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# **Executive Compensation: A Brief Review**

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Chief executive officer (CEO) compensation is defined as the sum of base pay, bonuses, stock grants, stock options, other forms of compensation and benefits. Inflation-adjusted, median total CEO compensation in the United States almost tripled between 1992 and 2000, with grants of stock options evolving to be the largest component of compensation. This article presents the arguments for and against this level and composition of CEO compensation.

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The level of executive pay has long been a flashpoint with the general public, particularly in periods of macroeconomic or stock market distress. Chief executive officer (CEO) compensation is defined as the sum of base pay, bonuses, stock grants, stock options, other forms of compensation and benefits. Of these components, grants of stock options have evolved to be the largest component of compensation. The near tripling of inflation-adjusted, median total CEO compensation between 1992 and 2000 was produced largely by a fivefold increase in stock options (Murphy, 2002). To quantify the relative growth in CEO pay, in 1970 the average S&P 500 CEO earned approximately 30 times the pay of an average production worker. By 2002, this multiple had risen to almost 90 times the earnings of an average production worker in terms of CEO cash compensation (salary and bonus), and exceeded 360 times the earnings of an average production worker in terms of CEO total compensation (cash compensation, stock options and grants, and other compensation) (Hall and Murphy, 2003).

In a comparison of 12 OECD countries, Abowd and Bognanno (1995) found that US CEOs were the most highly compensated. A similar result was not found for high-level US managers (human resource directors) or for US manufacturing operatives.<sup>1</sup> Conyon and Murphy (2000) found that, controlling for firm size and other factors, US CEOs earned 190 per cent more in total compensation than UK CEOs. The United Kingdom's highest paid executive ranked only 97th on the list of the most highly paid US CEOs. Remarkably, Disney's Michael Eisner exercised options in 1997 worth more than the aggregate compensation of the top 500 UK CEOs.

While there has been an undisputed escalation in US CEO pay in absolute terms and in relation to the earnings of production workers over recent decades, academic researchers have taken positions on both sides of the debate over whether the level of CEO pay is economically justified or is the product of managerial power over the process of CEO pay determination. This

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<sup>1</sup> See also Murphy 1999 for international comparisons and a summary of theoretical and empirical research on executive pay.

article characterizes the basic framework within which CEO pay is viewed, and presents the principal arguments characterizing this debate.

The compensation of CEOs is generally viewed within an agency framework.<sup>2</sup> The separation that exists between the owners and managers in corporations gives rise to an agency problem in which managers have an incentive to pursue their personal interests over the interests of shareholders. The increase in the components of pay that are linked to firm performance, stock option schemes for example, are viewed from this perspective as a mechanism to align the incentives of managers with those of shareholders.<sup>3</sup>

Jensen and Murphy (1990) and Dow and Raposo (2005) attribute the sharp gain in CEO pay to the adoption of high-powered incentives in compensation packages. Hall and Liebman (1998) document the increasing responsiveness of CEO compensation to firm performance in the period between 1980 and 1994, a sensitivity due almost entirely to holdings of stock and stock options. The argument has been made that the public focus on the level of CEO pay is misplaced because such concern changes the focus from the more important issue of how CEOs are paid and the link between CEO pay and firm performance (Jensen and Murphy, 1990).

While the agency framework has provided a justification for stronger pay for performance and higher levels of contingent compensation, to some extent executives have responded to contingent compensation by seeking to avoid the risk created. A working paper by Ozerturk (2006) touches on the growth in the market for managerial hedging instruments, a

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<sup>2</sup> The gist of agency theory is found in the Bible, John 10:12: 'He who is a hired hand, and not a shepherd, who is *not the owner* of the sheep, sees the wolf coming, and leaves the sheep and flees, and the wolf snatches them and scatters them.'

<sup>3</sup> Another incentive argument is based in tournament theory. The idea is that high CEO pay levels may increase the effort of those executives below the CEO position who are competing for promotion to the top spot (Lazear and Rosen 1981). However, reasons for caution against the use of intense competition also exist because competition may impede teamwork and spark counter-productive efforts (Lazear, 1989).

growth coinciding with the growth in stock-based compensation in the late 1990s. The extent to which executives are reducing the pay–firm performance sensitivity of their compensation through the use of managerial hedging instruments is unknown, as disclosure rules are loose and participants in the market have no interest in publicizing their actions (Ozerturk, 2006). Lavallo (2001) notes that at least 31 company insiders reported hedging in 2000, and for the majority it was a good decision. Hedging removes the agency theory basis for awarding large stock-based compensation packages.

The potential drawbacks of stock options are reviewed in Holden (2005), and include incentives for excessive risk taking and a focus on short-term performance, discouraging the payment of dividends and costing more to the firm than they are valued by risk-averse executives. Another negative feature of performance-based pay is the incentive created to manipulate or misstate the firm’s financial performance. Efendi, Srivastava and Swanson (2007) find that the likelihood of accounting misstatements and severe accounting irregularities increases with the worth of CEO stock options.

The principal argument for the contention that the level of CEO pay is economically justified is that a competitive market for executive talent exists, and the level of CEO pay is a reflection of the intensive bidding by firms for scarce top talent. Tervio (2003) presents a competitive assignment model that determines CEO pay as the outcome of a bidding process between heterogeneous firms. In Gabaix and Landier’s (2008) framework, CEOs of varying talent are matched to firms competitively, resulting in the largest firms having the top talent and the largest firms in the largest economies paying the most for CEO talent. Firm scale magnifies the pay discrepancies that result from small differences in CEO talent. High pay for top achievers is seen as appropriate given the value of their talent when magnified through the scale of large corporations. Their model also offers a partial explanation of the international differences in CEO pay.

Murphy and Zabochnik (2004) argue that CEO pay is determined by competitive forces, and the increase in CEO pay was driven primarily by an increase in the importance of general skills in running the modern corporation, as opposed to skills that are not transferable between firms, and the trend towards employing more externally hired CEOs. In the period from the 1970s to the 1990s, they state that the percentage of externally hired US CEOs rose from 15 per cent to more than 26 per cent. Others have also suggested that the trend toward filling the CEO position with external hires has played a role in increasing CEO pay.

In the presence of firms seeking to hire experienced CEOs from the outside labor market, Giannetti (2009) develops a model that offers an explanation of many aspects of managerial compensation, including benchmarking pay against larger firms, providing unrestricted stock awards to highly paid top executives and the use of long-term incentives. His model also offers an explanation of the growth in US CEO pay, and for international differences in CEO pay.

Further explanations arguing that the growth in CEO pay is justified also exist. Research suggests that CEO pay is in accord with historical norms in relation to the size of the firm, and that the marked growth in CEO pay is commensurate with growth in firm size. The link between firm size and CEO pay is very well documented (Murphy, 1999). A recent study by Gabaix and Landier (2008) finds that the sixfold increase in CEO pay between 1980 and 2003 can be attributed to the sixfold increase in market capitalization of large US companies during that period.<sup>4</sup>

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<sup>4</sup> A contrasting result is found in Bebchuk and Grinstein (2005). They find the growth in CEO pay between 1993 and 2003 to exceed the increase than can be explained through changes in firm size, performance and industry mix. Mean compensation would have been only half as high in 2003 were the relationships between these factors and pay the same as they were in 1993.

The principal argument for the contention that CEOs are overpaid is the managerial power hypothesis. It argues that the pay-setting process is unduly influenced by the CEO, as the CEO may have substantial influence over the composition of the board of directors and of the compensation committee determining CEO pay (Crystal, 1991). Support for this hypothesis is found in that CEO pay is excessive for firms with relatively weak boards of directors, for firms with no dominant outside shareholder, and for firms with a manager who has a relatively large ownership stake (Bebchuk, Fried and Walker, 2002; see Bebchuk and Fried, 2003 for a review of the managerial power hypothesis).

The managerial power hypothesis also purports to explain several features of executive compensation, such as why stock option grants may have 'reload' provisions, why executives are allowed to exercise options early and hedge the risk of their options and stock holdings, and why US CEOs receive pay in excess of their international counterparts (Bebchuk, Fried and Walker, 2002).<sup>5</sup>

CEO pay is both meaningful and growing in relation to firm financials. The ratio of the aggregate compensation paid by public companies to their top five executives to the aggregate earnings of their firms increased from five per cent in 1993–95 to 9.8 per cent in 2001–03 (Bebchuk and Grinstein, 2005). This trend makes the debate over CEO pay levels and the policies directed towards CEO pay more important than ever. However, in pondering the regulation of CEO pay, there is a large literature with contrasting viewpoints that demand careful examination.

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<sup>5</sup> Murphy (2002) provides counter-arguments to the managerial power hypothesis.

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