Corporate Executive Salaries – The Argument from Economic Efficiency

Scott Elaurant

Abstract

The very high level and constant growth in salaries for corporate executives has been a trend causing debate for over a decade now. It has given rise to a range of arguments for and against high salary levels. The single most prevalent argument for high executive salaries has been the argument based on economic efficiency. In this argument, high salaries for corporate executives are justified as they form an incentive that motivates them to high performance. While striving to earn these incentives, executives achieve improvements to productivity in their firm, which benefits society. This paper considers the argument from economic efficiency from a philosophical viewpoint. Arguments for and against this justification are examined for consistency with philosophical (distributive justice) and economic theory to test their logical soundness. Empirical evidence from Australian and United States salary markets is also examined where relevant to conclude on the validity of the arguments. Most arguments for high executive pay are shown to be unsound in that they assume cause and effect by linking the executive's actions to the corporation's performance. Philosophically, the efficiency argument may be valid, provided empirical evidence confirms that high executive pay leads to improved societal well-being. However on the evidence of most studies that is not empirically true for executives in Australia and the United States

Introduction

This paper considers corporate executive salaries from the viewpoint of philosophical (consequentialist) theories of distributive justice. That is, it considers whether the level of such salaries can be morally justified for the society in which the corporation operates. This paper will examine one category of commonly cited justifications for high corporate executive salaries - arguments from economic efficiency. These arguments for high rewards for leaders of corporations conceived as an incentive type argument. That is, the rewards are (ethically) justified in so far as they provide an incentive towards an outcome that increases utility in the society.

There are a multitude of corporate structures and terminologies used in capitalist economies. For purposes of this discussion we will focus on publicly listed corporations (or firms) typical of those traded on stock markets. These are defined as consisting of shareholders, directors representing shareholder interests, executives reporting to the directors, and employees managed by the executives (Jensen and Mecklin 1976). Executives are employees with power over the corporation's assets.

This paper was prepared largely before the advent of the global financial crisis of late 2008. Data considered is based on market conditions as they were prior to the severe declines in share values that occurred during the crisis. Although not examined in this paper, it is considered that the financial shock and subsequent events validate some of the concerns raised here about corporate executive salaries and raise further concerns.

Corporations and Ethical Justification

From a consequentialist (utilitarian) ethical viewpoint, an activity will be justified if is beneficial to the whole community of interest that the activity is practiced in. For most corporations this community of interest will be the society or nation-state it is incorporated in, and for international corporations it will be the international community.

The structure of corporations is such that the potential benefit and motivations for each stakeholder group in them is different. If the corporation is carrying out a socially beneficial activity the society will wish it to be profitable and continue. Depending on the structure of rewards within the corporation, if each stakeholder group within it acts through rational self-interest they may all have some varying degree of motivation to see the corporation be profitable and continue. They may still differ in their preferences for the distribution of the benefits of a corporation's activities.

Economic Efficiency Argument

Jensen (1990) and others used empirical evidence to demonstrate that there was a link between large pay bonuses provided to executives on a performance basis and improved corporate performance . These theories in part motivated the trend beginning in the 1990s of deliberate structuring of corporate executive salaries to match performance of the corporation as closely as possible, usually through options to purchase shares in the company on advantageous terms offered to the executive. Over time the under-costing and over-issuing of such bonuses has led to much higher salaries and Jensen's objectives not being realized. However this misapplication does not necessarily invalidate Jensen's theory. It is economically rational for corporations to pay executives bonuses such as those espoused by Jensen if it increases the economic efficiency of the firm and returns to shareholders.

Jensen was considering executive pay from a purely economic viewpoint in terms of the firm's self-interest. For philosophical justification this is a necessary but not sufficient condition for the economic efficiency criteria to be satisfied by high executive pay. For high executive pay to be economically efficient it must be such that:

- high executive pay increases economic efficiency for the firm and
- greater efficiency for the firm improves social utility.

The following conditions are also required to be satisfied for the corporation:

- gains from increased efficiency for the firm exceed the cost to the corporation of the high executive pay;

- gains from increased efficiency for the firm exceed the "opportunity cost" of the high executive pay. That is, there is not a more efficient way available to the corporation to achieve the same or greater gains at lesser cost.

An important qualification on this theory is that high executive salary needs to result in a benefit to the society for it to be justified in terms of consequentialist ethics. Increased returns to the firm are not sufficient. Increased efficiency for the firm is a potential justification, but the efficiency must increase social utility either directly or indirectly.

This means that the corporation must not be engaged in a legal but socially harmful activity. Improved efficiency for a corporation engaged in such an activity would not ethically justify a high salary for an executive. Even in beneficial activities, improvements in economic efficiency may create negative externalities that are not internalized and lead to social harm. There must be a net benefit to society to be ethically justified.

Similarly, improved efficiency for an individual corporation that gives it a competitive advantage but with no benefit flowing to the society would also not justify high salary. Examples of such cases might include improvements to increase market share by dominant corporations within an industry, where benefits may be confined to the corporation's shareholders but not distributed within the society in which the goods are produced or consumed. For these firms a high salary to attract talented executives would be a rational strategy in pursuing the corporation's own self- interest. The society in which they operate will be indifferent to gains in economic efficiency in such firms, if they merely result in a transfer of wealth or market share from one corporation to another.

More normally, gains in factor efficiency by a corporation should result in gains in social utility in the long term. Unless the corporation is a monopoly any gains will be won at the expense of other market competitors. These other firms will then have to either increase their own efficiency or lose market share. Over time more and more of the goods produced in that market will be produced more efficiently, and the price offered to consumers should be reduced by competition. (This will not hold for unregulated monopolies, where the benefits may not be passed on beyond the corporation, or multi-national corporations where the benefits may accrue to other societies.) Provided the industry is not a monopoly, social utility should benefit in the long run from efficiency gains by a corporation.

Provided that the increased productive efficiency of the corporation leads to growth in overall societal income and wealth, and that the income and wealth is fairly distributed within the society, it should then benefit all or most members of the society in the long run. The high executive salary may then be justified in consequentialist terms by being in the long term interests of all members of the society. Philosophically economic efficiency as a justification for executive salaries is, in terms of distributive justice, a form of incentive theory, loosely framed around (societal) welfare principles.

Jonathon Riley has described this as a "second best" theory. That is, it is only a partial justification, and applies if and only if the empirical evidence actually supports the claim. There is no inherent benefit to the society in high rewards to executives in themselves, and arguably some dis-benefit from the effects they will have on social equity. Thus the high rewards are only ethically justified for the society if the high rewards lead to additional benefits to the society.

Empirically it is difficult to prove this argument either way. At the macro level there is a strong basis for economic efficiency arguments in the history of economic philosophy. Adam Smith (1776) cited the long term advantages to a society from increased economic efficiency as the primary benefit and reason for a market-based capitalist economic system. The countries having systems that encouraged economic efficiency were generally the richest at the time when Smith wrote. By the year 2000 all of the world's richest nations had market-based capitalist economies. These nations almost without exception enjoy the highest per capita incomes, longest life expectancy, and provide the greatest benefits to their citizens (based on OECD statistics and UN Global Development Index).

However the fact that the nations with most efficient corporations are generally the societies with highest utility does not prove that efficient corporations are the cause. Other factors such as better education systems, infrastructure, social change and technological change might all be identified as possible causes of economic growth. Efficient corporations might be a product of economic growth in a nation, rather than the cause.

At the level of individual firms it is more difficult to validate the economic efficiency argument. It would be necessary to demonstrate that high executive salaries cause more corporations to become more efficient to justify them based on economic efficiency. This would require proof both that the actions of executives caused greater efficiency in corporations, and that it was the high executive salaries that motivated the executive's actions. In both cases, defining the effects of executives' decisions on a corporation's efficiency is extremely difficult.

The practical difficulty at the level of individual firms is the same as for any contribution based theory applied to groups – it cannot be shown that gains in economic efficiency for a group are the result of the actions or efforts of any one member of the group, including the executive. If gains in the performance of a corporation are examined in isolation, they may be the result of economic, organisational or technological improvements that affect (at least) other firms in that industry. For this reason most studies of executive performance rely on comparing performance between corporations in the same industry or market. The studies then make the assumption that any differences in form's performance are due to differences in executive leadership. This ignores the potential for other internal and external influences, such as exceptional contributions from other members of the corporation. Hence it is likely to overstate the value of executive contributions where improvements occur. Nevertheless, comparative performance of a firm within an industry appears to be the best proxy available for measuring executive performance.

For corporations which do not have better than average performance, which will be most firms, it will not be possible to identify any contribution by the executive, which may greatly understate their contribution. For these reasons the comparative analysis should be carried out over time, with the change in relative performance over time compared with that firm's starting position in the industry used as a proxy of executive performance. This would require the performance component of executive pay to be made after the fact, when long term results are known. (This is consistent with current practices of delaying the time when executive share options may be exercised.) The results of comparative analysis of performance would then justify differentials between performance pay for individuals, although they would not justify any particular level of pay for executives.

Logically, if it is believed that executive performance is the primary determinate of comparative corporate performance, then some executives are also presumably responsible for the

losses on investment (relative to opportunity costs) incurred by any firm with below average performance. In such cases the value of the executive's performance is presumably a very large negative value, meriting dismissal or sanction, rather than any level of reward. Yet none of the studies trying to link executive pay and performance (Jensen et al) have attempted to measure the cost or loss induced by poor executive performance.

A final difficulty is that, even if the contribution to a corporation of executives' decisions can be isolated, it may not be possible to isolate the performance of the CEO from the performance of the rest of the executive group. One possible way to overcome this would be by identifying the period when a particular CEO was present and isolating the performance during their tenure from that before and after. The difficulty with this is that the impact of many decisions on corporate restructuring or strategy by a CEO may take time to take effect. Thus the full benefits or disbenefits of their decisions may not emerge till some time later. A solution would be to treat performance bonuses for the executive group in an identical fashion, distributing benefits to a pre-agreed formula at a later time when comparative industry performance is known.

Alternative Arguments: Economics of Superstars

Other arguments have been raised to explain the existence of high executive salary, but they are not ethical justifications. An example is the claim that executive salaries are an example of "the economics of superstars". There are some fields, notably sporting, arts and entertainment, where "superstar" performers may earn rewards far greater than the average for that field. The potential incomes in these fields have the character of prizes in a tournament, with a comparatively small number of prizes relative to the number of competitors.

It has been recognized in economic analysis by Rosen (1983) that in such highly competitive fields, a slight edge in performance may create a significant increase in the chance of competitive success. This allows more talented performers to charge an economic rent for their performance and attract a reward premium far greater than the actual difference in performance. The employer of the superstar (or the superstar themselves if effectively self-employed) can then charge users or spectators a premium fee for the performance. Thus very high rewards for superstars might still be in the rational self-interest of the employer.

This theory has been suggested to explain very high rewards for corporate executives with exceptional performance (Gabaix and Landier 2005). It can be applied to corporate executives at two levels – comparing salaries between CEOs of different firms, and between the salary of CEO and other employees within a firm.

Considered at the level of comparing CEOs between firms, if exceptional CEOs can generate exceptional performance for their firm, this theory would predict and justify a large range of CEO salaries, ranging from very low for poor to average executives, to very high for exceptional executives. The actual distribution of CEO salaries is not as would be predicted by this theory. While there are some CEOs paid more than others, none are paid poorly, and the average salary for CEOs is exceptional (Bebchuck and Grinstein 2005).

Considered at the level of comparative salary within firms, this theory might justify a wide variation of salaries between CEOs and other corporate executives. In this case, the position and salary of CEO could act as a prize that executives compete for, motivating higher performance from the executives, to the benefit of the corporation (Benjamin 2002). While this application of the theory would implicitly acknowledge that CEO salaries were not justified by the performance of the CEO, it would justify high executive reward if the overall performance of the corporate executive as a group produced a corresponding benefit to the shareholder and/or community.

Arguments Against Economic Efficiency Justification

Having considered the arguments for economic efficiency as a justification for high executive pay, there are also several counter arguments to examine. These fall into four broad categories – (1) other causes of efficiency, (2) objections from more sophisticated motivational theories of behavior, (3) supply and demand and (4) burden of proof arguments.

(1) Other Causes of Efficiency

Measured at the societal level, a range of political, social, and technological changes may cause economic and social advances, apart from the business efficiencies that may be generated by a single executive or corporation. The economic growth and prosperity enjoyed by most OECD nations in the 1990s might just as easily be traced to other causes such as the "peace dividend" from the end of the cold war, increased computerization, the baby boom ensuring record high workforce participation, and the increasing globalization of world trade. There seems no reason to attribute the global growth trend particularly to corporate management decisions.

The most comprehensive studies to date of the causes of business efficiency and competitiveness were those carried out by Micheal Porter in the 1980s and 1990s. Porter (1990) developed a model of factors that consistently influenced the success of different businesses. Economic efficiency of the corporation or industry itself (regardless of cause) was only one factor in a firm or industry's success. One factor, government policy, was beyond the direct control of the corporation. The other four factors were external influences that firms had to respond to, rather than things they led. Corporate leadership was not identified as a significant factor, although it might be argued that it influences the response to some of the causal factors.

In an Australian study the apparent causes of improved efficiency have included scale economies, technological innovations, X (factor)-efficiency gains and the removal of behavior aimed at merely satisficing performance targets rather than maximizing performance (Quiggan 1998). Gains in factor efficiency may have been due to corporate leadership, such as through restructuring of corporations. This is plausible but difficult to prove. It cannot be isolated from other potential causes of factor efficiency gains, such as changes to regulation or government policy. For example, reforms to labor markets might improve factor efficiency in an industry regardless of the actions of an individual executive. Even where the fortunes of a single corporation had a determining and beneficial effect on a single nation's economy, such as the Nokia corporation's growth relative to the Finnish economy in the 1990s, that success has not been linked to the actions of any single executive (Haikio 2002).

The existence of alternative causes for corporate success and difficulties in measurement does not disprove that executive leadership affects corporate performance. It could be argued that putting an idea into practice, particularly in a large complex organizational environment, is a difficult task in itself and deserves pay separate to the desert base of conceiving the idea. Thus even if an executive has not developed the products or innovations responsible for improved performance, and is simply putting into practice standard concepts of management theory,

that practice still generates value and deserves reward. In this case the desert base is the relative effectiveness with which some new organizational or technological change is implemented in the firm. The other employees of the firm who must carry out the change also share in the desert base of any improvements resulting to the firm's performance. The desert base for the executive is, once again, some share of the comparative improvement of the performance of the firm relative to other firms in the same industry with similar organisation and technology. There still seems no justification to attribute all of the gains from the change in the firm's performance solely to the desert base of the executive.

(2) Executive Motivation

The efficiency argument assumes that the predominant motivation influencing the behavior of corporate executives while carrying out their duties as an executive is personal financial gain in the form of salary. It relies on closely linking the salary to the corporation's performance, typically measured through the share price. This assumption has been explicitly used by those in favor of high executive pay justified by links to corporate performance, such as Murphy and Jensen (1990). There are alternative theories which may be applied to executive motivation that would give different conclusions.

Economic viewpoint: Income and Substitution Effects

The assumption that CEOs motivated by salary will strive for greater corporate efficiency if paid more is simplistic from an economic viewpoint. It ignores the fact that there are two recognized effects on the supply of any type of labor from an increase in the price of that labor – an income effect and a substitution effect. These act in opposite directions.

The income effect means that the increased income per unit of work supplied will allow at least some workers in that field to reduce their hours of work and receive the same income, or retire early where rewards are sufficiently high. They may then substitute some of their work hours for leisure hours, thereby increasing their total utility. The substitution effect means that an increase in labor income will make workers more willing to work in that field, increasing the supply of labor.

For the efficiency argument to be true, it must always be the case that the substitution effect is greater than the income effect in the executive labor market. Given that corporate executives are already the most highly paid occupational group in the world, and thus the financial inducements for individuals to enter and work in the field are already greater than for any other occupation, this assumption seems highly doubtful. Put simply, no additional effort would be expected from paying executive management higher salaries, when their salaries are already sufficient to satisfy any reasonable needs on their part. Similarly at a group level, no additional persons would be expected to be attracted to a career in executive management by higher salaries, when those salaries are already higher than for any competing career.

Another difficulty implicit in this argument is that, even if economic efficiency is improved by an executive, it is not a sufficient reason to prove that a firm needed to offer an exceptionally high executive reward to achieve that result. The efficiency argument contradicts the normal behavioral assumptions of firms hiring all other types of labor, where it is assumed that most individuals maximize utility by satisficing income in combination with other working conditions. For most employers, it is desirable to hire employees that are highly efficient. However the method is not to pay the highest rewards to all employees to achieve the highest performance. Firms pay rewards that are (just) high enough to motivate the desired level of performance. Firms seek to optimize their pay rates relative to worker performance, not to seek maximum performance at any price. It is not rational for corporate boards acting as employers on behalf of shareholders to pay corporate executives any more than the reward level sufficient to attract the executive to that position and motivate high performance.

Psychological Viewpoint: Motivational Theories

The claim that higher salaries will act as a motivator for executives may also be considered from a psychological viewpoint. One of the seminal investigations into the motivations that influenced employee performance in businesses was by Maslow (1943). Maslow identified a hierarchy of psychological forces that motivated individuals. These were ranked from primary needs (for survival), followed by three other levels of "deficiency needs" to a higher level of growth needs. Maslow's theory was that primary needs had to be satisfied first, and that individuals then sought the higher level growth needs.

Deficiency needs:
- physical needs (able to provide food, clothing, shelter etc)
- security (certainty of position, values, belongings),
- belonging (to a group eg firm or category of executives)
- esteem (respect for position)

Growth needs:
- self-actualisation (creativity through setting direction of firm)

For the executive, physical needs have probably already been satisfied in the preceding middle management career and are not relevant. Security is arguably reduced for the executive, due to higher risk of dismissal for poor performance. Satisfaction of the need for belonging is also questionable, as the holding of the power to discipline or dismiss other employees in a firm presumably reduces the ties of friendship to them. Conversely, the existence of an "old boys club" among executives suggests that being an executive represents belonging to a prestige group in itself. The desire for esteem would appear to be readily satisfied by executive employment for the same reason. The satisfaction of the desire for self-actualisation through executive employment is considerable, with frequent decision making, problem solving, and the opportunity to create a new direction for a large complex structure of people.

It could be argued that executive employment also contradicts Maslow's theory in some respects. Many executive contracts represent individuals trading off deficiency needs (eg security of employment) for growth needs (e.g. self-actualisation/ability to direct the firm). The less popular aspects of executive employment (cutting cost through dismissal of staff, accepting salaries many times higher than fellow staff and citizens) might threaten the need for belonging and esteem.

Maslow's theory has been criticized by subsequent behavioral researchers. For example, Wahba and Bridwell (1976) found that there was little empirical evidence for Maslow's ranking of needs, or any apparent hierarchy. Neef and others have argued that fundamental human needs as identified by Maslow are ontologically different and cannot be ranked or compared. On balance, it would be better to say that there are a range of different psychological needs and desires, which executive employment will satisfy to varying degrees. Whether taking Maslow's view, Neef's, or others', it does not seem plausible to say that additional executive salary will in itself satisfy psychological motivations on the part of the executive. Offering continually

higher salary may simply predetermine a category of persons to become executives, namely those who value salary more highly than other motivations normally considered by persons.

It has been suggested that executives seek higher salaries in comparison to other executives, as a means of recognizing comparative ability or performance. That is, high salary is a means of recognizing the status of the executive amongst their executive peers. In this case new provisions for the reporting of executive salaries as a means of restraining them would be self defeating. The information about salaries of executive peers would • serve to motivate executives to seek parity with any more highly paid executive. If executives with superior to average performance then received a higher salary it would result in a cycle of continual increase of executive salary, precisely as has been actually happening. The resulting increasing level of executive salaries would not be justified by increasing performance.

This motivation explains the desire for continually increasing executive salaries, but does not justify them. Nor does it explain why the higher salaries are agreed to. Recognition of ability is an understandable desire in members of every profession, and higher salary is one of the means of providing it. Yet it is not the case that salaries in every other profession are continually rising in real terms. Thus the desire for recognition might explain the motivation of executives seeking higher salaries, but does not explain why they are awarded. This motivation also has the undesirable feature that executives may seek higher salary as proof of their ability, irrespective of performance.

As there is not evidence that highly paid executives benefit individual corporations, a more logical strategy for a corporation rationally pursuing its own self-interest is to act as a free-rider with respect to executive salaries. That is, if the corporation had the lowest executive salaries, while based in the nation having on average the highest paid executives, it would gain the benefits of being in the most efficient nation, while having the least cost in executive rewards paid. The apparent absence of such behavior on the part of corporations suggests that their boards of directors do not pursue the rational self interest of the corporation when executive salaries are agreed.

If these motivational theories are correct, then there would appear to be potential to motivate executives through the use of alternative non-financial prizes or rewards for superior executive leadership as markers of status or recognition for high performance. These would satisfy the desire for esteem and comparative recognition, but not create a cost burden for shareholders.

(3) Supply and Demand Arguments

Another major argument against high corporate rewards on the basis of economic efficiency is based on the theory of equilibrating markets, which contradicts the continued trend of corporate executive rewards to rise. According to economic theory any field where resources are in demand, including labor markets, will see at first a rise in the price offered for the resource. The market will then adjust so that more resources enter that field. The price will then adjust down so that returns to those resources equate to normal levels of reward. Where this does not occur it is generally seen as evidence of rent-seeking behavior by owners of the resources, and a market that is not perfectly competitive. Such markets are unlikely to deliver efficient outcomes and hence not be socially optimal.

There may be a valid case to say that the demand for corporate executives is growing. The relative proportion of the world's economic activity carried out by large corporations has been growing in the long term (Galbraith 1967). This trend has accelerated since the end of the cold war with the replacement of most nominally Communist economies with market-based capitalist economies containing privately owned corporations. Within most OECD countries, the trend has been to reduce the proportion of government spending (other than welfare) and privatize many formerly government-owned businesses as corporations. The size of individual corporations has also grown in real terms, with 51 of the 100 largest economic entities in the world being corporations by the year 2000 (Anderson & Cavanagh 2000). Within each corporation, while other staff functions have typically been "downsized" or "outsourced" throughout the 1990s, there appears to be no trend to do this to executive positions. Thus overall there are more and larger corporations than before, and therefore a need for more executives.

However if the demand has risen, the supply has risen more dramatically. The number of persons being educated in the disciplines seen as entry level qualifications into business management careers – accountancy, business, economics and law – have greatly increased in all OECD countries. If these are indeed the skills required, then the supply of labor has increased to the point where some correction in the price of executive labor might be expected. If the supply of persons with the required skills to be an executive has not increased after two decades of constant increases in executive salary, this is contrary to labor market theory and raises the question of what blocks or prevents increases in the skill supply.

Some might argue that the critical skills for success as an executive are not gained from such formal education. This leaves two other possibilities – either the required skills are inherent qualities that cannot be taught, or they can be learnt through experience in the business concerned. If the required skills are inherent, then the supply of individuals with them will be fixed and not influenced by executive salary levels. If they are learnt from experience, then it is encumbent on current executives working for the good of their corporation to give opportunities to potential executives to develop their skills, so that there will be a sufficient number of replacements for themselves. If there has not been a sufficient number of future replacements trained so that there is a shortage of labor with executive skills, it would seem perverse to reward executives with higher rewards now because of their or previous executives past failure to train adequate replacements.

In reality, no shortage of applicants for such positions is reported. In an era of increasing skill shortages as the "baby-boom" generation retires, various professions are listed as being undersupplied but positions for corporate executives never make such lists. Since most executive positions are not advertised, it seems more accurate to say that these positions are only accessible to a small number of persons, but this does not prove that only a small number of persons would be able to perform them.

(4) Burden of Proof

Authors such as Nichols and Subramanian (2001) have correctly pointed out that some attacks on high executive rewards are unsubstantiated because of difficulties in measuring the value of executive actions in corporations. Thus the claim that executive rewards are too high is unproven. However in principle Nichols and Subramanian have reversed the burden of proof for justifying high executive rewards. Executives receive, and have sought to justify, higher levels of reward than all other occupations. Given this exceptional level of reward, it would seem that the burden of proof for their justification rests on those claiming, or seeking to justify, the exceptionally high levels of reward.

For any employer to approve an exceptionally high level of reward for an employee, presumably the employer would want to be satisfied that it was justified. In the absence of such proof, a reasonable employer might pay the employee the average level of reward, but would seem to have little reason to go beyond this. In the same manner, for corporate directors to approve what are exceptionally high levels of reward for executives, presumably they would want some evidence of it being deserved. Otherwise the directors would have failed in their duty to protect shareholders' interests, from whose returns the reward must ultimately be paid.

Empirical Evidence – National and Societal Level

At the national level it is possible to compare economic performance with CEO pay as reported in World Bank statistics. This has been done for selected countries where data up to 2006/07 is available for CEO pay, average income, GDP growth rate and share market index returns. The statistics have been adjusted to show net impacts per person for comparison. Average CEO pay has been divided by average income to obtain an index representing how high CEO pay is relative to average pay for each country. Similarly GDP Growth rate has been divided by population growth to obtain a GDP growth rate per capita.

CEO pay as reported by the world bank is shown against average incomes in Figure One. Generally CEO pay is proportional to, and much larger than, average income. The pay rate for US CEOs appears to be an outlier. For subsequent graphs CEO pay has been reported as a multiple of average income.

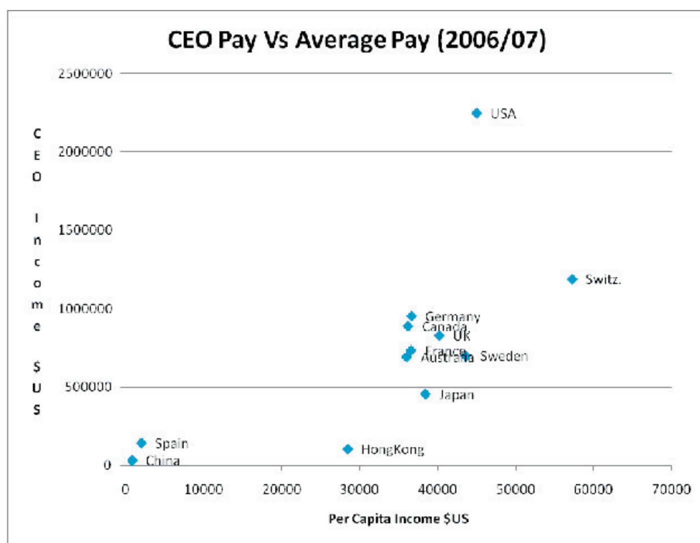

Figure One – CEO Pay Compared with Average Income

National GDP growth rate per capita is compared with the CEO pay multiple (of average incomes) in Figure Two and with unadjusted CEO pay in Figure Three. From these GDP growth appears to be inversely related to raw CEO pay. That is, the higher the CEO pay, the lower the economic growth rate. When CEO pay is adjusted to a multiple of average incomes there is no obvious relationhsip apparent in the data. At best, there appears to be no evidence at the national level that comparatively high CEO pay leads to higher national income or economic growth.

Figure Two – GDP Growth Rate compared with CEO Pay multiple

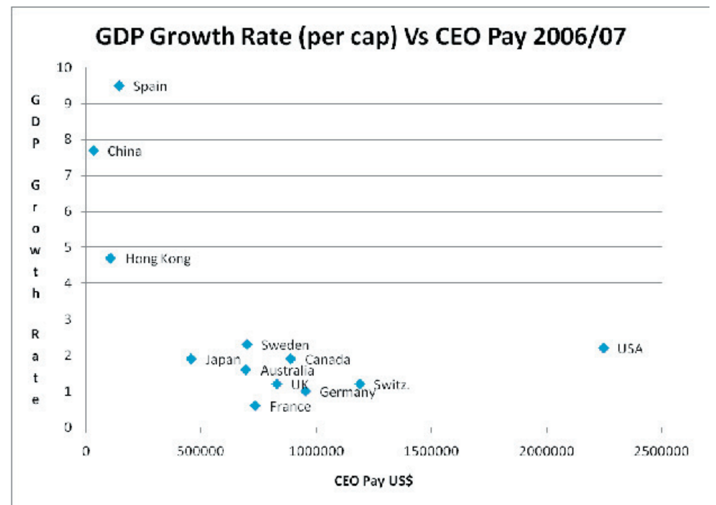

Figure Three – GDP Growth Rate compared with CEO pay

Proponents of high CEO pay might argue that it is better measured against corporate returns, as national GDP growth is affected by many factors beyond the CEO's control. Average share market returns over ten years for (publicly listed) corporations is compared with the CEO pay multiple (of average incomes) in Figure Four and with unadjusted CEO pay in Figure Five. Again there is no obvious relationship apparent in the data where higher CEO pay leads to higher share index returns. The best performed share markets appear to be those where CEO pays is average to low.

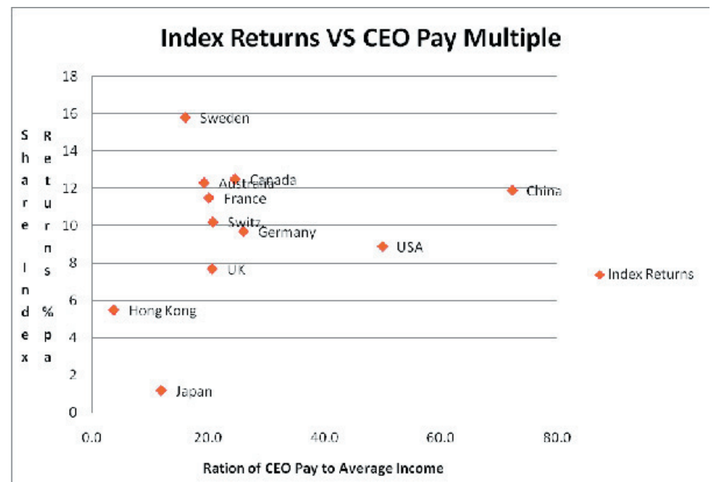

Figure Four – Share Index Returns compared with CEO pay

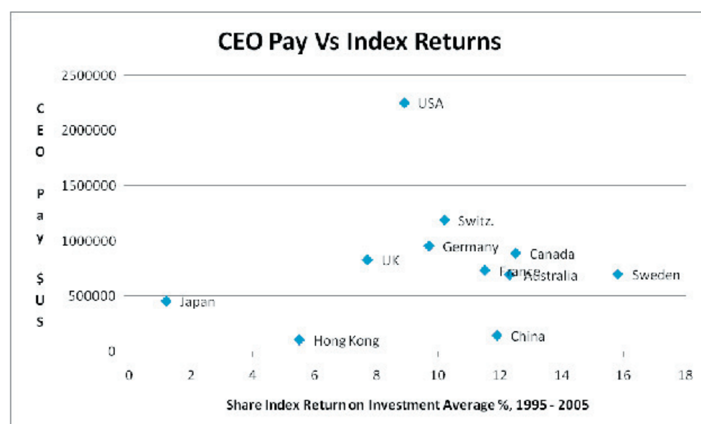

Figure Five – Share Index Returns compared with CEO pay

Empirical Evidence – Corporate Level

Acknowledging measurement difficulties, recent studies have examined empirical evidence on the relationship between executive pay and corporate performance. These analyses are difficult to perform because it is not possible to isolate the effect of the executive's decisions from other factors which affect the corporation's performance. Firstly, the performance of a corporation must be isolated from other general economic trends, preferably by comparing its performance to that of its market competitors. Secondly, it must be assumed that this comparative performance of a corporation during the period a particular executive controls it are due to that executive's decisions. This method potentially overstates the value of an executive's contribution, since it ignores other potential sources of comparative improvement in the corporation.

Most empirical analysis assumes that CEOs ability to influence corporate performance depends on their degree of control over the organization. Adams, Almeida and Ferriera (2005) have shown that firms with structures giving greater power to the CEO have more variable performance than other firms, both for better or worse. This suggests that the CEO role is influential.

Nohria (2001) analysed differential corporate performance in each US industry group. He found that, assuming CEOs were responsible for the differential performance change that occurred during their period of control, their influence was at most 21% of performance improvements (in Communications Equipment) and at worst 2% of performance improvements (in meat products). In this way Nohria concluded that on average 14% of the gains in performance made by US corporations could be linked to decisions made by the corporation's executive.

If we accept the assumption that it is the CEO's actions that affect changes in a firms performance relative to its market rivals, then it is possible to compare CEO pay and performance. Daines, Nair and Kornhauser (2005) refer to a continuation of good performance of a firm relative to its rivals or change in poor performance as being due to CEO "skill". They showed that there were instances of when CEOs paid higher than average did display high "skill" (i.e. good relative performance) and other instances where CEOs paid higher than average did not display such skill. Overall they found that highly paid CEOs displayed high skill when the pay was performance based, and when there was a single large shareholder. Where one or both of these factors was absent high pay did not guarantee a highly skilled CEO. This suggests that it is possible that high CEO pay may be justified in cases of exceptional performance. Conversely, it shows that high CEO pay does not in itself guarantee high performance, and also does not explain the high average level of CEO pay, only differences between pay of individual CEOs.

Bebchuk and Fried (2004) undertook a comprehensive review of empirical studies of CEO pay in the United States. They concluded that in the majority of cases, high CEO pay was not due to performance but due to a windfall gain from an overall rise in the share market. Many CEO pay contracts did not rigorously link CEO pay to relative performance. The fact that bonuses for "exceptional" performance were invariably paid indicated that most such contracts were written to reward average performance rather than truly "exceptional" performance. Widespread practices such as generous CEO severance benefits regardless of performance, unsecured company loans to CEOs and complex financial arrangements camouflaging the true extend of CEO pay all appeared to be contrary to shareholders interests. After the passing of the Sarbanes Oxley Act (2002) in the United States, effectively prohibiting some of these practices, Bebchuk and Fried concluded that the situation may improve slightly. Nevertheless, given that the underlying cause of excessive CEO pay in their view, managerial power, was not greatly altered, they considered that significant problems would remain, and average CEO pay would remain very high.

Figure 1: Australian Shareholder, Worker and Executive Incomes
Source: John Shields (2005)

Overall, the empirical studies indicate that, even assuming differences in comparative performance are due to the executive, the salaries paid to executives of individual corporations cannot be justified by their relative impact on the corporation's performance in the majority of cases.

Putting aside these limitations, there does not appear to be evidence at the level of individual corporations that high executive pay leads to improved economic efficiency. Following the work of Jensen and Murphy (1990) and others, it had been concluded that corporations performed better where executive pay was closely aligned to returns to share holders. Subsequently salary packages were increasingly tied to the corporation's share price, typically by allocating options to purchase shares at a discounted price as a performance bonus to the executive. Yet over the past two decades executive salaries have consistently risen faster than corporate share prices and returns on investment. Figure 1 shows this trend for Australian data from 1990 to 2005 (Shields 2005).

There are several reasons why pay schemes as suggested by Jensen may lead to higher executive pay outcomes. Abowd and Kaplan (1999) have shown that the reporting rules for share options in the 1990s tended to hide the true extent of executive pay from shareholders and enabled large entitlements to be

built up with little scrutiny. At the same time the share options did not motivate executive performance to the degree assumed, as they tended to be discounted by executives because they were payments both in the future and at risk. In practice, share bonus schemes resulted in large pay bonuses to executives when the overall share market rose, regardless of the comparative performance of the corporation.

Given these findings it is not surprising that, where empirical studies have been carried out, current levels of executive pay could not be justified on the basis of economic efficiency. Shields (2003) demonstrated that for Australian corporations, the correlation between corporate performance and executive salary was negative, that is, the highest paid executives controlled corporations with the lowest comparative performance.

Recent reforms to requirements for corporate reporting of executive rewards has enabled more complete research of trends. Bebchuk and Grinstein (2005) have carried out a comprehensive analysis of the growth of executive pay in the United States. Their analysis of the period 1993 to 2003 included both CEOs and top-five executive incomes reported for each of 1500 United States corporations including small (Small Cap-600), medium (Mid-Cap 400) and large (S&P 500) firms as defined by their market capitalization. They tested whether movements in executive pay could be correlated to individual firms size, growth or profitability. Conclusions were as follows:

- Real growth in executive pay was double what could be explained by changes in firm size, profitability or market capitalization;
- Growth in equity (performance) based pay has been in addition to, rather than in lieu of cash compensation. That is, the amount of executive pay not at risk has not reduced as performance pay rose;
- The pay growth trend applied to CEOs and other senior executives;
- The trend applied to small, medium and large firms, though was greatest for large firms;

Considering Bebchuck and Grinstein's findings, one conclusions is striking: the quantum of executive pay is now so large (aggregate pay to US top five executives now averages 10% of aggregate earnings for the 1500 listed corporations) that in itself it represents a significant cost to shareholders. This strongly suggests that economic rent is being obtained by incumbent corporate executives.

To summarise the empirical evidence then, from the viewpoint of economic efficiency narrowly defined, the recent trend of rising executive pay is not justifiable by economic efficiency in Australia. In the United States both the trend of pay increase and the quantum of executive pay is also unjustifiable. This is summarized in the following table:

Argument for High Reward	Philosophical Theory	Empirical Proof?
Economic efficiency	Conditionally valid	Societal level: False, Corporate level: False
Economics of Superstars	Not valid	False
Argument against High Reward		
Efficient Labor Market	Valid (criteria for efficient market)	Executive market fails to meet criteria
Motivational Theories	Valid	Unproven but Plausible
Supply and demand	Valid	True
Burden of proof	Valid	Not applicable

Summary of Arguments for High Corporate Executive Rewards

Conclusions

There is now a significant body of literature analysing economic efficiency arguments for or against particular levels of corporate executive rewards. Some consider the argument from a corporate governance perspective, although few consider the philosophical strengths and weaknesses of the argument.

Despite the large and growing number of empirical studies of executive rewards, there are many difficulties in reaching conclusions based on these studies. Information on the level of corporate rewards is very difficult to determine, particularly the value of stock options which are exercised at a future date. For empirical arguments, it would also be desirable to base conclusions on trends which are as long term as possible. Recent improvements in corporate accounting requirements for executive benefits have enabled more rigorous studies of pay and performance to be completed, such as that by Bebchuk and Grinstein in the United States. In Australia's case complete information on executive rewards has only been available since 2001, making long term tend analysis more difficult.

Economic efficiency arguments for high executive pay appear to face a fundamental difficulty for executive positions, with the inability to distinguish the contribution of the executive from the fortunes of the corporation as a whole. Attempts to compare performance against similar corporations might allow comparative evaluation of executives, but still do not resolve the difficulty of deciding what is an appropriate comparison base. There seems no answer to the question of how to determine the value of the contribution of the average executive.

Despite these qualifications, it is possible to reach some conclusions about the validity of most common arguments used to justify executive rewards, and based on empirical evidence of recent trends. Philosophically, the efficiency argument could potentially be valid, provided the evidence supports it, and executive pay markets conform to conditions for free and fair markets (which current corporate executive labor markets do not meet).

Empirically the efficiency argument appears to be false. At the societal level, there seems to be no evidence that economies that pay higher executive pay are more efficient. From Shields and Bebchuk's research, even if all increases in individual corporations' economic efficiency are assumed to be due to their executives, they do not appear to be sufficient to justify the rewards being paid to those executives. Thus at the level of individual corporations the case for large executive rewards to encourage economic efficiency appears to be false.

From a philosophical viewpoint, the economic efficiency argument for high reward appear to be potentially valid. However on the evidence of most studies, it is not empirically true for executives in Australia and the United States. Therefore the current trend of increasing executive salaries would appear to be evidence of rent-seeking behavior by incumbent executives.

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