

Corporate Governance Reforms and Executive Compensation

Determination: Evidence from the UK

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Abstract: This paper examines the effect that the ‘Cadbury reforms’ have had on the pay determination process of executives in the UK. Our results suggest that, on average, the impact has been disappointing. The relationship between pay and performance remains weak and the link to firm size has, if anything, been strengthened. However, our results suggest considerable heterogeneity in the impact of the reforms, and for those firms above median employment the link between pay and profits appears to have strengthened.

Keyword: Executive, Compensation, Governance, Cadbury.

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1. Introduction

Corporate governance, according to an authoritative survey in this *Journal* by Shleifer and Vishny (1997, p737), is concerned with: "...the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment." As such it might be expected that that it would be a private contractual matter between a firm's stockholders, debt-holders and senior executives. Indeed, many finance and economics scholars, not all of them from Chicago, would argue that private contracting between the interested parties, under some appropriate legal and accounting framework, would be the most effective way of minimising the agency costs of their relationship- see Hart (1995). On such a view, agency cost reducing reforms are likely to be introduced voluntarily; therefore imposed *ex post* changes are likely to be ineffective or, at most, to redistribute rents between the parties. However, this has not stopped repeated attempts to secure the imposition of statutory corporate governance reforms in the US and the UK. These are variously supported with reference to the vulnerabilities of existing governance arrangements to the public good problems of monitoring with dispersed share ownership, the advent of contingencies that were unanticipated at the time of the initial equity or debt offering or general systemic problems – e.g. "short-termism" or excessive executive salary growth - attaching to incomplete monitoring arrangements. [Blair (1995), Hart (1995)]. Whether externally imposed changes to the institutional arrangements of governance really do improve their effectiveness is therefore a matter of some debate. Critics of externally imposed reforms, including Hart (1995) have expressed doubt whether formal compliance with such changes will necessarily produce genuinely different outcomes.

This paper examines the impact of the introduction of the package of corporate governance changes embodied in the *Code of Best Practice* [Cadbury (1992)] on the

determination of executive compensation in the UK. The implementation of the Cadbury *Code* offers an unusual opportunity for a natural experiment in this field. It required thoroughgoing changes in UK corporate governance arrangements that, with significant support from the London Stock Exchange, appear to have been very widely implemented within a short period. Furthermore, the establishment of the Cadbury Committee, see below, was partially motivated by concerns over executive compensation determination and the Committee's *Report* and the *Code of Best Practice* it proposed explicitly aimed to change the executive compensation process in UK firms.

The Cadbury Committee was set up in 1991 by the then Conservative Government to enquire into and report upon "...the financial aspects of corporate governance¹". This was against the background of widespread public debate over the extent of abuse of centralised power within large UK firms. There were three principal areas of concern to contemporaries: First, the use of so-called "creative accounting" practices which obfuscated the calculation of shareholder value and which were separately attracting much effort by the UK accounting profession in a drive to harmonise accounting standards- see Whittington (1993); Second, corporate failures, particularly several associated with high profile, domineering CEOs, such as Asil Nadir and Robert Maxwell, who appeared to deliberately discourage financial transparency in their operations; and third, the rapid rate of growth of executive compensation, both in general and especially for the directors of recently privatised and/or deregulated companies. Particular criticism was voiced of the failure to relate pay increases more strongly to performance [see Keasey and Wright (1993)].

¹ The circumstances surrounding the Committee's establishment and a description of its composition is given in Dahya et al (2002).

The Committee itself rejected the statutory imposition of new governance arrangements in favour of a *Code of Best Practice* that all quoted companies would be encouraged to adopt. The *Code* set out a number of changes that were intended to subject corporate executives to greater and more effective monitoring by the representatives of the shareholders, especially the non-executive directors. Thus it sought to make the executive-agents more responsive to the interests of the shareholder-principals. Although the Cadbury Code was formally voluntary², its endorsement by the London Stock Exchange helped it to secure very high levels of compliance soon after publication. A survey by Conyon (1997) suggests that the overwhelming majority of large UK firms implemented its proposals very rapidly. Indeed, many introduced the widely trailed Cadbury reforms *before* its publication.

The Cadbury *Code* aimed to decentralize control within the corporation by requiring the splitting of the functions of the CEO and board chair, offices previously frequently combined in large UK firms. It also increased the number and importance of non-executive directors. UK boardrooms, certainly in comparison to their US counterparts, had traditionally operated with relatively few non-executive directors. Moreover, many of those who were in place had ties to the company, often being its retired executives, and hence had questionable genuine independence [Cosh and Hughes (1987)]. Cadbury introduced the requirement that all quoted companies were to have at least three non-executives on the board and, to reduce the risk of ‘capture’, required that their service contracts should not exceed three years without being subjected to shareholders’ approval. Moreover, to reduce the potential for executive patronage, the non-executives

² Compliance was almost certainly increased by the implicit threat that compulsion would follow if the voluntary code were not adopted.

were to be put forward to the shareholders' meeting by a nominations committee, itself normally containing a majority of non-executives.

Turning to executive compensation determination, the central focus of this paper, Cadbury made the following suggestions: First, the total compensation of directors and that of both the chair and the highest paid UK director should be fully disclosed, with a breakdown of the base salary and performance-based elements; Second, executive directors' pay was to be determined by a remuneration committee of the board of directors, itself wholly or mainly comprised of non-executive directors³ and chaired by a non-executive, and those members should draw upon outside advice as necessary; And third, membership of the remuneration committee should be published in the annual report. It envisaged that the committee would respond to any shareholder concerns at the company's annual general meeting.

Therefore Cadbury addressed the widespread contemporary criticisms of existing executive compensation arrangements by seeking to make the pay determination process more transparent, more accountable, less subject to executive influence and by setting up an institutional apparatus that could relate compensation to the firm's circumstances.

While the impact of Cadbury on the formal institutions of corporate governance in UK companies was clear and almost immediate, its effects on governance outcomes are largely uncharted. Dahya et al (2002) in this *Journal* have recently reported that, largely contrary to their expectations, the Cadbury reforms did appear to impact on managerial

³ The subsequent Greenbury Report (1995) strengthened this requirement to make remunerations committees solely the preserve of the non-executives.

tenure. The latter became shorter and more strongly (negatively) related to firm performance after the adoption of the *Code*.

There has been little explicit examination of the impact of Cadbury on executive labour market outcomes. Ezzamel and Watson (1997) explored changes in the level of CEO salaries in the immediate post-Cadbury environment and report some evidence of catching up among the less well paid. However, it is important to note that nowhere did Cadbury advocate the need for changes in the *level* of executive pay: Indeed the Report was explicit in its belief that this should be determined in accordance with the firm's market needs. What Cadbury did seek to implement was a pay-setting procedure that would more closely align executive and shareholder interests by significantly raising the indirect and direct role of shareholder voice. However, it was widely conjectured [e.g. Main and Johnson (1993)] that this would have the effect of increasing the importance of corporate performance in executive pay determination.

The aim of this paper is to present a rigorous examination impact of the Cadbury reforms on the process of executive compensation determination. We estimate a dynamic compensation model across a large unbalanced panel of UK firms over the years 1981 to 1996, a period spanning the incorporation of the Cadbury changes. The paper has regard for three major issues: Firstly, has the link between pay and performance become closer post-Cadbury, as the reformers envisaged? Secondly, has the dynamic response of pay altered post 1992? Efficiency considerations may suggest a more rapid adjustment to equilibrium, though this effect could be attenuated or even reversed if the remuneration committee is sensitive to 'political' issues. Indeed Rose et al (1996) argue for the US that this effect might be sufficient to slow adjustment in larger firms. Finally, drawing upon a result of Girma et al (2002), which suggests merger

completion has a significant *ceteris paribus* impact on CEO compensation, even where no performance improvement results, we examine whether the acquisition impact on executive pay has changed in the post-Cadbury period.

Unlike previous work in the executive compensation literature we also directly address the issue of within-sample heterogeneity, itself to be expected not least as the agency problem is unlikely to be uniform across firms of widely differing size. Quantile regression is used to explore changes in the underlying model as we move across the compensation distribution. Quantile regression both allows for variability in the response function at different points in the distribution and accommodates the possibility, quite likely with CEO compensation data⁴, that the dispersion of outcomes rises as one moves across the compensation distribution. This exercise reveals some consistent and very substantial changes in determinants of compensation as we move up that distribution. In so doing it calls into question previous conclusions in the executive compensation literature which implicitly assumes a homogeneous response by employing regression techniques that evaluate effects at the conditional mean.

The paper is organised as follows: Section 2 describes the modelling framework and provides simple descriptive statistics for remuneration growth pre- and post-reform. Section 3 provides econometric estimations of CEO pay equations, and addresses the issues outline above. Section 4 concludes.

⁴ See the discussion in Koenker and Hallock (2001).

2. Modelling Framework and Data

Model Specification

The large empirical literature on CEO remuneration (see Murphy (1999) for a survey) typically specifies pay as a function of the size and performance of the firm. Since we are also interested in dynamic issues (how pay determination changes post Cadbury), we therefore specify an estimating equation of the following form:

$$\Delta PAY_{it} = \alpha PAY_{it-1} + \beta' X_{it-1} + \varepsilon_{it} \quad (1)$$

Where i and t index companies and years respectively and ε is a random error term. X is a vector of variables hypothesised to impact on plant level CEO pay trajectories such as company sales growth, industry sales growth⁵, profit growth and significant events in corporate history such as substantial acquisitions.

In order to test whether the link between pay and performance has become closer post-Cadbury, we interact profit growth with a dummy variable for the post-1992 period. If the link between pay and performance has increased then we would expect to observe a positive coefficient on this variable. We are also able to test whether the reforms impacted on other components of X in a similar way. We examine in this regard whether the premium for acquisition has decreased in the latter period.

The coefficient on lagged pay, α , provides an estimate of the speed with which CEO pay adjusts over time. Values of α in the range $-2 < \alpha < -1$ are consistent with a cyclical convergence in pay towards equilibrium. If $-1 < \alpha < 0$ the convergence is monotonic, with value of α closer to -1 implying faster convergence. Thus values of α of -0.09 and -0.15 imply that CEO pay moves half way to its steady state level in 7.35 and

⁵ Measured at a 3-digit level of disaggregation.

4.27 years respectively⁶. Thus, in order to test whether the speed of pay adjustment has changed following the Cadbury report, we test to see whether α has changed post 1992.

It was noted above that Cadbury did not advocate *lowering* either executive pay or its rate of increase. The Report did, however, anticipate that transferring pay-setting responsibilities to a remuneration committee dominated by non-executive directors would align shareholder and manager interests more closely and so link pay more directly to performance. Since profit growth is an unambiguous performance measure, we test to see whether this variable carries additional weight in the post-Cadbury period. Sales growth may have elements of a performance indicator about it, as well as possibly being a preferred objective of empire-building managers. However, given prior criticism of the dominance of size-related factors in the executive pay determination process, it might be expected that sales growth would become correspondingly less important in the post-Cadbury era. Industry sales growth is included here as a control. Prior research [Girma et al (2002)] also suggested that completing an acquisition appeared to exert a positive impact on executive compensation, despite extensive research suggesting that acquiring firms' shareholders gained little, if anything, from the average acquisition. If shareholders concurred with this pessimistic assessment then we would expect to observe a reduction in the (positive) acquisition effect in the post-Cadbury period.

It is worth noting at this juncture that we would not expect the response of pay determination to the Cadbury reforms to be uniform across all firms. Agency considerations are likely to arise primarily in larger firms where share ownership is more dispersed and where monitoring is more difficult. The measured impact of governance

⁶ This is obtained solving $t = \ln(0.5)/\ln(\alpha + 1)$

reforms might therefore be greater in such firms. It is also possible that the impact of reforms might be observed earlier in larger firms: first, because larger firms will tend to adopt innovations, including organisational change, before their smaller rivals; and second, because the annual reports of larger firms, detailing compensation arrangements, are more likely to attract publicity.

Data Description

The executive compensation data used in this study is obtained from the *Hemmington-Scott Corporate Register*. We adopt the normal convention of defining CEO compensation as the reported pay, including bonuses, of the highest paid director (HPD). Whilst the HPD is not always identifiable as the CEO, the universal availability of this information as a reporting requirement for UK companies makes this definition both simple to implement and allows coverage to be greater than other possibilities⁷. We do not attempt to incorporate either option grants or realised option gains into the compensation measure: firstly, and crucially, because before Cadbury the information on executive stock options in UK companies' annual reports was generally insufficient to permit valuation; secondly, as Murphy (1999) demonstrates, existing attempts to value executive stock options, with the restrictions these carry, as tradable European call options involve somewhat arbitrary assumptions; and thirdly, empirical work [e.g. Conyon and Murphy (2000)] suggests that in the UK the use of options has not materially increased since the early 1990s. Firm performance data was taken from *Datastream*.

⁷ If the occupancy of the CEO position changes within the firm's financial year the reported salary of the HPD usually falls, as each occupant of the position now receives a fraction of the full yearly level. Fortunately, scrutiny of several years' data usually allowed the identification of the individual CEO and hence the elimination of such cases.

Since previous work [Girma et al (2002)] had suggested that merger activity had a significant impact on executive compensation in the UK, even after allowing for merger-associated changes in sales and performance, it was necessary that acquiring and non-acquiring firms were identifiable in our sample. Accordingly, the London Business School's *London Share Price Database* was initially used to identify all acquisitions among the set of UK quoted companies between 1981 and 1996. To avoid conflating the effects of multiple acquisitions, we excluded cases where two or more acquisitions were made within a three-year period, although multiple acquirers were otherwise retained, generating 286 acquiring firms. The target sample was completed by the addition of an industry-stratified random control of 706 firms.

Inclusion in the final sample further required the availability of data on CEO compensation from the *Hemmington-Scott Corporate Register* and firm characteristics from *Datastream*. In the case of firms making acquisitions, these data were additionally required for at least two accounting years subsequent to the acquisition. The final sample consisted of 286 firms that had made at least one relevant acquisition and an industry-stratified random control of a further 706 firms.

The unbalanced panel of 992 companies generated 7891 observations over the period 1981-1996. Table 1 presents some basic descriptive statistics for CEO pay growth pre- and post Cadbury reform. As can be seen from examination of the mean, annual compensation growth slowed post-1992 from 7.9% to 5.5%. This change in the mean hides considerable heterogeneity across the distribution of pay however. Although it is true that pay growth has slowed for all percentiles, this fall has been particularly pronounced for those at the lower end of the compensation distribution. This has had

the effect of spreading out the pay distribution. Clearly this is an important feature of the data and we need to allow for this response in our regression analysis.

3. Results

An examination of Table 1 reveals the heterogeneity of growth rates of CEO pay within the sample. Prior to the Cadbury reforms, the growth of CEO pay at its mean was running at about 8%. However, those in the lower percentiles of the pay distribution suffered wage losses. This was in stark contrast to the better paid CEOs, with those in the 95th percentile experience a 26% growth in pay. Post-Cadbury the heterogeneity is equally stark. Mean wage growth has fallen, with those in the lowest 5 percentiles experiencing particularly large falls.

The heterogeneity of response observed in the basic sample statistics has implications for the econometric estimation of the CEO remuneration equation. Standard OLS or GMM techniques that concentrate on the conditional mean of the dependent variable make no allowance for the fact that behaviour may differ across the pay distribution. In the presence of a CEO pay process that is heterogeneous, these techniques may therefore give misleading results, or at least throw away much useful information. Thus, in order to examine the dynamics of CEO pay at points in the distribution other than the conditional means, we also employ quantile regression techniques (Koenker and Bassett, 1978). Quantile regression may be used to characterise the entire conditional distribution of the dependent variable given a set of regressors and thus may be used to examine parts of the pay distribution other than the conditional mean. We can therefore examine, for instance, whether the speed of adjustment for the 10th percentile of pay differs from that of the 90th percentile.

Quantile regression has the additional benefit that it is robust to deviation of the residuals from normality and is therefore not affected by the presence of outliers that would impact on the conditional mean. Since the data set contains a finite number of

observations, only a finite number of quantiles are distinct. We consider regression estimates at five different percentiles: .10, .25, .50 (median), .75 and .90. The results of this estimation are presented in Table 2.

Looking first at the results for the conditional mean in column one of Table 2, and considering pay determination pre-Cadbury, we obtain results that are typical of the existing literature. Company performance, as measured by the growth of profits has an insignificant impact on executive remuneration confirming the weak link between pay and performance. In contrast the impact of company size, as measured by sales growth, is both positive and highly significant, again in line with previous results. This impact is reinforced when it is additionally noted that firm growth via acquisition also leads to increases in CEO pay.

What about post-Cadbury? Contrary to the hopes of the Committee, little impact on pay determination is evident. Although the interaction of reform- with profit growth is of the right sign, it is statistically insignificant. There is also no indication that the link from size to CEO pay via acquisition has been weakened in the latter period: indeed, the post-Cadbury effect is positive although completely insignificant. Finally, there is no real indication that the speed of pay adjustment has altered post-1992. Does this suggest that the reforms have had none of the desired effects? To check the robustness of these results, Table 2 presents the results of quantile regression estimates. Examining the median ($q = 0.5$) yields broadly similar results pre-Cadbury to the mean, though there is some indication of a link between profit growth and CEO pay. This would suggest that the link between pay and performance in column one being influenced by a number of extreme cases that impact on the conditional mean but not the median. Scrutinising the

quantile results suggests that the link between pay and profit growth is absent below the 50th and above the 90th percentiles.

Table 2 also provides some indication that for part of the pay distribution, the link between pay and performance has strengthened post 1992, though once again this effect is significant merely between the 50th and 90th percentiles. There is however little to indicate that the link between CEO pay and firm size has weakened in the latter period. A significant decline is observed only at the 75th percentile, whilst a *positive* coefficient verges on significance at the 25th percentile.

As a further test of robustness, Tables 3 and 4 split the analysis according to the size of the firm since, as indicated above, there are substantial reasons to expect that pay determination could differ in large firms where monitoring costs are larger. Although we do find heterogeneity according to size, the link between pay and performance seems stronger for larger firms. For firms of less than median employment (880 employees), in Table 3, the link between pay and performance is weak and is not statistically significant in either the pre- or the post-Cadbury periods. For firms above the median employment, in Table 4, the effect is stronger. Although no link exists between pay and performance pre-1992, when evaluating at the conditional mean, a highly significant relationship is evident above the 75th percentile. Subsequent to this period the link strengthens, whether the conditional mean or median is used. This appears to be a consequence of greater performance-related pay for CEOs in the lower quantiles of the pay distribution. No additional effect is discernible above the 75th percentile.

Firms below the median employment exhibit a uniformly positive and significant sales growth effect whose magnitude increases monotonically across the quantiles. These firms

display no post-Cadbury effect. Firms above the median employment display a very similar pattern of pre-Cadbury coefficients. However, in the post-Cadbury era pay of the CEOs in the lower quantiles of the pay distribution exhibits a sharply increased sensitivity to sales growth, an effect that is also evident at the conditional mean. This suggests that Cadbury may have had a somewhat perverse effect in that by formalising executive pay determination it has strengthened the role of firm size. We would note, as does Conyon (1997), that size is an unambiguous and publicly available comparator and thus may be attractive to remuneration committees and the consultants that advise them.

Splitting the sample by employment also reveals substantial heterogeneity in the acquisition effect. The CEOs of firms below the median employment are largely unaffected by merger activity⁸, and an acquisition effect is only discernible above the 75th percentile of the pay distribution. By contrast, the larger firms in the sample exhibit a consistently large and positive acquisition effect. However, there is little evidence to suggest that Cadbury had any change in the acquisition effect, either for small or large firms.

Finally, what impact have the Cadbury's reforms had on the dynamics of the pay-setting process? Here again substantial outliers appear to be present, leading to a marked difference between the results evaluated at the conditional mean and median. Although substantial heterogeneity is evident, firms below median employment generally exhibit faster adjustment than their larger counterparts. This might reflect the fact that larger firms are more likely to attract adverse news coverage as a result of large pay changes, and so pay changes are staggered. In the post-Cadbury period there is small, but generally

significant, fall in the speed of adjustment for the smaller firms. By contrast, there is no obvious effect for larger firms in the sample. Therefore, if the Cadbury reforms were intended to make executive compensation respond more rapidly to changes in the firm's circumstances, they appear to have been at best ineffective.

4. Conclusions

This paper has examined the impact of corporate governance reforms on the process by which executive pay is determined in the UK. The establishment of the Cadbury Committee was motivated, at least in part, by concerns over CEO pay and many of the requirements of the resulting Code were designed to increase the role of non-executive directors, as representatives of the shareholders, in the pay determination process. In the event, our results suggest that it has had very little impact across the sample as a whole. However, our results are suggestive of considerable heterogeneity in the pay determination procedures, particularly when the sample is split by firm size.

The paper examined CEO pay determination in the context of a dynamic model. It had been expected that if the Cadbury reforms had the effect of making CEO remuneration more directly responsive to firm circumstances –and hence making the individual more accountable during his or her tenure of the top job - then the rate of adjustment would have increased in the post-Cadbury period. In the event, the rate of adjustment was largely unaffected, except for smaller firms who exhibit a *slowing* of the speed of pay adjustment.

⁸ The sampling procedure adopted here required acquiring firms to have made acquisitions *within* the set of quoted companies on the London Stock Exchange. The smaller quoted firms are much less likely to have made such acquisitions.

It was widely argued by contemporaries that the Cadbury reforms would make CEO pay more sensitive to company performance and less dependent upon factors such as firm size that were not directly relevant to shareholders. Our results suggest that any increased sensitivity in the post-Cadbury era was restricted to CEOs of larger firms and then only to those in the lower pay quantiles. Elsewhere, executive compensation appeared very largely insensitive to performance, except for the upper deciles of the pay distribution among large quoted companies. By contrast, sales growth emerges as easily the most important determinant of CEO pay change, with the strength of this relationship increasing as we move up the pay deciles irrespective of the size of firm. This is generally unchanged in the post-Cadbury period. However, among larger firms, where the impact of corporate governance reforms might have been expected to be at their greatest, the compensation-sales growth sensitivity actually increases, especially among CEOs at or below the median pay level. It is difficult to escape the conclusion that formalising the pay determination process has had the effect of giving more weight to easily measurable characteristics such as sales. Similarly, the positive *ceteris paribus* effect of acquisition completion that is manifest among firms above median size, is not at all diminished in the post-Cadbury era. If the underlying intention of altering the pay-setting machinery was to increase the incentive to boost firm performance and reduce any incentives to engage in managerial empire-building then, on our results, Cadbury has failed.

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Table 1: Growth Rates of CEO pay by wage percentile pre- and post-Cadbury

Percentile	Annual Wage Growth	
	Pre-Cadbury	Post-Cadbury
1	-.2498751	-.3335654
5	-.0948343	-.1480957
10	-.0385675	-.06142022
25	.0225692	.0030229
50	.0695642	.0517628
75	.1247681	.110436
90	.2008123	.1878071
95	.2613202	.2477932
99	.5088571	.4625874
Mean	.0792718	.0545738
Variance	.0180659	.0206272

Table 2: The determinants of CEO pay

	Mean	q = .1	q = .25	q = .5	q = .75	q = .9
Last period's pay	-0.076 (9.04)**	-0.110 (13.22)**	-0.044 (14.34)**	-0.022 (7.39)**	-0.019 (3.63)**	-0.054 (4.97)**
Last period's pay * post Cadbury	0.001 (1.00)	0.001 (1.34)	0.001 (1.32)	-0.001 (1.49)	-0.000 (0.15)	0.001 (0.58)
Industry sales growth	0.022 (1.23)	0.031 (1.19)	0.024 (2.20)*	0.038 (3.63)**	0.031 (1.60)	0.061 (1.70)
Industry sales growth*post Cadbury	-0.001 (0.03)	0.001 (0.03)	-0.009 (0.70)	-0.023 (1.82)	-0.003 (0.12)	-0.017 (0.40)
Sales growth	0.171 (7.56)**	0.037 (1.31)	0.091 (10.29)**	0.147 (19.85)**	0.266 (20.00)**	0.321 (12.11)**
Sales growth *post Cadbury	-0.024 (0.49)	0.068 (1.38)	0.027 (1.89)	0.017 (1.46)	-0.048 (2.25)*	-0.036 (0.79)
Profit growth	-0.000 (0.12)	0.000 (0.42)	0.000 (0.72)	0.001 (2.30)*	0.001 (2.14)*	0.000 (0.35)
Profit growth * post Cadbury	0.003 (1.35)	0.001 (0.58)	0.001 (0.97)	0.001 (2.19)*	0.002 (2.13)*	0.001 (0.61)
Post acquisition effect	0.074 (7.49)**	0.083 (6.08)**	0.031 (5.32)**	0.039 (6.86)**	0.071 (7.33)**	0.100 (5.57)**
Post acquisition effect * post Cadbury	0.007 (0.47)	0.015 (0.76)	0.008 (0.90)	-0.005 (0.58)	-0.022 (1.53)	-0.024 (0.93)
Observations	7891	7891	7891	7891	7891	7891

Notes:

a. Robust t-statistics in parentheses

b. * indicates significant at 5%; ** indicates significant at 1%

**Table 3: The Determinants of CEO pay
Below median employment (<880)**

	Mean	q = .1	q = .25	q = .5	q = .75	q = .9
Last period's pay	-0.116 (8.54)**	-0.126 (7.51)**	-0.070 (13.73)**	-0.047 (10.20)**	-0.059 (6.45)**	-0.113 (5.56)**
Last period's pay * post Cadbury	0.002 (2.51)*	0.003 (1.92)	0.002 (3.51)**	0.001 (1.93)	0.002 (1.90)	0.003 (1.53)
Industry sales growth	0.032 (1.41)	0.080 (2.26)*	0.021 (1.61)	0.038 (2.92)**	0.052 (1.86)	0.066 (1.05)
Industry sales growth*post Cadbury	-0.017 (0.67)	-0.054 (1.42)	-0.004 (0.28)	-0.023 (1.52)	-0.026 (0.81)	-0.027 (0.39)
Sales growth	0.168 (5.63)**	0.059 (1.32)	0.097 (8.48)**	0.154 (17.29)**	0.252 (14.14)**	0.305 (8.10)**
Sales growth *post Cadbury	-0.040 (0.75)	0.033 (0.57)	0.020 (1.20)	0.015 (1.16)	-0.024 (0.93)	-0.051 (0.89)
Profit growth	-0.000 (0.27)	-0.000 (0.51)	0.000 (1.40)	0.000 (1.56)	-0.000 (0.08)	0.000 (0.01)
Profit growth * post Cadbury	0.003 (1.29)	0.000 (0.19)	0.001 (1.00)	0.000 (1.02)	0.002 (1.77)	0.001 (0.61)
Post acquisition effect	0.036 (1.57)	0.024 (0.72)	0.003 (0.23)	0.011 (0.88)	0.052 (2.34)*	0.139 (3.19)**
Post acquisition effect * post Cadbury	0.045 (1.47)	0.052 (1.12)	0.029 (1.66)	0.034 (2.01)*	0.011 (0.35)	-0.030 (0.49)
Observations	3855	3855	3855	3855	3855	3855

Notes:

a. Robust t-statistics in parentheses

b. * indicates significant at 5%; ** indicates significant at 1%

**Table 4: The Determinants of CEO pay
Above median employment (> 880)**

	Mean	q = .1	q = .25	q = .5	q = .75	q = .9
Initial pay	-0.081 (6.40)**	-0.132 (14.40)**	-0.050 (11.76)**	-0.023 (6.74)**	-0.010 (1.31)	-0.035 (2.06)*
Initial pay * post Cadbury	0.001 (0.82)	0.002 (1.88)	0.000 (0.29)	-0.001 (2.10)*	-0.001 (1.09)	-0.000 (0.17)
Industry sales growth	-0.010 (0.36)	-0.029 (0.83)	0.020 (1.19)	0.025 (1.93)	-0.004 (0.14)	0.023 (0.41)
Industry Sales growth* post Cadbury	0.034 (1.03)	0.044 (1.04)	-0.012 (0.56)	-0.005 (0.29)	0.035 (1.03)	0.043 (0.60)
Sales growth	0.168 (5.18)**	0.023 (0.84)	0.087 (7.05)**	0.127 (13.33)**	0.252 (12.68)**	0.321 (6.78)**
Sales growth *post Cadbury	0.105 (1.07)	0.208 (3.38)**	0.070 (2.47)*	0.077 (3.43)**	-0.019 (0.37)	-0.037 (0.27)
Profit growth	-0.000 (0.38)	0.000 (1.58)	-0.000 (1.31)	-0.001 (6.12)**	0.006 (12.94)**	0.009 (12.40)**
Profit growth * post Cadbury	0.010 (2.51)*	0.013 (2.28)*	0.008 (2.84)**	0.010 (5.21)**	0.001 (0.36)	-0.007 (1.04)
Post acquisition effect	0.055 (4.84)**	0.061 (4.66)**	0.012 (1.86)	0.031 (5.61)**	0.053 (4.63)**	0.065 (2.63)**
Post acquisition effect * post Cadbury	-0.006 (0.34)	-0.003 (0.14)	0.009 (0.81)	-0.007 (0.78)	-0.019 (1.02)	-0.016 (0.42)
Observations	4036	4036	4036	4036	4036	4036

Notes:

a. Robust t-statistics in parentheses

b. * indicates significant at 5%; ** indicates significant at 1%