CENTRE FOR ECONOMIC PERFORMANCE

DISCUSSION PAPER NO. 199

JULY 1994

MERGERS, MOTIVATION AND DIRECTORS' REMUNERATION

P. ABELL, J. SAMUELS AND M. CRANNA

ABSTRACT

Using small matched samples of companies which are, and are not, highly involved in acquisition in the period 1986-90, an investigation is mounted to ascertain whether "acquisitiveness" has any impact upon the remuneration of the top directors over and above what one would expect because of the growth in "size". The evidence suggests it does, if returns to share options are included in the measure of remuneration.

This paper was produced as part of the Centre's Programme on Entrepreneurship

MERGERS, MOTIVATION AND DIRECTORS' REMUNERATION

Peter Abell, John Samuels and Michael Cranna

Section	Page
A: Introduction	1
B: Management Motive for Mergers	2
C: Managerial Remuneration and Corporate Performance	4
D: Methods and Data Sources	6
E: Results	9
F: Conclusions	15
References	17

We gratefully acknowledge financial assistance from the Esmee Fairbairn Trust Fund. The Centre for Economic Performance is financed by the Economic and Social Research Council.

MERGERS, MOTIVATION AND DIRECTORS' REMUNERATION

Peter Abell, John Samuels and Michael Cranna

A: Introduction

This paper is concerned with two interrelated topics, both of current interest. One is managerial or directors' motives for mergers and acquisitions, the other the relationship between directors' financial rewards and company performance. One aspect of a director's financial reward to which we draw particular attention, is the gain from executive share option schemes. This is often not included in studies on the levels of directors' remuneration (Main, 1991; Gregg et al, 1993).

We examine the financial rewards received by the directors of two groups of companies during 1986-90; one group active in mergers and acquisition, the other less active.

The main hypothesis we test is that *ceteris paribus*, directors of companies who are particularly active in mergers and acquisitions receive greater remuneration, bonuses and gains from share options than directors of companies who are less active. This hypothesis, if proven, would support those who emphasise the importance of management motives behind acquisition and mergers. While it could be that both the directors and the shareholders of the acquiring firm benefit, there is a considerable volume of research which finds only limited, if any, gain to shareholders of acquiring firms (Franks and Harris, 1989; Firth, 1991).

In Section B we will briefly review the relevant literature on management motives for acquisitions. In Section C the literature on executive remuneration is reviewed. In Section D we give details of the data we have used and the research methodology. Section E gives the results and Section F the conclusions.

There is a problem of terminology in this area of research. In the USA, the term "compensation" is used to embrace the whole package of returns to directors. In the UK, however, this term suggests a payment for loss of office. The Companies Act 1987 refers to "emoluments", but this term does not include all forms of financial reward, such as gains from share options.

The financial rewards received by the director of a company, whilst still employed by the company, can take a number of forms. These include;

- -Fees
- -Basic remuneration (salary)
- -Performance related bonuses
- -Executive share options
- -Cheap loans

In this paper, the three components of financial reward we consider are: 1) basic salary, 2) bonuses and 3) executive share options. When combining basic salary and bonuses we will refer to this as "remuneration"; we shall call all three elements combined, "total remuneration".

Further financial returns received by most directors are the dividends and earnings from the ownership of ordinary shares in the company. It is a controversial issue as to whether or not these should be seen as a return for services as a director. It could be argued, for example, that if the directors of a company are also substantial shareholders, they might decide to take the financial return for their efforts in the

form of dividends rather than annual remuneration. We have not, however, included return on share ownership beyond share options in this study.

B: Management Motive for Mergers

Throughout the 1980s it was often argued that there was no need for shareholders to be concerned with the finer details of directors' remuneration. If, it was urged, a management team is not administering a company efficiently, this would eventually be reflected in the share price of the company. They would then run the risk of becoming a target for a takeover by a more efficient management team. Thus, assuming a desire for continued tenure by the original team, the market for corporate control would effectively discipline them to work with the interests of shareholders in mind (Marris, 1964; Jensen and Ruback, 1983). Their goal congruence or agency would be effectively guaranteed.

Unfortunately, the evidence on the success of mergers and takeovers in securing the most efficient use of resources is far from conclusive. In the wake of the events of the 1980s, it is difficult to assume firstly, that an inefficient management team will always be noticed; secondly, that they will be uncovered in time to save the company; and thirdly, if they are uncovered, that those who succeed them will be necessarily any more efficient (Cowling *et al*, 1986; Peacock and Bannock, 1991).

There is in most companies a limited amount of information available to shareholders concerning directors' remuneration. It might, however, be argued that the detail that is provided is all that is needed and if shareholders and the market want more, they are in a position to demand it.

For the agency relationship between owners and managers/ directors to work effectively, it is essential that the owners can at least monitor the rewards received by their agents. It is, therefore, important that shareholders remain confident that directors are being paid in a way that ensures as much unity as possible in their respective interests. Shareholders need a detailed understanding of how directors benefit from performance related bonuses and share option schemes, and the extent to which each of these elements make up the directors' financial rewards.

A succession of studies have shown that directors' financial rewards are related to firm size (Cosh and Hughes, 1987; Jensen and Murphy, 1990a; Gregg *et al*, 1993). It is, therefore, in a director's interest for the firm to grow and the fastest way to achieve this is through acquisition. We pose the question, however (whether taking account of size) there is a premium to management in attaining size through acquisition. Clearly, there is an inherent premium, since growth by acquisition will normally increase size more rapidly than by `organic growth'. One of the central purposes of this study is to ascertain the extent to which there are gains over and above this.

It is the senior management of a company who make the decision to launch a takeover bid, not the shareholders. It is natural that the managers will take their own interests into account. Because of the pressure "to succeed" and the competition in the market for corporate control, the acquiring company sometimes pays more for the target company than can be justified. Reich (1983) goes as far as to argue that some management teams pursue takeovers and mergers knowing that their shareholders will not benefit.

Shareholders' wealth

A Department of Trade and Industry report (1990) refers to the UK culture of management as "being judged essentially in value terms ("shareholder value")". Ignoring the wider issue as to whether takeovers and mergers lead to economic gains for the economy as a whole, we will consider the evidence as to whether takeovers and mergers in the UK and USA lead to increases in the wealth of the shareholders of the acquiring firm. In other words, do the decisions of the managers who initiate the takeovers and mergers lead to increases in their shareholders' wealth.

The most recent comprehensive study on this topic based on UK data is that by Franks and Harris (1989). They examine the post merger performance of over 1,000 bidders during the period 1960-85. They find that the evidence for improved shareholder value is not conclusive. Undoubtedly there are short term gains, "mergers have on average been value creating for shareholders ... around the merger announcement date". Bidding company shareholders gain, or at least do not lose, in the short run. Whether there are longer term gains depends on the benchmark returns against which bidding companies' share prices are evaluated. The actual share price performance has to be compared with what it might have been, in the absence of the acquisition. One set of such assumptions results in negative returns -with an average negative return cumulating to about 13% by two years after the acquisition. Another set of assumptions shows small positive returns - about 4% over the two years following the acquisition. "This negative drift in bidder share prices is consistent with US findings in earlier studies". It is not what one would expect to find if acquisitive managers are motivated solely by the goal of maximising their shareholders' wealth. Neither is it what one would expect if effective agency or goal congruence existed. Undoubtedly, some acquiring companies do show very high returns to their shareholders, but these are (more often than not) offset by the losses to the shareholders of other bidding companies. It may be, however, that companies always estimate an above average performance.

A 1987 study at `The Brookings Institute' in the USA concludes, "serious errors were made by managers who engaged in wide ranging merger activity and by investors who financed them. It is important for business leaders to understand what went wrong and how to avoid making similar errors in future. It is also important for policy makers to understand what happened" (Ravenscroft and Scherer, 1987).

The Ravenscroft and Scherer study was based on over 6,000 mergers and takeovers consummated in the USA between 1950 and 1976. A detailed study of a number of conglomerates, it examines their subsequent post-merger performance. Based on data taken from the financial accounts of the companies concerned, they found that "the average acquisition, if not downright unprofitable, was not highly profitable". Looked at from an alternative point of view, namely in terms of stock market performance, the conclusion the authors reached was that on average investors received less returns with more risk, than they could have obtained from investing in a portfolio of shares performing at the stock market index.

If managers are judged in our culture by the wealth they create for shareholders, one wonders why they appear so enthusiastic about acquisitions. Perhaps they have been misled by those who undoubtedly do benefit from mergers and takeovers, namely sections of the financial services sector.

Firth (1980) has shown that in the UK, following an acquisition, it is less likely that shareholders of the acquiring firm will lose if the directors of the acquiring firm

have a relatively large shareholding in their own company. It was found that the higher the personal wealth directors had invested in the firm, the more circumspect they are in making acquisitions. Similar results were found in the USA by Amihud *et al*, (1990) and Lewellen *et al*, (1985).

Firth (1991) examined takeovers in the UK over the period 1974-80. His results on the influence of directors' share ownership on gains to all shareholders were consistent with these other studies. He found that although the increases in remuneration of directors were greater, following acquisitions that benefited shareholders, the chairman and highest paid director still received substantial increases following takeovers that led to abnormal negative returns to shareholders. The evidence shows that to make an unprofitable acquisition is better in terms of rewards for senior management than making no acquisition at all. Lambert and Larcker (1987), however, found that in general, senior management in the USA did not receive significant increases following acquisitions which gave negative returns to shareholders. Firth, when measuring changes in compensation for directors, did not take into account executive share option schemes. Nevertheless, his conclusions are consistent with the idea that takeovers are motivated by the desire of management to maximise their own returns.

In reviewing the empirical studies on this subject, it is difficult to find evidence to support the view that the average acquisition increases the wealth of the shareholders of the acquiring company. This leaves open the idea that management motives may dominate the market for corporate control.

C: Managerial Remuneration and Corporate Performance

A study conducted in the USA for the period 1964-81 (Murphy, 1985) found no relationship between management compensation levels (measured by salary plus bonus only) and company performance. In the USA, however, shares owned or share options held constitute a large portion of an executive's individual wealth. Although in the UK executive share option schemes are less significant than in the USA, they are still important. Murphy came to a similar conclusion to some UK studies in respect of sales growth being an important determinant of executive compensation (Cosh, 1975; Meeks & Whittington, 1975; Gregg *et al*, 1993).

A more recent study, again in the USA by Jensen and Murphy (1990b), indicates that the situation has changed over time. Their study of 1,400 companies from 1974-88 leads them to the conclusion that what is important "is not how much you remunerate, but how you remunerate." The study concluded that annual changes in executive compensation (including share options and share appreciation) do not reflect changes in corporate performance. They believe that the reason for this is that, as a result of public criticism over recent years, boards have become reluctant to reward chief executives with substantial financial gains for superior performance. However, they also believe boards are "reluctant to impose meaningful penalties for poor performance". Hence, they argue for a more aggressive remuneration for performance policy with a high probability of dismissal for poor performance and big rewards for outstanding performance. They want a higher percentage of the compensation received to be performance related, either through bonuses or share options.

US studies have shown that the incentive element received is generally only a minor element of total compensation. On the other hand, a study of changes of

directors in companies in the USA has shown that only 4% left their jobs because of poor performance (Warner *et al*, 1988).

There are only a small number of UK studies on these topics. Meeks and Whittington (1975) find that both growth of sales and profits play a significant role in determining executive remuneration. They find that company growth, although possibly achieved in only one period, exerts a positive influence on remuneration in all subsequent periods, irrespective of future growth. Cosh (1975) found that in the case of large companies, size factors dominate profit factors in determining levels of executive remuneration.

Main (1991) analyses cross-sectional data for 1985 on the relationship between company performance and top executives' financial rewards. He found no evidence of a link between their remuneration and returns to shareholders. His measure of executives' reward did not, however, include gain from share options. The return to shareholders was calculated as the capital gain plus dividends over the twelve months of the company's financial year. He concluded that the link between executives' remuneration and shareholders' interest was "empirically modest". He found it "particularly perplexing" that abnormal returns to shareholders do not lead to higher levels of executive remuneration.

In a more recent study by Gregg, Machin and Szymanski (1993) it was again found that there was only a weak link between company performance and executive remuneration, a fact especially marked during the recessionary period from 1989 when company profitability dropped significantly but remuneration continued to increase at much the same rate as previously.

This divergence over one or two years could be justified as an incentive for directors to take risks in an attempt to maintain company performance, but for it to continue over a number of years is a sign that performance packages are not working, or are being misused. There is a potential problem with all studies that examine the relationship between the remuneration of directors and company performance, that is: whether the performance is measured by the movement in share price, or earnings per share. With some companies the performance related remuneration element for each year is divided between an immediate payment and a deferred payment. This practice is designed to assist in retaining key executive directors and to smooth the impact of the payment on the level of profits. The result is that only the immediate payment is disclosed in the accounts for the year when the good performance occurs. The deferred element is disclosed in the following years whatever the profit performance in those years. It may be paid anything up to four years after the year in which it was earned. This is why, for example, Sir Ralph Halpern, the chief executive of Burtons plc for much of the 1980s, was receiving a bonus in 1993 - three years after he ceased to be director of that company.

Such deferred payments can distort the statistical results that relate directors' remuneration and bonuses received in one year with the profits for that same year. Some studies relate the remuneration in one year with the performance (earnings per share or shareholders returns) of the previous year (Gregg *et al*, 1993). This allowance for a lag does not, however, adequately address the problem of deferred payments.

Most studies on the subject of managerial remuneration have been conducted in the USA. There is always a danger in taking the findings in one country and assuming they apply in another. In the USA, for example, directors are bigger shareholders in their companies than they are in the UK.

Benston (1985) argues that, in the USA, shares constitute a large portion of an executive's individual wealth and that an executive's wealth is tied to his company's stock market performance. Changes in value of the director's share holdings are often many times greater than his/her salary plus bonus.

There have been a number of US studies into the effect of the adoption of Executive Share Option Schemes (ESOS) on the decisions made by executives. Larcker (1983) found that capital investment in the company increased following the adoption of performance plans. Agrawal and Mandelker (1987) found that companies in which managers had low share holdings were more likely to have lower levels of gearing than companies where managers had large share holdings.

For some, a more worrying consequence of the adoption of ESOS was found by Defusco, Johnson and Zorn (1990), namely, that it led managers to select more risky projects than they would have done in the absence of such a scheme. This fits in with what is known about share options in general, that is to say, that their value increases as the variance of the share price increases. Executives cannot lose money with an option, so they may as well go for riskier projects in an attempt to secure larger returns. A fixed salary contract does not reward managers for taking risks. The announcement of the adoption of ESOS was found to lead to a positive share price reaction and a negative bond market reaction (Defusco *et al*, 1990).

D: Methods and Data Sources

In our study, we wished to test a number of hypotheses concerned with the relationship between a company's merger and takeover activity and its directors' financial rewards.

The aim was to examine those publicly-listed, UK-owned companies who were the most active acquirers during the 1986-90 period, using as our definition of "acquisitiveness" the completion of purchases of over 50% of the issued share capital of three or more UK-listed companies within the time period. We had planned to study the most active acquirers but some of these had gone into liquidation by 1992 (for example, Coloroll PLC, British and Commonwealth PLC, Mountleigh PLC) rendering their Register of Share Interests unavailable. We also decided to remove from our sample, banks and investment houses. This left us with 25 companies. These were then matched with companies with a less or non-active acquisitive record over the same period. The matching was conducted on the basis of similar industrial or commercial interests and size. This information was gathered from *FT Profile* and *Mergers and Acquisitions International*.

The initial sample was taken from the database FT Profile, covering 1,318 bids in the period 20 October 1986 to 15 June 1991. The list did not include pending, new, or uncompleted bids, agreed UK bids for UK private companies, UK bids for foreign companies and failed bids for UK companies. The companies were contacted and asked to send copies of their annual reports dating back to 1986 in order to obtain data on the remuneration of the executive directors and any gains they made from share options.

The companies in our sample, almost without exception, used one uniform format in their reports and accounts to present information concerning executive remuneration. That is, they present a series of bands of salary ranges indicating the

number of directors in each band. Companies are required to disclose the remuneration of the chairman and the highest paid director. In some cases the chairman is the highest paid director and so only one figure is disclosed. It was in such cases necessary to investigate the salary bands in order to estimate the remuneration of the second highest paid director. In most annual reports the information pertaining to share options was presented in such a way as to make matching directors' names with their share option returns impossible. It was essential to identify the two highest paid directors by name, whereby it became possible to link the gain each made from the exercising and selling of share options. The Chief Executive Officer (CEO) was always one of the two highest paid directors. identify the second, it was on some occasions necessary to refer to the service contracts. Shareholders, and indeed any interested party, have the statutory right to inspect the service contracts which are made available for a limited time every day at the company's offices and for a short time before the annual general meeting. These contracts contain the details of each director's salary but have no information on share options, performance related remuneration, or salary if the contract extends for less than 12 months. We based our decision about which two directors to study, on the remuneration figures shown in the annual report, that is, before gains from share options were taken into account. The option gains were later added to the remuneration figure in order to determine each director's total reward.

Whether the disclosure of the remuneration of the principal individual directors will improve following the Cadbury Report, remains to be seen. UK companies disclose more information than German companies but are far behind the standards set by US companies. In the USA, companies are now required to disclose the remuneration and the name of each of the five highest paid directors.

Although all the annual reports we examined identified each director with the *number* of shares and options held (with the exception of one company) none gave any information about the prices at which individual director's share options had been granted and if sold, at what price. However, we were examining annual reports composed in the pre-Cadbury period. (Since the Stock Exchange accepted the Cadbury Report recommendations, a few companies have begun to provide details of options exercised with the grant price included.) All the information pertaining to the pricing of options was given in a separate *Note to the Accounts*, with no reference to any individual director's holdings. Moreover, any options exercised during the course of the year, if mentioned at all, were given as a total figure for all the directors' trading, and almost without exception, did not mention the price at which the options had been originally granted.

Egginton *et al*, (1993), discuss the inadequate level of disclosure of share options in the UK. They refer to the "paucity" of information on exercise prices of options and point to the different disclosure requirements, when the shares provided at the exercise of the option result from a new issue of shares as opposed to the provision of existing shares. They conclude that "...the existing UK statutory requirements on options do not have any coherence on disclosure of options".

The Stock Exchange Weekly Intelligence reports proved inadequate in providing information on the price at which options were granted. However, as mentioned previously, companies are required by the Companies Act to provide access to their Registers of Share Interests and to supply such information for a nominal fee. These documents are normally managed by the office of the company

secretary and contain details, transaction by transaction in chronological order, of each director's trading in shares and share options. Of the fifty companies from whom we tried to obtain details of their Registers, 34 or 68% provided the information required. From these registers it was possible to ascertain for individual directors, the returns from share options granted between 1986 and 1992.

Definition of Variables

Remuneration

We used four measures of remuneration:

- 1. Aggregated Remuneration 1986-90 this was the amount received in salary and performance related bonuses for the period 1986-90 inclusive;
- 2. Percentage Change in Remuneration 1986-90;
- 3. Total Remuneration 1986-90 this figure includes remuneration as defined in 1 above, in addition to returns or potential returns from share options exercised in the same period (for explanation of share option figures see below);
- 4. Percentage Change in Total Remuneration.

Total Remuneration included share option returns as defined below:

- 1. Options exercised before 31 Dec 1990:
- 2. Options granted before 1990 and exercised during 1991 and 1992;
- 3. Options granted before 1990 but not exercised as at 4 January 1993. If these options were "in the money" they were treated as a potential gain. The potential gain was taken to be the difference between the exercise price of the option and the market price of the share on 4 January 1993.

Acquisitiveness

The measure of acquisitiveness used in the analysis was the expenditure by a company over the period 1986-90 on purchasing interests in other companies (A) as a percentage of the total investment (TI) in the same period. Total investment is the sum of expenditure on acquisitions ("acquisitive growth") plus expenditure on the purchase of fixed assets ("organic growth") (FA), (TI = A + FA). The expenditure on new assets does not include investment in working capital. This was excluded on the grounds that movements in items of current assets or current liabilities could be attributed to financial management considerations and not solely to growth policies. The five year average was used so as to smooth out the fluctuations in a company's takeover activity from year to year, which inevitably occur as a result of the need to consolidate after a major takeover.

Details of the expenditures were generally obtained from the Source and Applications Funds statements in the companies' annual accounts. The clarity of presentation of these figures varied considerably between companies, on occasions requiring detailed examination of the footnotes in the Notes to the Accounts. In two instances, exclusion of the company from the sample resulted because of the difficulty in distinguishing organic from acquisitive growth.

Other Exogenous Variables

Four measures were used:

- 1. The percentage growth in company profits before tax over the 1986-90 period;
- 2. The percentage growth in capital employed, measured over the 1986-90 period;
- 3. The percentage growth in share price. The mid price between the high and the low for each of the five years was calculated and the change in level between the price in 1986 and 1990 ascertained;
- 4. The percentage growth in labour the average number of UK employees (as in the annual report) over the period 1986-90.

Specifying the Relationships

Because it is likely that the acquisition variable will only have an impact (if at all) upon executive remuneration in a cumulative way over a period of time, we initially, as noted above, averaged the variable over a five year period. We then studied the relationship between remuneration and the exogenous variables in two distinct ways. Firstly, total remuneration (or remuneration plus returns from share options) was aggregated over the same five year period and the exogenous variables (apart from acquisition) entered as the percentage change over that period. Secondly, the remuneration variable was entered as a percentage change over the five years, with the exogenous variables entered as before. Also, in an attempt to capture possible lagged effects of the exogenous variables, a version of the aggregate model was used where aggregate remuneration plus options over the period 1989-92 was regressed onto the acquisition variable for 1986-89 and the percentage changes on the other variables, also from 1986-89. Attempts to treat the variables as year by year point measures and to specify lagged models proved unrevealing, even though this multiplied the number of observations. The present specifications must be regarded as provisional and exploratory. Further work with larger samples is clearly called for.

E: Results

In the analysis that follows, we study the impact of the variables on the levels and percentage changes (1986-90) in remuneration and total remuneration accruing to the two highest paid directors. It should be borne in mind throughout, that our variables to cases ratio is somewhat high. As a consequence we often report the results of exploratory bivariate analysis.

Bivariate analysis of Director 1 and Director 2's percentage growth in remuneration (excluding ESOS gains) gave the results in Table 1.

TABLE 1

Bivariate Relations between Remuneration and Other Variables

	t-values	
	Director 1	Director 2
Percentage growth in capital employed	4.55	4.94
Percentage growth in labour	5.84	6.77
Percentage growth in share price	2.92	2.64
Average levels of acquisition	1.42	0.1
Percentage growth in profits	0.29	0.36

Bringing all five exogenous variables into the equation left only growth in capital employed as significant (t = 3.2). We report here, however, the regression where only the three significant variables from the bivariate analyses are included (Table 2).

TABLE 2

Regression of Percentage Change in Remuneration (Salary plus Bonus)

	Director 1	Director 2
	t-values in brackets	
Constant	71.55 (2.49)	79.7 (3.19)
Percentage growth in capital employed	0.53 (2.09)	0.34 (1.54)
Percentage growth in labour	-0.135 (-0.95)	0.009 (0.08)
Percentage growth in share price	0.042 (0.07)	0.198 (0.36)
	R ² (adj.)=45.3%	R ² (adj.)=62.1%

Our tentative conclusions from Tables 1 and 2 are therefore that acquisitive activity has no significant effect upon the growth of either directors' remuneration, but an increase in size measured by capital employed, does. As we noted earlier it is the change in size of the enterprise which seems to determine changes in remuneration, though if anything, increasing the size of the labour force has a surprisingly depressing effect upon remuneration.

We also examined the impact of the various variables upon the growth in share price. Bivariate analysis gave the result in Table 3. However, when the two significant variables were introduced simultaneously, significance disappeared (Table 4). These results seem to support earlier studies reported above, which also find little evidence for an impact of acquisitions upon share price performance of the acquiring company.

TABLE 3

Bivariate Relation of Percentage Change in Share Price with Other Variables

	t-values
Average level of acquisition	0.13
Percentage growth in capital employed	3.35
Percentage growth in labour	3.09
Percentage growth in profit	1.59

TABLE 4
Regression of Percentage Change in Share Price

	Co-efficient	t-values
Constant	18.93	(2.35)
Percentage growth in capital	0.089	(1.18)
Percentage growth in labour	-0.017	(-0.40)
	R ² (adj.)=23.8%	

We turn next to an examination of the remuneration plus option gains of both Directors 1 and 2. The pattern of bivariate relations depicted in Table 5, is different from Table 1 where remuneration is measured by salary and bonus only. The notable feature is the emergence of the average level of acquisitions as strongly significant for Director 1 and the disappearance of the growth in capital variable as a significant predictor. There appears to be no significant bivariate relations at all for Director 2. Bringing all the variables into the equation simultaneously gives the results in Table 6.

TABLE 5

Bivariate Relations between Remuneration plus Option Gain and Other Variables

	t-values	
	Director 1	Director 2
Average level of acquisition	2.81	0.86
Percentage growth in profits	0.20	-0.51
Percentage growth in capital	0.20	0.62
Percentage growth in labour	-0.10	0.33
Percentage growth in share price	0.72	0.42

TABLE 6

Regression for Director 1 of Remuneration plus Option Gains

	Co-efficient	t-values
Constant	-1015	(1.11)
Average level of acquisition	5044	(2.55)
Percentage growth in profits	-4583	(-1.15)
Percentage growth in capital	3071	(0.61)
Percentage growth in labour	-2212	(-0.77)
Percentage growth in share price	1077	(0.88)
	R ² (adj.)=12.5%	

All the variables except the average level of acquisition are insignificantly related to remuneration plus option gains for Director 1. If the results can be relied upon, we have strong evidence for the proposition that managerial interests might be behind many acquisitions. Notice also that remuneration plus option gains over the period studied bears no relationship to movements in share price. As the bivariate t-values might suggest, there appears to be no relationship between the remuneration plus option gains of Director 2 and the chosen exogenous variables.

In Table 7 a similar analysis is carried out where the endogenous variable is now the percentage change in remuneration plus option gains for the two directors. Once again growth in capital assets gains significance, whilst the acquisition variable is no longer significant.

TABLE 7

Regression of Percentage Change in Director 1's Remuneration plus Option Gains

	Co-efficient	t-values
Constant	261333	0.74
Average level of acquisition	676223	1.28
Percentage growth in profits	-5367	-0.42
Percentage growth in capital	451.41	6.14
Percentage growth in labour	-6.37	-1.68
Percentage growth in share price	-32462	0.42
	R ² (adj.)=22.5%	

Timing Effect

There are at least two reasons why we would expect to find a lag in the relationship between financial rewards and acquisitiveness. One is that we have taken as a measure of acquisitiveness, not an annual figure, but an average over five years. It could be that a high figure for this variable is attributable to acquisitions towards the end of the five year period. There would be no time, therefore, for directors to receive higher levels of remuneration.

It must be appreciated that there should always be at least one year's time lag between company performance and any increase in executive financial rewards. The performance in one year will normally affect the directors' rewards the next year. Even if a scheme based on future performance has been approved for future periods, the rewards would need to follow the results immediately.

The Companies Act (1987) does not give a great deal of guidance as to the procedure a company should follow with regard to approving the remuneration of bonus schemes for executive directors. It is up to the directors of each company to agree on the procedure for approving the remuneration of executive directors. Executive share option schemes do, however, require explicit shareholder approval.

A further reason why a lag should be expected relates to the timing of any improvement in financial performance following a successful acquisition. The effects of any changes will not be shown immediately in the annual accounts. It can take time for the benefits from an acquisition to be achieved, if at all. If one of the objectives of ESOS is to achieve goal congruence then the directors should benefit at the same time as the shareholders. Therefore, a successful acquisition during the 1986-90 period will lead to an increase in directors' financial rewards through share price increases in a later period. This of course assumes that the `efficient stock market' does not immediately appreciate the benefits of the acquisition.

Therefore, to allow for lags in the exogenous variable we regressed remuneration plus option gains in the period 1989-92 onto the values of the levels of various exogenous variables for the years 1986, 1987 and 1988 separately. The analysis showed no significant relationships. When however, the exogenous variable was aggregated for the period 1986-89 the results in Table 8 were achieved. These relate to the highest paid director. The results show that both the level of acquisition and the percentage growth in capital assets have a significant influence.

TABLE 8

Regression of Director 1's Remuneration plus Option Gains: 1989-92

Variables for 1986-89	Co-efficient	t-values
Constant	5172	1.1
Average level of acquisition	171985	2.5
Percentage growth in capital	4991	3.6
Percentage growth in share price	19358	-1.4
	R ² (adj.)=38%	

F: Conclusions

It is difficult for shareholders and other investors to identify the financial gains made by the directors of a company resulting from executive share option schemes. Following the Cadbury Report, this has become easier in the case of a few companies. The UK still lags far behind the USA, however, in such straightforward matters as identifying the annual emoluments paid to individual directors. Even after Cadbury, it is difficult for shareholders to determine how directors' financial rewards are linked to performance.

This paper has attempted to determine whether certain components of the financial reward to directors are related to growth by acquisition. Was it possible during the hectic period of growth by acquisition that occurred in the UK in the second half of the 1980s, that the directors of some of the companies involved were motivated by personal gain? It is well established that the level of financial reward to directors is influenced by the size of the company, but could there be a premium to acquisition over and above the implied increase in size?

The level of acquisitiveness was not found to have an impact on the level of remuneration of the highest or second highest paid director. However, when we included the gains made from ESOS for the highest paid director with remuneration and bonuses received by that director, the level of acquisition becomes a highly significant factor in determining the level of such financial rewards. All the variables we considered, except the level of acquisition, were insignificantly related to remuneration plus option gains for the highest paid director.

No such significant result was found for the second highest paid director. One reason for this could be because of the large difference that exists in many companies between the gains from options made by the highest paid director and those made by the second highest paid. This large difference would lead to greater significance in the statistical results for Director 1, than Director 2.

The significant relationship found between the level of acquisition and the financial rewards of the highest paid director is important. If no such relationship was found, there would be no reason to expect other directors' rewards to be linked to acquisition. With such a relationship holding, there is reason to suspect a similar link, but this is assuming it is the highest paid director that has the most influence

on board decisions. This result goes a significant way in confirming the central hypothesis of this study and strongly suggests the importance of conducting the same investigation over a larger sample.

REFERENCES

- Agrawal, A. and Mandelker, G., 'Managerial Incentives and Corporate Investment and Financing Decisions', <u>Journal of Finance</u>, Vol. 42(4), 1987, pp.823-837.
- Amihud, Y., Lev, B. and Travlos, N., 'Corporate Control and the Choice of Investment Financing: The Case of Corporate Acquisition', <u>Journal of Finance</u>, Vol. 45, June 1990, pp.603-616.
- Antle, R. and Smith, A., `Measuring Executive Compensation: Methods and Application', <u>Journal of Accounting Research</u>, Vol. 23, Spring 1985, pp.296-325.
- Benston, G.J., `The Self Service Management Hypothesis: Some Evidence', <u>Journal of Accounting and Economics</u>, Vol. 7, 1985, pp.67-84.
- Cosh, A., `The Remuneration of Chief Executives in the United Kingdom', <u>Economic Journal</u>, Vol. 85, March 1975, pp.75-94.
- Cosh, A.D. and Hughes, A., `The Anatomy of Corporate Countol: Directors, Shareholders and Ecxecutive Remuneration in Giant US and UK Corporations', <u>Cambridge Journal of Economics</u>, Vol. 11, 1987, pp.285-313.
- Cowling, K., Stoneman, P. and Cubbin, J., (1986), *Mergers and Economic Performance*, Cambridge University Press: Cambridge.
- Cowling, K., and Sugden, R., `Behind the Market Facade: An Assessment and Development of the Theory of the Firm', Research Centre in Industrial Strategy, University of Birmingham, Occasional Paper, 1993.
- Defusco, R., Johnson, R. and Zorn, T., 'The Effect of Executive Stock Option Plans Stockholders and Bondholders', <u>Journal of Finance</u>, Vol. 45, 1990, pp.617-627
- Department of Trade and Industry, (1990), Barriers to Takeover in the European Community, HMSO: London.
- Egginton, D., Forker, J. and Grout, P., `Executive and Employee Share Options: Taxation, Dilution and Disclosure', <u>Accounting and Business Research</u>, Vol. 23, 1993, pp.363-372.
- Firth, M., `Takeovers, Shareholders Returns and the Theory of the Firm', <u>Quarterly Journal of Economics</u>, Vol. 94, March 1980, pp.137-154.
- Firth, M., `Corporate Takeovers, Stockholder Returns and the Exective Rewards', Managerial and Decision Economics, Vol. 12, 1991, pp.421-428.
- Foster, T.W., Koogler, P.R. and Vickrey, D. `Baluation of Executive Stock Options and the FASB Proposal', <u>The Accounting Review</u>, Vol. 66, July 1991, pp.595-610.

- Franks, J.R. and Harris, R.S., 'Shareholder Wealth Effects of Corporate Takeovers' <u>Journal of Financial Economics</u>, Vol. 23, 1989, pp.225-249.
- Gregg, P., Machin, S. and Szymanski, S., `The Disappearing Relationship Between Directors' Pay and Corporate Performance', <u>British Journal of Industrial Relations</u>, March 1993, pp.1-9.
- Healy, P.M., 'The Effect of Bonus Schemes on Accounting Decisions', <u>Journal of Accounting and Economics</u>, Vol. 7, 1985, pp.85-107.
- Jensen, M.C. and Zimmerman, T.L., `Management Compensation and the Managerial Labour Market', <u>Journal of Accounting and Economics</u>, Vol. 7, 1985, pp.3-9.
- Jensen, M.C. and Murphy, K.J., `Performance Pay and Top Management Incentives', <u>Journal of Political Economy</u>, Vol. 98, No. 2, 1990a, pp.225-264.
- Jensen, M.C. and Murphy, K.J., `CEO Incentives Its Not How Much You Remuneration, But How', <u>Harvard Business Review</u>, May- June 1990b, pp.138-153.
- Jensen, M.C. and Ruback, R.S., `The Market for Corporate Control: The Scientific Evidence', <u>Journal of Financial Economics</u>, April 1983, pp.5-50.
- Lambert, R, and Larcker, `Executive Compensation Effects of Large Corporate Acquisitions', <u>Journal of Accounting and Public Policy</u>, Vol. 6, Winter 1987, pp.231-243.
- Larcker, D., `The Association between Performance Plan Adoption and Corporate Capital Investment', <u>Journal of Accounting and Economics</u>, Vol. 5, 1983, pp.3-30.
- Larcker, D., `Managerial Incentives in Mergers and their Effect on Shareholder Wealth' in Stern, J.M. and Chew, D.M., eds., (1986), *The Revolution in Corporate Finance*, Basil Blackwell: Oxford.
- Lewellen, W., Loderer, C. and Rosenfeld, A., `Merger Decisions and Executive Stock Ownerhsip in Acquiring Firms', <u>Journal of Accounting and Economics</u>, Vol. 7, 1985, pp.209-231.
- Main, B.G.M., 'Top Executive Remuneration and Performance', <u>Managerial and</u> Decision Economics, Vol. 12, 1991, pp.219-229.
- Marris, R., (1964), *The Economic Theory of Managerial Capitalism*, The Free Press: Glencoe, Illinois.
- Meeks, G. and Whittington, G., `Directors Remuneration, Growth and Profitability' <u>Journal of Industrial Economics</u>, Vol. 14, Sept 1975, pp.1-14.

- Morck, R., Shleifer, A. and Vishny, R., `Do Managerial Objectives Drive Bad Acquisitions', <u>Journal of Finance</u>, Vol. 45, March 1990, pp.31-48.
- Murphy, K.J., `Corporate Performance and Managerial Remuneration: An Empirical Analysis', <u>Journal of Accounting and Economics</u>, Vol. 7, April 1985, pp.11-42.
- Peacock, A. and Bannock, G., (1991), Corporate Takeovers and The Public Interest, Aberdeen University Press.
- Ravenscorft, D.J. and Scherer, F.M., (1987), *Mergers, Sell Offs and Economic Efficiency*, Brookings Institute, Washington DC.
- Reich, R., (1983), The Next American Frontier, New York: Times Books.
- Warner, J.B., Watts, R.L. and Wruck, K.H. `Stock Prices and Top Management Changes', <u>Journal of Financial Economics</u>, Vol. 20, Jan-March 1988, pp.461-492.
- Williamson, O.E. and Winter, S.G., eds., (1991), *The Nature of the Firm, Origin, Evolution and Development*, Oxford University Press: Oxford.