO pay: median grant-date total CEO pay in the S&P 500 declined from \$9.3 million in the peak year of 2001 to \$9.0 million in 2011, representing the first prolonged stagnation in CEO pay since the early 1970s.

The decrease in pay primarily reflects both a substantial decline in the grant-date value of stock options, and a shift in the industry composition of the S&P 500. The percentage of companies granting options to their CEOs in each year increased from about 63% in 1992 to 87% by 2001, falling to 68% in 2011, while the percentage of companies making restricted stock or performance-share grants more than tripled from 25 percent to 82 percent. The trend suggests a substitution of stock grants for stock options, although more than half of the S&P 500 CEOs have received both options and restricted stock annually since 2006.

The scandals that erupted across corporate America during the early 2000s focused attention on the quality of accounting disclosures, which in turn renewed pressures for companies to report the expense associated with stock options on their accounting statements. Shareholder groups began demanding shareholder votes on whether options should be expensed.

The Emergency Economic Stabilization Act of 2008 (EESA) is a law enacted in response to the subprime mortgage crisis, which gives the Treasury Secretary the authority to buy up to \$700 billion of troubled assets, in order to improve liquidity in the market, stabilize economy and restore investors' confidence. It required financial institutions, to sell their assets to TARP in order to issue equity warrants or equity or senior debt securities to the Treasury. While applying only to TARP recipients the October 2008 EESA covered the top-five executives, and covered a much broader set of material inaccuracies in performance metrics when compared to Sarbanes-Oxley Act.

On February 4, 2009, President Obama's administration responded with its own proposal for executive-pay restrictions that distinguished between failing firms requiring exceptional assistance and relatively healthy firms participating in TARP's Capital Purchase Program. Separate bills proposing amendments to EESA had been passed by both the House and Senate, and it was up to a small conference committee to propose a compromise set of amendments that could be passed in both chambers. On February 13th the conference chairman (Senator Chris Dodd) inserted a new section imposing restrictions on executive compensation that were opposed by the Obama administration and severe relative to both the limitations in the October 2008 version and the February 2009 Obama Proposal. Nonetheless, the compromise was quickly passed in both chambers with little debate and signed into law as the American Recovery and Reinvestment Act of 2009 by President Obama on February 17, 2009 (ARRA).

In July 2010, President Obama signed into law the Dodd-Frank Wall Street Reform and Consumer Protection Act or Dodd-Frank Act. Passed as a response to the Great Recession, it brought the most significant changes to financial regulation in the United States since the regulatory reform that followed the Great Depression. It made changes in the American financial regulatory environment that affect all federal financial regulatory agencies and almost every part of the nation's financial services industry. As the extensive title of the Act declaims, its intents are to promote the financial stability of the United States by improving accountability and transparency in the financial system, to end "too big to fail", to protect the American taxpayer by ending bailouts and to protect consumers from abusive financial services practices.

Executive compensation has evolved over time in response to changes in both economic and political environments. Government intervention has been both a response to and a major driver of time trends in executive compensation over the past century, and any explanation for pay that ignores political factors is critically incomplete. What makes CEO pay both interesting and complicated is the fact that the efficient contracting, managerial power, and political paradigms co-exist, interact, and are plausible at the same time.

At one end of the spectrum, CEO pay is viewed as the efficient outcome of a labour market in which firms optimally compete for managerial talent. At the other end of the spectrum, the high levels of CEO pay are seen as the result of executives' ability to set their own pay and extract rents from the firms they manage.

According to Kaplan (2008), and others, while corporate governance and CEO pay are not perfect, a great deal of evidence suggests that CEO pay is largely determined by market forces. Since both shareholders and executives are equally informed and acting in their own interest, according to the optimal contracting view, incentive contracts, while aligning executives' and shareholders' objectives, encourage managers to maximize profits, and so shareholders return (MSV Theory). The bargain between (and the successive monitoring activity, operated by one of) the two parts happens at an arm's length, thus eliminating unwise compensation practices. According to supporters of this approach, rising in CEO pay, therefore, appears to be part of (not the cause of) the general increase in economic inequality: market forces (and arm's-length bargaining) have driven the large increase in pay of this as well as the other groups. Main points of the supporters of this view are that CEOs are strongly paid for performance and boards do monitor CEOs; CEO tenures are lower than they have been since tenures began to be measured in the 1970s; CEO turn-over is more closely tied to stock performance than it has been since turn over began to be studied in the 1970s. All of these factors suggest that the CEO job has become increasingly difficult and less pleasant.

On the contrary, the rent extraction view posits that weak corporate governance and acquiescent boards allow CEOs to (at least partly) determine their own pay, resulting in inefficiently high levels of compensation. Managerial power theory attempts to explain high executive pay, arguing that executive compensation is often excessive when compared against a hypothetical, economically efficient compensation contract. The theory also argues that executive pay does not correlate to performance: in other words, high earners are not necessarily high performers. "Managerial power approach," focuses on a different link between the agency problem and executive compensation. Under this approach, executive compensation is viewed not only as a potential instrument for addressing agency problems, but also as part of the agency problem itself.

All three the approaches, governmental intervention, managerial power and competitive market forces are important determinants of CEO pay, and that neither approach alone is fully consistent with the available evidence. Although one approach is conceptually quite different from the other two approaches, they should not be proposed as a unique possibility nor complete replacement to the others. Compensation arrangements might be shaped both by market forces that push toward value-maximizing arrangements, and by the influence of managerial power, leading to departures from these arrangements in directions favourable to managers, which are then mitigated by government intervention. The managerial power approach simply claims that these departures from value-maximizing arrangements are substantial and that compensation practices thus cannot be adequately explained by optimal contracting alone. The optimal contracting view recognizes that managers suffer from an agency problem and do not automatically seek to maximize shareholder value. Thus,

providing managers with adequate incentives is important.

Corporate scandals, reflected in excessive management compensation and fraudulent accounts, cause great damage. Agency theory's insistence to link the compensation of managers and directors as closely as possible to firm performance is a major reason for these scandals. Agency theory can be subdivided in two models: (1) adverse selection, (2) moral hazard. The agency problem is a conflict of interest inherent in any relationship where one party is expected to act in another's best interests.

A principal-agent model of CEO pay permeates almost all works on CEO compensation. According to this model, principals must delegate control of the firm to an agent (the CEO) who may be unwilling to work hard and whose objectives may not be fully aligned with those of the firm's principals. Incentive contracts offer a partial solution to this agency problem. This agency problem, while bearing a major responsibility for the rise in CEO compensation, it also permeates corporate governance at all its levels. The deviation from the principal's interest by the agent is called "agency costs". Managerial power and rent extraction behaviours are likely to have an important influence on the design of compensation arrangements; solutions adopted so far have used incentive pay, to try to overcome the shortcomings deriving from this information asymmetry.

Much research has focused on how executive compensation schemes can help alleviate the agency problem in publicly traded companies. To adequately understand the landscape of executive compensation, however, it is necessary to recognize that compensation schemes are also partly a product of this same agency problem.

Compensation arrangements currently provide as weak incentives to reduce managerial slack and increase shareholder value as would be provided by arm's length arrangements.

Also Bebchuk and Fried (2003), though arguing that executive compensation is part of the agency problem itself, still believe in the basic message of agency theory: in the opinion of Bebchuk and Fried, to overcome the failures identified, pay for performance must be improved.

To curb opportunistic behaviour, agency theory argues that the CEOs' and directors' incentives need to be aligned with shareholders by tying pay to performance and by providing managers and directors with equity-based stakes in their firms. Corporate policy has widely followed this prescription. In 2001, equity-based pay constituted about two thirds of the median annual pay of U.S. top executives, compared to zero in 1984 (2003, Hall).

My point of view is that, despite its dominance, since it has been always used as unique remedy, the agency model (and its solutions adopted so far) has proved to be seriously incomplete, and to partly work as a detrimental force to impede executives' rent extractions. High-powered incentive compensation, even if it could be optimally designed, does not solve the problems in the corporate sector identified but aggravates it, when considered alone.

Frey and Osterloh suggest a model based on a new concept, based on intrinsic and extrinsic incentives. Psychologists have proposed some different ways of thinking about motivation, including one method that

involves looking at whether motivation arises from outside (extrinsic) or inside (intrinsic) the individual: in fact, human beings derive utility from the activity itself, or because they wish to comply to given normative standards, or for the reward associated. Extrinsic motivation occurs when we are motivated to perform a behaviour or engage in an activity to earn a reward or avoid punishment. Intrinsically motivated behaviours are performed because of the sense of personal satisfaction that they bring.

The design of an efficient incentive system, needs the use of an approach capable to consider either the characteristics of the business, and of the much wider habitat-industry in which it is operating, either the functions and the role, as well as the social and psychological identikit and inclinations of the person involved. Contingency approach is a concept in management stating that there is no one universally applicable set of management principles, neither rules, nor solutions by which to manage organizations: there is no reason to expect that “one size fits all”. Thus, the implementation of the same incentive plan within enterprises which present a different corporate culture, or structure, or operative system or within people asked to perform different tasks, and having different attitude toward risk, decision making, future expectations, may have very different result. Incentives can be restructured through individual contracts, by connecting as closely as is optimal the information available about executives’ performance, and the compensation for that performance. Because of differences in the quantity and quality of information available about the performance of individual employees, the ability of employees to bear risk, and the ability of employees to manipulate evaluation methods, the structural details of individual contracts vary widely, including such mechanisms as discretionary bonuses, promotions, profit sharing, efficiency wages, deferred compensation, stock grants, stock-options grants and so on. Milgrom and Roberts (1992) identify four principles of contract design: (1) when perfect information is not available, Holmström (1979) developed the Informativeness principle, which states any measure of performance that (on the margin) reveals information about the effort level chosen by the agent should be included in the compensation contract. This includes, for example, Relative Performance Evaluation; (2) the Incentive-Intensity principle states that the optimal intensity of incentives depends on four factors: the incremental profits created by additional effort, the precision with which the desired activities are assessed, the agent’s risk tolerance, and the agent’s responsiveness to incentives; (3) the Monitoring Intensity principle, is complementary to the second; in that situations in which the optimal intensity of incentives is high; (4) Equal Compensation Principle, which essentially states that activities equally valued by the employer should be equally valuable to the employee. This relates to the problem that employees may be engaged in several activities, and if some of these are not monitored or are monitored less heavily, these will be neglected, as activities with higher marginal returns to the employee are favoured.

The major problem in measuring performance is the setting of a standard by which to judge the performance: it is convenient the use some form of relative performance evaluation. Subjective performance is typically used for jobs with a high degree of complexity. Problems with subjective performance evaluation have resulted

in a variety of incentive structures and supervisory schemes. When the measurement of workers' productivity is difficult, making it hard to measure effort and/or performance contributions of each participant, it can be hard if not even impossible task, to distinguish between single contributions and effects or output they are going to generate. In fact, if the objective of performance evaluation is to induce a precise behaviour, results must be: (1) accountable, (2) measurable.

A different set of solutions is now considered and proposed according to the different tools, or actions or tenant/s considered:

6. Incentive plan should: (1) Basing compensation on increasing the intrinsic value of business, rather than the merely achievement of financial indicators; (2) CEOs' incentive plan should be designed on a contingency approach;

Furthermore, executives' incentive plan should encourage long term thinking and discourage pursuit of short-term profits through different techniques: (3) incentive pay should be spread out over an extended period of years and it should be phased in as well. The vesting period, and the timing of exercisability (as well as the unwinding) of stock grants and options grants should be carefully planned in advanced, and shouldn't be left to managerial freedom. Firms could require stocks' sales to be carried out gradually over a specified period, perhaps pursuant to a prearranged plan. Alternatively, executives could be required to publicly disclose in advance their intended trades (1998, Fried). A number of firms have adopted "trading windows" and "blackout periods" to restrict the times during the year that a manager can sell or buy shares (2000, Bettis, Coles, and Lemmon); (4) "clawback" provisions for returning incentive compensation to the company if an accounting restatement of earnings is made; (5) factor out windfalls unrelated to the managers' own efforts in calculating bonuses or granting stock or stock options through reduced "wind-fall" provisions. One approach could be to relatively evaluate the CEO's performance with the ones of direct competitors, eventually rewarding excess spread surpluses, and punishing spread deficit, basing evaluation on different parameters. Another approach discussed frequently by academics, regarding options, is linking the exercise price of options to a market-wide index or a sector index (1999, e.g. Rappaport). Another strategy is to condition the "vesting" of options on the firm meeting specified performance targets; (6) set a price to the stock grants, or the option grants out-of-the-money; (7) prevent executives from hedging their stock or stock options in the company; (8) including Debt or Debt-Like compensation along with cash and equity based compensation.

7. Shareholders: should be constantly aware of their power and should act jointly to ensure that corporate value would not be eventually destroyed by distortion and misuse of managerial power, through: (1) encourage long term thinking and discourage pursuit of short-term profits through the various techniques of incentive planning expressed just above; (2) Join themselves into groups: by acting like

a group, shareholders can exercise more pressure: (a) to turn in their favour regulations as well as government's and regulatory authorities' opinion; (b) to monitor boards of director.

(3) Take advantage on the say-on-pay; (4) make mandatory the audit of executive pay by an independent firm.

8. Government: (1) pass a law that sets a ratio of pay between a firm's CEO and its most typical workers or median workers, and encourages corporations not to exceed it by: (a) by denying them government contracts if they do or, (b) denying corporate income tax deductions on executive compensation in excess of the ratio.

(2) Set a maximum wage or maximum compensation for executives; (3) increases in compulsory disclosure; (4) increases in transparency; (5) Intervene on the personal income conjunctively with capital gain as well as corporate income tax rates, in order to counterbalance, dis-equilibrative forces which may cause frictions in the market, and generate social disequilibrium.

9. Boards of directors: improvements in board accountability to shareholders, including limits on the use of staggered boards and increased transparency and accountability, granting shareholders the right to nominate directors and propose changes to governance arrangements in the corporate charter.

10. Academics: scholars, especially social scientists, hold a special place in society. Supported by tax dollars, private giving, or both, they are asked to live in society and, at the same time, somehow examine it as though they live apart from it. It is from that insider/outsider perspective that they can see what others, caught in the pressures of their daily lives, cannot see. As the world becomes a more complicated place, as economic and environmental conditions become more unforgiving, and as partisan political passions intensify, business scholars may find themselves increasingly asked to share their expertise in support of or opposition to all manner of initiatives. They must neither shy away from this challenge nor numb the public with endless "on the one hand, on the other hand" disquisitions.

Frey and Osterloh (2005) analysed the firm as a bundle of common pool resources. These are collective goods in the form of firm specific investments, generating a joint surplus that cannot be attributed to single actors. The production of such collective goods is based on extrinsic and intrinsic incentives. In contrast, agency theory assumes that manager's additional or marginal effort is solely motivated by one factor, extrinsic incentives. Individuals derive utility from the activity itself or because they wish to comply to given normative standards for their own sake. The extent of intrinsically motivated behaviour systematically depends on conditions that can be shaped by appropriate institutions.

Intensive interdependencies for selfish individuals create three problems: (1) the option to free ride, (2) to exploit information asymmetries, and (3) to under invest in firm-specific resources.

Thus, social dilemmas are at the heart of firms' activities, and they arise if the actions of self-interested individuals do not lead to socially desirable common pools. Corporate virtue has proved to be another crucial

common pool resource in the firm.

Social dilemmas can be solved if the good of the community enters into the preferences of the individual, therewith becoming prosocial preferences. The social dilemma is turned into a coordination game where defection is no longer the dominant solution (1974, Sen). Prosocial preferences are a special case of intrinsic motivation. People are prepared to behave in a prosocial way, however prosocial behaviour varies considerably across cultures. Several institutional factors can influence intrinsically motivated prosocial behaviour: the effects can be subdivided (1997, Frey) into crowding-out and crowding-in.

I conclude with few lines. Agency theory as the dominant approach to corporate governance is faced with widely publicized corporate scandals. High powered incentive compensation, aggravates the problems in the corporate sector. Pay for performance gives managers and directors incentives to manipulate performance criteria and to resort to fraudulent accounts to the disadvantage of the long-term interests of the firm.

Even if equity-based compensation provides managers and directors with desirable monetary incentives, the system of pay for performance needs to be improved and supported by prosocial motivations.

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Employment, productivity and earnings in U.S. and Western economies depend heavily on resource allocations decisions made by the CEOs and their senior management teams, at a relatively small number of large companies. A company's senior executives, with the support and under the advice of boards of directors, are responsible to decide the proportion of resources to allocate to investments in productive capability, and the residual distributions to shareholders. Central to corporate resource-allocation decisions are the modes of compensation that incentivize and rewards CEOs.

Senior management or executive management is generally a team of individuals, at the highest level of management of an organization, who have the day-to-day tasks of managing that organization. Senior managers hold specific executive powers delegated to them with and by authority of a board of directors and/or the shareholders: usually the senior management of a company is appointed by the corporation's board of directors and approved by shareholders. A management team is usually composed by: Chief Executive Officer (CEO), Chief Financial Officer (CFO), Chief Marketing Officer (CMO), General Counsel.

In many countries, there is a separate executive board for day-to-day business and supervisory board (elected by shareholders) for control purposes. The board of directors is technically not part of management itself (since it should be independent from the latter, to be able to supervise it better), although there are frequent.

Most CEO compensation packages contain five main, basic components: salary, benefits, incentive pay, with a short-term focus (they measure performance over a period of one, or less than one, year. Usually are formula-driven and have some performance criteria attached), incentive pay, with a long-term focus (3-5 years is common, they are projected to counterbalance short term incentives, in order to better align managers' and shareholders' objectives, and to avoid the risk of over-incentivize managers to enhance current performance, at expenses of long term one - short termism) and, last but not least, severance, or pensions or, more in general deferred compensation. In addition, CEOs often receive contributions to extra-defined-benefit, such as Supplemental Executive Retirement Plan (SERP), various perquisites, and other several single-payments.

We now introduce the four more common stock grants and stock option grants.

- Stock grants and restricted stock grants: employer pays a part or all of the compensation in the form of corporate stock. Restricted stock is not fully transferable until certain conditions (restrictions) have been met.
- Stock Option grants and restricted option grants: usually, a restricted "call option." It gives the recipient the right (but not the obligation) to buy, if determined condition (restrictions) have been met, the company's stock at a predetermined price.

As regards to tax purposes, in United States there are two class of stock options:

- Non-qualified stock option (NSO) grants are tax deductible by the company that provides them. Employee pays income tax on the difference between these two prices upon purchase. It's important to note that employees are not subject to taxes when the option becomes available to them; rather, they only pay taxes when they purchase a stock option.
- Qualified stock option (ISO): taxed at a capital gain rate, instead of paying ordinary income taxes upon it, and require a plan document that clearly outlines how many options are to be given to which employees, and those employees must exercise their options within 10 years of receiving them. Furthermore, the option exercise price cannot be less than the market price of the stock at the time the option was granted. Statutory stock options cannot be sold until at least a year after the exercise date and two years after the date the option was granted.

Incentive stock options are similar to non-qualified stock options in terms of form and structure: schedule, vesting and exercise period and/or methods, bargain element, clawback provisions, U.S. taxation.

The controversy over CEO compensation has reached new heights with labour unions, media, and even political candidates from both major parties (like in the US), expressing public criticism. According to Democratic candidate Hillary Clinton, the average CEO "... is now earning 200 times the average hourly wage. Twenty years ago the ratio was about forty times. People all over this country are really upset about this."

According to Republican candidate Donald Trump, CEO compensation is a “total and complete joke.... They get whatever they want.” On its website, the AFL-CIO cites a CEO-to-worker pay ratio of 331:1, underlying how, in recent decades, corporate CEOs have been taking a greater share of the economic pie while wages have stagnated and unemployment remains high. Executive pay packages in the United States have been taken to task as excessive, lacking transparency, controlled by their beneficiaries rather than shareholders, and rewarding the executive behaviour that ought to be discouraged.

Both the level and the composition of CEO pay have changed dramatically over time.

The post-WWII era can be divided into at least two distinct periods. Prior to the 1970s, we observe low levels of pay, little dispersion across top managers, and only moderate levels of equity compensation. From the mid-1970s to the end of the 1990s, all compensation components grow dramatically, and differences in pay across executives and firms widen. By far the largest increase comes in the form of stock options, which become the single largest component of CEO pay in the 1990s.

Between 1980 and 2004, Mutual Fund founder John Boogle estimates total CEO compensation grew 8.5 percent per year compared to corporate profit growth of 2.9 percent per year and per capita income growth of 3.1 percent. Forbes reports that from 1989 through 2008 total compensation for CEOs of Fortune 500 firms increased at 9.5% per year, while S&P 500 index increased at a rate of 8.2%, and the average wages for workers, increased by only 4.3%. By comparison, in 2007 CEOs made 344 times what the average work made, up from 71 times in 1989.

On a much wider scale, as reported (2012) by J. Bakija, A. Cole and B.T. Heim, share of the nation’s income going to the top percentiles of the income distribution in the United States has increased dramatically over the past three decades.

They found out that, executives, managers, supervisors, and financial professionals account for about 60 percent of the top 0.1 percent of income earners in recent years, and can account for 70 percent of the increase in the share of national income going to the top 0.1 percent of the income distribution between 1979 and 2005.

Chapter 2 introduces different views over the evolution and the composition of executive compensation. We will first give an historical-perspective view, analysing the works of Hopkins and Lazonick (2016) and Murphy (2012), to then approach the "optimal contracting" view (2000, Hubbard; 2008, Kaplan), and finally evaluate the "managerial power" approach (2004, Fried and Bebchuck, et alt.).

Most recent analyses of executive compensation have focused on efficient-contracting and managerial-power rationales for pay, while ignoring or downplaying the causes and consequences of disclosure requirements, tax policies, accounting rules, legislation, and the general political climate. Government intervention has been both a response to and a major driver of time trends in executive compensation over the past century, and any explanation for pay that ignores political factors is critically incomplete.

Two broad patterns for government intervention into CEO pay. The first can be described as knee-jerk reactions to isolated perceived abuses in pay, leading to disproportionate responses and a host of unintended and undesirable consequences. The second pattern – best described as “populist” or “class warfare” – arises in situations where CEOs (and other top executives) are perceived to be getting richer when lower-level workers are suffering. The associated attacks on wealth in these situations gave rise to disclosure rules in the 1930s, limits on tax deductibility for CEO pay in the early 1990s, and wide-ranging pay regulations in the 2010 Dodd-Frank Act. Beyond these two broad patterns, indirect intervention in the form of accounting rules, securities laws, broad tax policies, and listing requirements have also had direct impact on the level and composition of CEO pay.

After the creation of a permanent income tax under the 16th Amendment in 1913, considerable U.S. legislation concerning the gains from exercising an executive stock option focused on the appropriate tax treatment.

At issue was whether the exercising of a stock option provided the executive with additional employee compensation or an ownership stake in the company. If it was simply compensation, then the taxable event would be taxed at the ordinary income-tax rate. If, however, the acquired shares made the executive an owner, then the taxable event would occur when the executive decided to sell the shares and the realized gains could be taxed at the capital-gains rate. During the 1920s the IRS generally held that the taxable

income generated by stock options was compensation, not capital gains, and hence should be taxed at the ordinary rate in the year in which the option was exercised.

The initial push for pay disclosure was not driven by shareholders but rather by “New Deal” politicians outraged by perceived excesses in executive compensation. Following the Securities Act of 1934, the responsibility for enforcing pay disclosures for top executives in publicly traded corporations was consolidated into the newly created Securities and Exchange Commission (SEC). In December 1934, the SEC issued permanent rules demanding that companies disclose the name and all compensation (including salaries, bonuses, stock, and stock options) received by the three highest-paid executives. The securities of companies not complying would be removed from exchanges. The demand for disclosure reflects both legitimate shareholder concerns and public curiosity. Public disclosure effectively ensures that executive contracts in publicly held corporations are not a private matter between employers and employees but are rather influenced by the media, labour unions, and by political forces operating inside and outside companies.

The evolution of CEO compensation since WWII can be broadly divided into two distinct periods. Prior to the 1970s, we observe low levels of pay, little dispersion across top managers, and moderate pay-performance sensitivities. From the mid-1970s to the early 2000s, compensation levels grow dramatically, differences in pay across managers and firms’ employees widen, and equity incentives tie (or at least attempt to tie) managers’ wealth closer to firm performance.

By 1950, the tax issue surrounding stock options was a big deal: the highest marginal tax rates on ordinary and corporate incomes had swelled to 91% and 42% (from 25% and 12% in 1928, respectively), compared to a capital gains rate of 25% (from 12.5% in 1928). Corporate executives, lobbied for capital-gains treatment for stock options, contending that their managerial performance would be enhanced by having a proprietary interest in the corporations that employed them.

The Revenue Act of 1950 acceded to this line of argument, defining a *restricted* stock option. In 1950 the capital-gains tax rate was still 25 percent, while the marginal income-tax rate on income over \$200,000 was 84.4 percent. From 1951 through 1964 this top ordinary rate stood at 91 percent.

In 1961 Gore introduced a bill in Congress to rescind the tax privileges of executive stock options, arguing that the 1950 legislation created a “glaring loophole” in the tax law that had resulted in “flagrant abuses.” In 1964 Congress revised the tax code pertaining to stock options.

Under the Revenue Act of 1964:

- Executives were required to hold stock acquired through option exercises for three years (rather than six months) in order to be taxed at the lower capital gains rate.
- Exercise prices could be no less than 100% (rather than 85%) of the grant-date market prices.
- The maximum option term was reduced from ten years to five years.
- The option price could not be reduced during the term of the option, nor could an option be exercised while there is an outstanding option issued to the executive at an earlier time.
- Finally, (but perhaps most importantly), the 1964 law reduced the top marginal tax rate on ordinary income from 91% to 70%, and progressively raised capital gain tax rate, to a high of 39.9% in 1976.

While cash compensation escalated (at least in nominal terms) during the 1970s, the use of stock options was relatively stagnant. Part of the declining popularity of options reflected the change in tax policies in 1964 and 1969 that made qualified stock options less attractive, coupled with their outright prohibition in 1976. More importantly, was the prolonged stagnation in the stock market. The void in compensation created by worthless stock options was quickly filled by a plethora of new plans designed to provide more predictable pay-outs, including: book-value plans, long-term performance plans, guaranteed bonuses and various perquisites such as low-interest loans, yachts, limousines, corporate jets, club memberships retreats at exotic locations, etc. etc.

In August 1977, the SEC issued Interpretive Release #5856 stating that the value of perquisites (and other forms of compensation)

must be included as compensation in proxy statements and in 1979 IRS issued significant new auditing guidelines aimed at detecting and taxing executive perquisites.

On the taxation side, the switch to non-qualified options in the 1970s – which were considered compensation for tax purposes – raised a new question: how should options be accounted for in company income statements? One possibility was to follow the tax code by recognizing an accounting expense at the time an option is exercised. But, in spite of its simplicity, this method is inconsistent with the basic tenet of accounting that expenses should be matched to the time period when the services associated with those expenses were rendered. Rather, the tenet suggested that options should be expensed over their term based on the grant-date value of the option. At the time, however (and for a long time to come) there was no accepted way of placing a value on an employee stock option. In October 1972, the Accounting Principles Board issued APB Opinion No. 25, “Accounting for Stock Issued to Employees.” Under APB Opinion No. 25, the compensation expense associated with stock options was defined as the (positive) difference between the stock price and the exercise price as of the first date when both the number of options granted and the exercise price become known or fixed. The expense for this spread between the price and exercise price – called the intrinsic value – was amortized over the period in which the employee is prohibited from exercising the option.

Although CEO pay and bottom-line corporate profitability remained relatively stagnant from 1970-1982, productivity did not. Spurred in part by the oil-price shocks of 1973 and 1977, this period brought significant technological advances that improved productivity, declines in regulation, and increases in global trade, what Jensen (1993) calls the “Modern Industrial Revolution”. By the early 1980s, most sectors in the U.S. economy were saddled with increasing excess capacity: technological change dramatically increased capacity for computing firms, while increased competition from non-unionized entrants created excess capacity in a variety of industries. The executive compensation practices of the 1970s provided few incentives for executives to pursue value-increasing reductions in excess capacity and disgorgements of excess cash. Equity-based compensation accounted for only a small fraction of CEO pay, and the options that existed often were underwater or expired worthless. Annual bonuses were focused on beating annual budget targets rather than creating long-run value. Performance-based terminations were almost non-existent and the managerial labour market was similarly ineffective in disciplining poor performance. Boards of directors typically dominated by corporate insiders (in influence if not in numbers), had little reason to reduce corporate waste as long as the companies were delivering positive nominal profits. However, pressures to improve performance and disgorge cash were ultimately introduced by the capital markets, including “hostile takeover”.

The takeover market was complemented by the emergence of leveraged buyouts (LBOs). The emergence of LBOs and leveraged recapitalizations created substantial amounts of shareholder value in firms with stable cash flows and no productive alternative uses. The emerging market for corporate control had pronounced effects on the U.S. stock market. After nearly two decades of stagnation, the Dow Jones Industrial Average rallied from below 800 to over 2700 between mid-1982 and mid-1987 (i.e., appreciating nearly 30% per year for five years). While the largest beneficiaries were shareholders in firms that became takeover targets, the rally was broad based and lifted share prices across a wide range of firms and industries.

Academics recommended that executive pay be tied more closely to company value through increases in stock options and other forms of equity-based incentives. These pressures began having an impact: non-equity-based CEO pay continued to grow in real terms after the mid-1980s, but became a smaller part of the total compensation package. For the first time since the 1950s, stock options re-emerged as the dominant form of incentives compensation. The CEO pay debate achieved international prominence during the 1990-1991 recession, ending up with SEC’s new 1992 disclosure rules, which required companies to produce:

- A Summary Compensation Table summarizing the major components of compensation received by the CEO and other highly paid executives over the past three years.
- Tables describing option grants, option holdings, and option exercises in detail.
- A chart showing the company’s stock-price performance relative to the performance of the market and their peer group

over the prior five fiscal years;

- A report by the compensation committee describing the company's compensation philosophy.
- Overall, the new rules dramatically increased the information available about stock option grants and holdings, and the performance graph cemented the idea that the objective of the firm was to create shareholder value.

The median pay for CEOs in S&P 500 firms more than tripled between 1992 and 2001, driven by an explosion in the use of stock options. CEO incentive compensation in the early 1990s was split about evenly between options and accounting-based bonuses. By 2000, stock options accounted for more than half of total compensation for a typical S&P 500 CEO. Six main factors that fuelled the explosion in stock options: (1) Shareholder pressure for equity-based pay; (2) SEC holding-period rules; (3) SEC option disclosure rules; (4) Clinton's \$1 million deductibility cap; (5) New accounting rules for options; (6) NYSE listing requirements.

Accounting scandals erupted across corporate America during the early 2000s: in the midst of these scandals, Congress quickly passed the Sarbanes-Oxley Act in July 2002, setting or expanding standards for accounting firms, auditors, and boards of directors of publicly traded companies. The Act was primarily focused on accounting irregularities and not on compensation. However, Congress could not resist the temptation to use the new law to further regulate executive pay. First, Section 402 of Sarbanes-Oxley prohibited all personal loans to executives and directors. Second, Section 304 of Sarbanes-Oxley requires CEOs and CFOs to reimburse the company for any bonus or equity-based compensation received, and any profits realized from selling shares, in the twelve months commencing with the filing of financial statements that are subsequently restated as a result of corporate misconduct. This "clawback" provision of Sarbanes-Oxley – which was subsequently extended in the TARP legislation and Dodd-Frank Financial Reform Act was notable mostly for its ineffectiveness. Finally, Section 403 of Sarbanes-Oxley required that executives disclose new grants of stock options within two business days of the grant.

In 2005, academic research by University of Iowa professor Erik Lie and subsequent investigations by the Wall Street Journal unearthed a practice that became known as option backdating. The Wall Street Journal's crusade against backdating triggered SEC investigations into more than 140 firms. The SEC prosecuted backdating cases with a zeal usually reserved for hardened criminals. Changes in reporting requirements in 2002 essentially put an end to option backdating for top-level executives more than two years before academics and the media uncovered the practice.

Meanwhile, as a direct response to Enron scandal, Section 409(A) was added to the Internal Revenue Code as part of the American Jobs Creation Act of 2004. In essence, the objectives of Section 409(A) were to limit the flexibility in the timing of elections to defer compensation in nonqualified deferred compensation programs, to restrict withdrawals from the deferred accounts to pre-determined dates, and to prevent executives from receiving severance-related deferred compensation until six months after severance. Section 409(A) imposes taxes on individuals with deferred compensation as soon as the amounts payable under the plan are no longer subject to a substantial risk of forfeiture.

The first decade of the new century brought several important changes in the level and composition of CEO pay: median grant-date total CEO pay in the S&P 500 declined from \$9.3 million in the peak year of 2001 to \$9.0 million in 2011, representing the first prolonged stagnation in CEO pay since the early 1970s.

The decrease in pay primarily reflects both a substantial decline in the grant-date value of stock options, and a shift in the industry composition of the S&P 500. The percentage of companies granting options to their CEOs in each year increased from about 63% in 1992 to 87% by 2001, falling to 68% in 2011, while the percentage of companies making restricted stock or performance-share grants more than tripled from 25 percent to 82 percent. The trend suggests a substitution of stock grants for stock options, although more than half of the S&P 500 CEOs have received both options and restricted stock annually since 2006.

The scandals that erupted across corporate America during the early 2000s focused attention on the quality of accounting disclosures, which in turn renewed pressures for companies to report the expense associated with stock options on their accounting statements. Shareholder groups began demanding shareholder votes on whether options should be expensed.

The Emergency Economic Stabilization Act of 2008 (EESA) is a law enacted in response to the subprime mortgage crisis, which gives the Treasury Secretary the authority to buy up to \$700 billion of troubled assets, in order to improve liquidity in the market, stabilize economy and restore investors' confidence. It required financial institutions, to sell their assets to TARP in order to issue equity warrants or equity or senior debt securities to the Treasury. While applying only to TARP recipients the October 2008 EESA covered the top-five executives, and covered a much broader set of material inaccuracies in performance metrics when compared to Sarbanes-Oxley Act.

On February 4, 2009, President Obama's administration responded with its own proposal for executive-pay restrictions that distinguished between failing firms requiring exceptional assistance and relatively healthy firms participating in TARP's Capital Purchase Program. Separate bills proposing amendments to EESA had been passed by both the House and Senate, and it was up to a small conference committee to propose a compromise set of amendments that could be passed in both chambers. On February 13th the conference chairman (Senator Chris Dodd) inserted a new section imposing restrictions on executive compensation that were opposed by the Obama administration and severe relative to both the limitations in the October 2008 version and the February 2009 Obama Proposal. Nonetheless, the compromise was quickly passed in both chambers with little debate and signed into law as the American Recovery and Reinvestment Act of 2009 by President Obama on February 17, 2009 (ARRA).

In July 2010, President Obama signed into law the Dodd-Frank Wall Street Reform and Consumer Protection Act or Dodd-Frank Act. Passed as a response to the Great Recession, it brought the most significant changes to financial regulation in the United States since the regulatory reform that followed the Great Depression. It made changes in the American financial regulatory environment that affect all federal financial regulatory agencies and almost every part of the nation's financial services industry. As the extensive title of the Act declaims, its intents are to promote the financial stability of the United States by improving accountability and transparency in the financial system, to end "too big to fail", to protect the American taxpayer by ending bailouts and to protect consumers from abusive financial services practices.

Executive compensation has evolved over time in response to changes in both economic and political environments. Government intervention has been both a response to and a major driver of time trends in executive compensation over the past century, and any explanation for pay that ignores political factors is critically incomplete. What makes CEO pay both interesting and complicated is the fact that the efficient contracting, managerial power, and political paradigms co-exist, interact, and are plausible at the same time. At one end of the spectrum, CEO pay is viewed as the efficient outcome of a labour market in which firms optimally compete for managerial talent. At the other end of the spectrum, the high levels of CEO pay are seen as the result of executives' ability to set their own pay and extract rents from the firms they manage.

According to Kaplan (2008), and others, while corporate governance and CEO pay are not perfect, a great deal of evidence suggests that CEO pay is largely determined by market forces. Since both shareholders and executives are equally informed and acting in their own interest, according to the optimal contracting view, incentive contracts, while aligning executives' and shareholders' objectives, encourage managers to maximize profits, and so shareholders return (MSV Theory). The bargain between (and the successive monitoring activity, operated by one of) the two parts happens at an arm's length, thus eliminating unwise compensation practices. According to supporters of this approach, rising in CEO pay, therefore, appears to be part of (not the cause of) the general increase in economic inequality: market forces (and arm's-length bargaining) have driven the large increase in pay of this as well as the other groups. Main points of the supporters of this view are that CEOs are strongly paid for performance and boards do monitor CEOs; CEO tenures are lower than they have been since tenures began to be measured in the 1970s; CEO turn-over is more closely tied to stock performance than it has been since turn over began to be studied in the 1970s. All of these factors suggest that the CEO job has become increasingly difficult and less pleasant.

On the contrary, the rent extraction view posits that weak corporate governance and acquiescent boards allow CEOs to (at least partly) determine their own pay, resulting in inefficiently high levels of compensation. Managerial power theory attempts to explain

high executive pay, arguing that executive compensation is often excessive when compared against a hypothetical, economically efficient compensation contract. The theory also argues that executive pay does not correlate to performance: in other words, high earners are not necessarily high performers. "Managerial power approach," focuses on a different link between the agency problem and executive compensation. Under this approach, executive compensation is viewed not only as a potential instrument for addressing agency problems, but also as part of the agency problem itself.

All three the approaches, governmental intervention, managerial power and competitive market forces are important determinants of CEO pay, and that neither approach alone is fully consistent with the available evidence. Although one approach is conceptually quite different from the other two approaches, they should not be proposed as a unique possibility nor complete replacement to the others. Compensation arrangements might be shaped both by market forces that push toward value-maximizing arrangements, and by the influence of managerial power, leading to departures from these arrangements in directions favourable to managers, which are then mitigated by government intervention. The managerial power approach simply claims that these departures from value-maximizing arrangements are substantial and that compensation practices thus cannot be adequately explained by optimal contracting alone. The optimal contracting view recognizes that managers suffer from an agency problem and do not automatically seek to maximize shareholder value. Thus, providing managers with adequate incentives is important.

Corporate scandals, reflected in excessive management compensation and fraudulent accounts, cause great damage. Agency theory's insistence to link the compensation of managers and directors as closely as possible to firm performance is a major reason for these scandals. Agency theory can be subdivided in two models: (1) adverse selection, (2) moral hazard. The agency problem is a conflict of interest inherent in any relationship where one party is expected to act in another's best interests.

A principal-agent model of CEO pay permeates almost all works on CEO compensation. According to this model, principals must delegate control of the firm to an agent (the CEO) who may be unwilling to work hard and whose objectives may not be fully aligned with those of the firm's principals. Incentive contracts offer a partial solution to this agency problem. This agency problem, while bearing a major responsibility for the rise in CEO compensation, it also permeates corporate governance at all its levels. The deviation from the principal's interest by the agent is called "agency costs". Managerial power and rent extraction behaviours are likely to have an important influence on the design of compensation arrangements; solutions adopted so far have used incentive pay, to try to overcome the shortcomings deriving from this information asymmetry.

Much research has focused on how executive compensation schemes can help alleviate the agency problem in publicly traded companies. To adequately understand the landscape of executive compensation, however, it is necessary to recognize that compensation schemes are also partly a product of this same agency problem.

Compensation arrangements currently provide as weak incentives to reduce managerial slack and increase shareholder value as would be provided by arm's length arrangements.

Also Bebchuk and Fried (2003), though arguing that executive compensation is part of the agency problem itself, still believe in the basic message of agency theory: in the opinion of Bebchuk and Fried, to overcome the failures identified, pay for performance must be improved.

To curb opportunistic behaviour, agency theory argues that the CEOs' and directors' incentives need to be aligned with shareholders by tying pay to performance and by providing managers and directors with equity-based stakes in their firms. Corporate policy has widely followed this prescription. In 2001, equity-based pay constituted about two thirds of the median annual pay of U.S. top executives, compared to zero in 1984 (2003, Hall).

My point of view is that, despite its dominance, since it has been always used as unique remedy, the agency model (and its solutions adopted so far) has proved to be seriously incomplete, and to partly work as a detrimental force to impede executives' rent extractions. High-powered incentive compensation, even if it could be optimally designed, does not solve the problems in the corporate sector identified but aggravates it, when considered alone.

Frey and Osterloh suggest a model based on a new concept, based on intrinsic and extrinsic incentives. Psychologists have proposed some different ways of thinking about motivation, including one method that involves looking at whether motivation arises from outside (extrinsic) or inside (intrinsic) the individual: in fact, human beings derive utility from the activity itself, or because they wish to comply to given normative standards, or for the reward associated. Extrinsic motivation occurs when we are motivated to perform a behaviour or engage in an activity to earn a reward or avoid punishment. Intrinsically motivated behaviours are performed because of the sense of personal satisfaction that they bring.

The design of an efficient incentive system, needs the use of an approach capable to consider either the characteristics of the business, and of the much wider habitat-industry in which it is operating, either the functions and the role, as well as the social and psychological identikit and inclinations of the person involved.

Contingency approach is a concept in management stating that there is no one universally applicable set of management principles, neither rules, nor solutions by which to manage organizations: there is no reason to expect that “one size fits all”. Thus, the implementation of the same incentive plan within enterprises which present a different corporate culture, or structure, or operative system or within people asked to perform different tasks, and having different attitude toward risk, decision making, future expectations, may have very different result. Incentives can be restructured through individual contracts, by connecting as closely as is optimal the information available about executives’ performance, and the compensation for that performance. Because of differences in the quantity and quality of information available about the performance of individual employees, the ability of employees to bear risk, and the ability of employees to manipulate evaluation methods, the structural details of individual contracts vary widely, including such mechanisms as discretionary bonuses, promotions, profit sharing, efficiency wages, deferred compensation, stock grants, stock-options grants and so on. Milgrom and Roberts (1992) identify four principles of contract design: (1) when perfect information is not available, Holmström (1979) developed the Informativeness principle, which states any measure of performance that (on the margin) reveals information about the effort level chosen by the agent should be included in the compensation contract. This includes, for example, Relative Performance Evaluation; (2) the Incentive-Intensity principle states that the optimal intensity of incentives depends on four factors: the incremental profits created by additional effort, the precision with which the desired activities are assessed, the agent’s risk tolerance, and the agent’s responsiveness to incentives; (3) the Monitoring Intensity principle, is complementary to the second; in that situations in which the optimal intensity of incentives is high; (4) Equal Compensation Principle, which essentially states that activities equally valued by the employer should be equally valuable to the employee. This relates to the problem that employees may be engaged in several activities, and if some of these are not monitored or are monitored less heavily, these will be neglected, as activities with higher marginal returns to the employee are favoured.

The major problem in measuring performance is the setting of a standard by which to judge the performance: it is convenient the use some form of relative performance evaluation. Subjective performance is typically used for jobs with a high degree of complexity. Problems with subjective performance evaluation have resulted in a variety of incentive structures and supervisory schemes. When the measurement of workers' productivity is difficult, making it hard to measure effort and/or performance contributions of each participant, it can be hard if not even impossible task, to distinguish between single contributions and effects or output they are going to generate. In fact, if the objective of performance evaluation is to induce a precise behaviour, results must be: (1) accountable, (2) measurable.

A different set of solutions is now considered and proposed according to the different tools, or actions or tenant/s considered:

11. Incentive plan should: (1) Basing compensation on increasing the intrinsic value of business, rather than the merely achievement of financial indicators; (2) CEOs’ incentive plan should be designed on a contingency approach; Furthermore, executives’ incentive plan should encourage long term thinking and discourage pursuit of short-term profits through different techniques: (3) incentive pay should be spread out over an extended period of years and it should be

phased in as well. The vesting period, and the timing of exercisability (as well as the unwinding) of stock grants and options grants should be carefully planned in advanced, and shouldn't be left to managerial freedom. Firms could require stocks' sales to be carried out gradually over a specified period, perhaps pursuant to a prearranged plan. Alternatively, executives could be required to publicly disclose in advance their intended trades (1998, Fried). A number of firms have adopted "trading windows" and "blackout periods" to restrict the times during the year that a manager can sell or buy shares (2000, Bettis, Coles, and Lemmon); (4) "clawback" provisions for returning incentive compensation to the company if an accounting restatement of earnings is made; (5) factor out windfalls unrelated to the managers' own efforts in calculating bonuses or granting stock or stock options through reduced "wind-fall" provisions. One approach could be to relatively evaluate the CEO's performance with the ones of direct competitors, eventually rewarding excess spread surpluses, and punishing spread deficit, basing evaluation on different parameters. Another approach discussed frequently by academics, regarding options, is linking the exercise price of options to a market-wide index or a sector index (1999, e.g. Rappaport). Another strategy is to condition the "vesting" of options on the firm meeting specified performance targets; (6) set a price to the stock grants, or the option grants out-of-the-money; (7) prevent executives from hedging their stock or stock options in the company; (8) including Debt or Debt-Like compensation along with cash and equity based compensation.

12. Shareholders: should be constantly aware of their power and should act jointly to ensure that corporate value would not be eventually destroyed by distortion and misuse of managerial power, through: (1) encourage long term thinking and discourage pursuit of short-term profits through the various techniques of incentive planning expressed just above; (2) Join themselves into groups: by acting like a group, shareholders can exercise more pressure: (a) to turn in their favour regulations as well as government's and regulatory authorities' opinion; (b) to monitor boards of director. (3) Take advantage on the say-on-pay; (4) make mandatory the audit of executive pay by an independent firm.
13. Government: (1) pass a law that sets a ratio of pay between a firm's CEO and its most typical workers or median workers, and encourages corporations not to exceed it by: (a) by denying them government contracts if they do or, (b) denying corporate income tax deductions on executive compensation in excess of the ratio. (2) Set a maximum wage or maximum compensation for executives; (3) increases in compulsory disclosure; (4) increases in transparency; (5) Intervene on the personal income conjunctively with capital gain as well as corporate income tax rates, in order to counterbalance, dis-equilibrative forces which may cause frictions in the market, and generate social disequilibrium.
14. Boards of directors: improvements in board accountability to shareholders, including limits on the use of staggered boards and increased transparency and accountability, granting shareholders the right to nominate directors and propose changes to governance arrangements in the corporate charter.
15. Academics: scholars, especially social scientists, hold a special place in society. Supported by tax dollars, private giving, or both, they are asked to live in society and, at the same time, somehow examine it as though they live apart from it. It is from that insider/outsider perspective that they can see what others, caught in the pressures of their daily lives, cannot see. As the world becomes a more complicated place, as economic and environmental conditions become more unforgiving, and as partisan political passions intensify, business scholars may find themselves increasingly asked to share their expertise in support of or opposition to all manner of initiatives. They must neither shy away from this challenge nor numb the public with endless "on the one hand, on the other hand" disquisitions.

Frey and Osterloh (2005) analysed the firm as a bundle of common pool resources. These are collective goods in the form of firm specific investments, generating a joint surplus that cannot be attributed to single actors. The production of such collective goods is based on extrinsic and intrinsic incentives. In contrast, agency theory assumes that manager's additional or marginal effort is solely

motivated by one factor, extrinsic incentives. Individuals derive utility from the activity itself or because they wish to comply to given normative standards for their own sake. The extent of intrinsically motivated behaviour systematically depends on conditions that can be shaped by appropriate institutions.

Intensive interdependencies for selfish individuals create three problems: (1) the option to free ride, (2) to exploit information asymmetries, and (3) to under invest in firm-specific resources.

Thus, social dilemmas are at the heart of firms' activities, and they arise if the actions of self-interested individuals do not lead to socially desirable common pools. Corporate virtue has proved to be another crucial common pool resource in the firm.

Social dilemmas can be solved if the good of the community enters into the preferences of the individual, therewith becoming prosocial preferences. The social dilemma is turned into a coordination game where defection is no longer the dominant solution (1974, Sen). Prosocial preferences are a special case of intrinsic motivation. People are prepared to behave in a prosocial way, however prosocial behaviour varies considerably across cultures. Several institutional factors can influence intrinsically motivated prosocial behaviour: the effects can be subdivided (1997, Frey) into crowding-out and crowding-in.

I conclude with few lines. Agency theory as the dominant approach to corporate governance is faced with widely publicized corporate scandals. High powered incentive compensation, aggravates the problems in the corporate sector. Pay for performance gives managers and directors incentives to manipulate performance criteria and to resort to fraudulent accounts to the disadvantage of the long-term interests of the firm.

Even if equity-based compensation provides managers and directors with desirable monetary incentives, the system of pay for performance needs to be improved and supported by prosocial motivations.