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TITLE: The determination of top executive pay: importance of human capital factors.

YEAR: 1998

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The Determination of Top Executive Pay: the Importance of Human Capital Factors

Abstract

This paper discusses the relationship between director quality, measured in terms of human capital, and top executive pay. The sample is drawn from the largest UK quoted companies. Pay is split into basic salary and bonus payments. Finds age, tenure, years of board experience, years of experience as a director and the possession of an earned title all influence the level of top executive pay They exert a stronger influence on basic salary rather than on bonuses. Qualifications, both academic and professional, do not appear to influence executive pay.

The Determination of Top Executive Pay and the Importance of Human Capital Factors

Executive pay has been the subject of much recent discussion with concern being expressed about the levels of pay received by the chief executive officers of companies. One explanation for the apparently high levels of pay is that it reflects the accumulated experience and skills of the highest paid director (HPD). Characteristics such as age, experience and skills are measures of the HPD’s human capital. The basic premise is that the greater the investment an individual makes in human capital, the higher the expected return and therefore the higher the pay received.

The aim of this paper is to analyse the influence of various human capital measures on the level of pay received by the HPDs of large UK firms. The human capital variables discussed are age, the possession of qualifications, HPD experience, the number of additional directorships and the possession of a title.

The next part of the paper discusses the background to the debate by analysing the empirical evidence on the effects of human capital characteristics on top executive pay. The next describes the data and the following section explains the variables. Then the results are presented and finally some conclusions drawn.

Background

There has been a great deal of public disquiet expressed about the recent rises in executive pay especially as they appear to bear little relation to company performance. For example, it has been shown that the pay awards granted to the top executives in the UK privatised utilities were related to company size rather than company performance [1]. The issue of top executive pay was one of a number of questions raised about the overall nature of the corporate governance of UK plcs. The response to these concerns was the setting up of the Cadbury Committee [2] and more recently the Greenbury [3] and Hampel [4] Committees. Although it is too early to assess their impact, Greenbury and Hampel developed some of the issues raised by Cadbury, particularly in relation to the determination of top executive pay.

Cadbury proposed a voluntary Code of Best Practice for the governance of plcs. One area covered by the Code is the belief that top executive pay should be set by a remuneration committee and that the committee should consist of non-executive directors. A recent study, [5] found that by 1994, 90% of large UK firms based in the Midlands had introduced a remuneration committee. which indicates the widespread acceptance of elements of the Code of Best Practice amongst large plcs.

One of the key purposes of the remuneration committee is to link top executive pay to company performance and a number of studies have analysed the relationship. The general consensus of the studies is that company size and performance are both significant determinants of top executive pay. An excellent review of the evidence is found in [6]. However, the relationship between pay and size appears to be stronger and more meaningful than that between pay and performance. This applies to US [7] and UK [8] studies.

Given the weak link that appears to exist between pay and performance, attempts have been made to analyse the extent to which top executive pay reflects other characteristics such as experience, training and qualifications. The basis of this approach lies is human capital theory which maintains that qualifications and training represent investment which has been undertaken by individuals. The objective of the investment in human capital is to increase marginal productivity which will therefore result in higher pay [9].

The issue of human capital was not directly addressed by Cadbury as far as the top executive director was concerned. Cadbury did recognise, however, that the reputation and standing of non-executive directors was critical if they were to be effective monitors of the executive directors. Therefore there was an acceptance by the committee that human capital characteristics are important to the ability of directors to perform their required functions. Given this, we would expect higher quality directors (quality being measured by the director's human capital) to be paid more than those with less human capital. It is therefore of interest to analyse how far remuneration committees reward directors' investment in human capital.

Human capital can be split into its two types, general and specific. General human capital refers to qualifications, skills or training which is transferable across jobs and industries. Examples include age, years of experience and the possession of a degree or a general professional qualification such as CIMA. In contrast, specific human capital refers to qualifications and experience which are linked to a particular sector or firm and are thus less transferable. Examples of specific human capital include the number of years served on a board or tenure of office.

The evidence relating to the impact of age on pay is mixed. Age is expected to be positively related to executive pay because it proxies the accumulation of experience and learning. The expected positive relationship has been found [10,11] whereas others have found no link [12,13]. One reason for the difference is that [10 and 11] are UK studies and [12 and 13] are US studies. This suggests a different attitude to age with UK firms rewarding experience and knowledge gained over a long period more highly than firms in the US. It also implies that US firms are more willing to appoint younger executives to the top job. The example of UK building societies bears this out [14].

There is evidence that qualifications such as the possession of a degree or professional qualification is likely to lead to higher remuneration for top executives in the UK [15]. It has been argued that the widespread possession of higher qualifications has only become possible since the expansion of higher education in the 1960s. Prior to that, fewer people had the opportunity to do a degree which suggests that top executives over 50 years of age are less likely to possess such qualifications [16]. However, in a study of young, high-growth firms which employed younger top executives, it was found that only 57% had a degree or professional qualification [17].

Tenure in a post represents job-specific experience and is expected to be positively related to executive pay given the knowledge and skills that have been accumulated. However, the evidence is conflicting with some studies finding that tenure is positively related to pay [18,19] whereas others find no relationship [20,21].

Thus, although the issue is far from clear-cut, the weight of evidence indicates that human capital has a positive impact on pay. Most of the studies use total top executive pay, however, we separate total pay into two parts - basic salary and bonus payments. This will enable us to assess the impact of human capital on the individual elements of the pay package. It may be expected that human capital will be a more important influence on basic salary than on bonuses because the basic salary represents a tangible return for previous experience and achievements. However, it is argued that the greater a top executive's human capital, the better that company's performance should be and hence the higher the bonuses received. Therefore investment in human capital will affect both elements of the remuneration package.

Data

Firms used in the analysis consist of a sample of UK public limited companies which covers all sectors of the economy. The sample was taken from the largest 200 ranked by market capitalisation in 1996. All the data refer to 1996. The largest public companies were selected because they tend to provide fuller biographies of their directors in their annual reports. They are also more frequently commented upon in the press in relation to the issue of top executive pay. However, difficulties in obtaining human capital data restricted the sample to 122 companies. Data problems included a lack of human capital data such as age and the number of years on the board. In addition, we were unable to obtain some annual reports and some of the reports that were sent did not contain all the required information.

The pay to be analysed is that of the highest paid director (HPD) who is usually the chief executive officer. However, the HPD can have a variety of titles including, for example, the HPD of Marks and Spencer is Sir Richard Greenbury whose title is executive chairman: United Biscuits' HPD is Eric Nicoli who is Group Chief Executive. Only HPDs who were either group chief executive or group chairman were included. Therefore divisional chief executives who had done exceptionally well, and had been paid more that the group chief executive, were excluded. For example, Dr Owen was the highest paid director at the Natwest Group in 1996 but was chief executive of Natwest Markets and not the whole group.

The sample of companies was taken from the Extel Company Analysis, a database which provides comprehensive information on accounting and market measures. The identity of the highest paid director was obtained from 1996 company annual reports, which also provided details of the breakdown of executive pay. Two sources were used for the director human capital data, company annual reports and the Price Waterhouse Corporate Register. The Corporate Register provides details of board structure, board membership, shareholdings and biographical information about directors. All firms had a remuneration committee.

Variables

1. Three measures of pay were used:

(i) salary - the basic salary plus the monetary value of taxable benefits.

(ii) bonus - the cash bonus payment received.

(iii) total cash pay - salary plus bonus. It therefore excludes pension payments, compensation for loss of office and the value of share option schemes.

2. Age - the age of the HPD.

3. Qualifications - all are binary variables which have a value of one if the HPD possessed the qualification and zero if not. There are three qualification variables:

(i) any higher qualification - includes a first degree or post graduate level qualification such as an MSc or MPhil.

(ii) professional qualifications - includes membership of an accountancy body, sector-specific qualifications or other general professional qualifications such as CIM and IPM.

(iii) any qualification - includes any post-school qualification, whether it be a degree or professional qualification.

4. Director experience is represented by three measures:

(i) the number of years served in the present position

(ii) the number of years served on the present board

(iii) the number of years served as a main board director of a quoted public limited company

5. Additional directorships - is the number of additional directorships held on the boards of UK plcs.

6. Title - is a binary variable and has a value of one if the HPD has an earned title such as a knighthood or OBE and zero if no title has been awarded. This would include examples such as Sir Stanley Kalms at Dixons and Dr George Mathewson CBE at the Royal Bank of Scotland.

It is hypothesised that investment in human capital, as measured by the above variables should result in greater rewards and should be reflected in the pay of the top executives.

Results

INSERT TABLE 1

Table 1 provides an overview of the variables used. The average basic salary is £393,000. The range is £142,000 to £1,370,000. Thus even within large plcs, there are substantial differences in basic payments. In terms of bonus payments, there are also large differences with some firms paying no bonus at all whereas the largest bonus is in excess of £1,200,000.

The average age of HPDs is 56 which is similar to another study [22] which included data covering the 1930s and 1970s. Thus, although the youngest HPD was 38, it appears that there is an inbuilt bias against promoting young executives. This suggests that, in large UK companies, that age is regarded as in key indicator of experience which in turn illustrates the importance of age as a measure of human capital.

Just over half, 55%, of the HPDs had an academic qualification at degree level or beyond, 44% had a professional qualification and 77% had some form of qualification. This is higher than [23] who found that 57% of younger top executives, whose average age was 37, had either an academic or professional qualification. this suggests that increasing access to higher education has not increased the proportion of top executives gaining post-school qualifications. However, it may be that the younger top executives come from different social and academic backgrounds than the older top executives.

The average length of the tenure of the HPD in their present position is 7.7 years and the average number of years served on present board is 11.5 years. This indicates that they spent an average of almost 4 years on the company’s main board before becoming the HPD. The average number of years served as a director of a public limited company is 13.2 which is slightly higher than the number of years served on the board.

This suggests that HPDs tend to join the board as outsiders with previous board experience and therefore previous experience is regarded as a valuable contribution to an individual's human capital.

The average number of additional directorships is unexpectedly low, only 1.1. This suggests that, because most HPDs are also chief executives, they will have less time to undertake outside commitments, even if they are part-time. It may be that additional directorships are a better measure of the reputation of someone who was a top executive but has since retired from that post. Thus the return to this form of human capital may not become apparent until the end of a career as a full time top executive.

Less than a third, 30%, of HPDs have been awarded an honour such as a CBE or an OBE. Nevertheless, it is quite a high proportion of a relatively small group of people and therefore is an important indicator of accumulated human capital.

INSERT TABLE 2

Table 2 shows the relationship between pay and the age distribution of the HPDs in the sample. The majority of HPDs, 61%, are aged between 50 and 60 with 19% being 50 or under. Surprisingly perhaps there is still 6 % of the sample who are older than the retirement age of 65.

In terms of total pay, the lowest is earned by HPDs under 45 and the highest by those over 65. However, the link is not so clear for the ages 45-65. For example, the second lowest average is paid to the second oldest group, 61-65 and the second highest is paid to the fourth oldest group, 56-60.

With the exception of the 61-65 age group, there is a positive relationship between age and basic. The highest basic salaries are paid to those HPDs over 66 and the lowest to those under 46. Little pattern emerges in relation to bonus payments. The highest bonus is paid to the HPDs in the youngest age group, under 45 and the smallest to the oldest HPDs. Over the intervening years, the value of the bonus remains similar across the other age groups. Further, the relative importance of the two elements remains fairly constant at around 73% for basic salary and 27% for bonus. In addition, the increase in salary and bonus is relatively small as age increases, only 13% and 16% respectively, between the ages of 50 and 60. Thus for a large part of their working life, the contribution of age to human capital receives relatively little reward.

INSERT TABLE 3

The expected relationship between qualifications and pay is that HPDs who possess qualifications will be paid more than those without them. As Table 3 shows, the three categories which receive the highest total pay and highest basic salaries include HPDs who have no qualifications. The highest total pay figure is received by those with no professional qualification and the second highest by those who have no qualifications at all. Those with an academic qualification received the fourth highest total pay. Thus the argument that gaining a qualification is a means to increasing human capital, and hence to increase income, is not borne out by the figures for either total or basic pay.

If the possession of a qualification represents an important element of human capital, we would expect that the bonus component would be relatively higher than for HPDs who did not possess qualifications because the company's performance should be better. Although the proportion of total pay received as bonus is slightly higher for those with qualifications, the difference is not significant. There is therefore no evidence to support the view that that the possession of academic or professional qualifications is a type of human capital which leads to higher pay.

INSERT TABLE 4

Three measures of director experience were used to test the link between experience and pay: tenure in position, the number of years served on the board and the number of years as a director. It is expected that executive pay will be positively related to director experience. The results are shown in Table 4. Over the first ten years as a whole, tenure makes little difference to pay, whether it be basic, bonus or total. However, during the first five years, pay is slightly higher which may indicate that an initial premium was paid to attract externally recruited HPDs. Larger rewards are paid for those with eleven to fifteen years experience and, although those with more than fifteen years experience find their total pay has fallen, the basic salary is now far more important. Thus tenure does not appear to be linked to higher pay.

There is a positive relationship between basic salary and the number of years on the board. However, the differences in pay are not large. For example, basic salary only increases by 5% between the first 0-5 and 10-15 year categories. In contrast, we found that bonus payments and the number of years on the board do not appear to be linked except for the slight decline in bonuses after ten years service on the board. There is a positive relationship between basic salary and years as a director. However, bonus payments do not increase with experience as a director.

In general, salary and bonuses do not have a simple relationship with experience. Salary tends to increase with board experience and so it appears to be a useful measure of human capital. However, bonuses and the measures of experience do not appear to be linked which indicates that years experience do not get translated into bonus payments but rather become embedded in the basic salary.

INSERT TABLE 5

It is expected that additional directorships and titles will be positively related to executive pay. Table 5 shows that HPDs who have more than one additional directorship earn a higher basic than those with no additional directorships. The difference is, however, only 6%. However, the total pay for those with additional directorships is slightly less because of the differences in bonuses. Those with no additional directorships earned bonuses which were 31% higher than HPDs who had more than one further directorship. This suggests that those HPDs who were only on the board of one company were more effective than those who spread their talents around. Thus this form of peer recognition does not translate into significant additional payments.

Table 5 also shows that those who have received a title earn higher total, basic and bonus payments. The differences are quite large, 29% on the total, over 34% on the basic and 16% on the bonus. Thus a title awarded in recognition of achievements, whether it be for services to business, charity or public service, represents a measure of human capital which yields substantial returns.

Conclusion

The aim of this paper was to assess the influence of director quality on the remuneration of the highest paid director. Director quality was measured by means of the human capital accumulated by the HPDs of large UK public corporations. A number of human capital variables were used including age, qualifications, experience, number of additional directorships and possession of a title.

It was expected that directors who were older, better qualified and generally more experienced would receive more pay because of the consequent increased productivity. The results suggest that age, tenure, years of board experience, years of experience as a director and the possession of a title are regarded as good indicators of director quality because they are associated with higher basic pay. The possession of academic or professional qualifications however do not have a positive effect on basic pay. The generally positive, but weak, relationship between human capital characteristics and top executive pay may be due to the imperfect market for executives in the UK [24], political power in the boardroom [25] or may simply be that on the job experience and training is more important than formal qualifications [26].

Human capital variables seem to influence the basic salary more than the bonus suggesting that basic salary is more of a function of director quality than is short term bonus payments. This lends support to the argument that pay is influenced by different factors [26]. The results have shown that disaggregating total pay into its basic and bonus components has highlighted a number of characteristics which influence the individual parts of the pay measure.

Thus, given the continuing concerns relating to governance issues, concentrating on the pay-performance relationship appears to be ignoring other factors which are important is the pay setting process. It would therefore be useful if remuneration committees indicated the extent to which human capital characteristics were included in the determination of top executive pay. For example, remuneration committee reports usually indicate that factors such as director experience are part of the pay package but no indication is given about its relative weighting. Such information would improve communications between the interested parties and prevent some of the misunderstandings which currently occur.

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TABLE 1 Summary statistics

Variable	Average	Minimum	Maximum
salary	£393,000	£142,000	£1,370,000
bonus	£140,000	£ 0	£1,212,000
age	56	38	74
academic qualification *	55 %	n/a	n/a
professional qualification *	44%	n/a	n/a
any qualification	77	n/a	n/a
tenure	7.7 years	1 year	40 years
years on board	11.5 years	1 year	47 years
years as a director	13.2 years	2 years	47 years
number of additional directorships	1.1	0	5
possession of a title *	30 %	n/a	n/a

n = 122

* refers to a binary variable

TABLE 2 Average 1996 Pay (£000) By Age Distribution

Age (years)	% of Sample	Salary	Bonus	Total Pay	Salary as % of Total Pay	Bonus as % of Total Pay
less than 45	4	278	173	451	62	38
46-50	15	360	133	493	73	27
51-55	28	398	141	531	74	26
56-60	33	408	155	563	72	28
61-65	15	343	146	489	70	30
66 plus	6	579	28	607	95	5
n = 122						

TABLE 3 Average 1996 Pay (£ 000) by Qualifications

	Salary	Bonus	Total Pay	Salary as % of Total Pay	Bonus as % of Total Pay
Academic Qualification	381	151	532	72	28
Professional Qualification	362	126	488	74	26
Any Qualification	375	144	519	72	28
No Academic Qualification	409	124	533	77	23
No Professional Qualification	418	151	669	73	27
No Qualification	454	127	581	78	22
n = 122					

TABLE 4 Director Experience and Average Pay (£000)

Experience (years)	Tenure (years)			Years on Board			Years as Director		
	Salary	Bonus	Total	Salary	Bonus	Total	Salary	Bonus	Total
0-5	386	151	537	380	140	520	337	142	479
6-10	357	134	491	372	146	518	378	154	532
11-15	456	170	626	400	124	524	384	115	499
>15	501	62	563	437	138	575	465	139	604
n = 122									

TABLE 5 Peer Recognition and HPD 1996 Pay (£000)

Peer Recognition	Basic	Bonus	Total
has one or more additional directorships	402	128	530
no additional directorships	377	168	545
has a title	478	155	633
has no title	356	133	489
n = 122			