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UK Executive Pay: The Special Case of Executive Bonuses

by

Jay Daniel Fattorusso

Doctoral Thesis

Submitted in partial fulfilment of the requirements

for the award of

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## CERTIFICATE OF ORIGINALITY

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## ABSTRACT

Executive pay research has traditionally focused on salary, severance payments and long-term incentives. A systematic rigorous empirical examination of short-term annual bonuses is lacking. To address this omission, this research empirically examines the relationship between short-term bonuses and firm performance (TSR and EPS), in the UK. It also considers the association between form of bonus payment (i.e. cash/shares), and type of performance target (i.e. hard/soft and simple/complex) with bonus and performance. Furthermore, firm size and particular corporate governance factors are included (i.e. NED ratio on remuneration committee, CEO presence on nominations committee, CEO/Chair duality, tenure, and power) to examine their relationship with bonus value.

From a sample of 299 firms listed in the FTSE-350 (1,542 executives including 300 CEOs), this study uses two competing theories (i.e. agency and power theory) to provide a fuller explanation of the subtleties of the pay-performance relation. The main findings support the agency view, since bonus is positively and significantly associated with financial performance. As with previous studies on executive bonus pay this association remains weak. By implication, power theory is not supported.

However, other findings indicate: (1) although firm size may change, the proportion of bonus pay relative to salary does not vary. This suggests that large and small firms pay out proportionally similar bonuses; (2) cash bonuses are not positively related with the total value of bonus pay, suggesting that they are not any more open to abuse than other methods of compensation, as agency theory would predict; (3) cash bonuses encourage short-term achievement, as predicted by power theory; (4) consistent with agency theory, share-based bonuses are positively related to bonus pay and performance (weak association), suggesting that share-based bonuses (rather than cash bonuses) may be more effective at aligning pay with performance; (5) in line with agency theory, transparency (i.e. hard (external/published) and simple bonus conditions) is positively associated with performance, providing support for the alignment between principals' and agents' interests; (6) detailed bonus scheme characteristics are generally insensitive to performance and are becoming increasingly softer (i.e. more internal/unspecified targets) and complex (i.e. multiple targets). On the power view, these may create opportunities for executives to mask weak performance and extract greater rents; (7) governance factors are insignificant, suggesting that efforts to improve this area may be wasted, since they mainly leave pay-performance sensitivities unaffected. However, based on power theory, weak governance may foster the rise of powerful executives and widen the pay-performance gap. Therefore, it is suggested that close monitoring of executive pay must continue and shareholders should remain vigilant.

Keywords: executive pay, bonuses, deferred pay, firm performance, performance targets, firm size, corporate governance, strategic human resource management, agency theory, self-serving/power model.

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# CHAPTER 1

## INTRODUCTION

The magnitude and determination of all the elements of executive pay is a controversial subject everywhere, with emotive language about ‘fat cats’ countered by the argument that executive pay is simply a market-clearing price (Bebchuk & Fried, 2004). Therefore, this thesis examines one neglected element of executive pay, the relationship between executive annual bonus pay, its detailed characteristics, and firm performance in the UK. It is acknowledged that the pay and performance relationship is always complex. However, when examining this association it is necessary to consider its detailed characteristics. These include the form in which the bonus is paid (i.e. cash/shares), the type of performance targets used and the governance practices in operation. In general, this study argues that short-term bonus pay, albeit weakly, is closely associated with financial performance and that transparency in the form of external or published targets that are easy to communicate, understand and monitor are associated with the best results.

This chapter, therefore, introduces and defines the main concepts and theories relating to pay and performance, which are developed further in the literature review (see chapter 2), and has six sections. Section 1.1 provides an overview of executive compensation and how human resources support a corporation’s strategic focus. It outlines specific features of corporate governance (CG) and briefly indicates how some of the governance policies, practices and structures influence executive pay. Section 1.2 highlights two prominent theoretical models, which will be used to analyse the pay-performance relationship. Section 1.3, based on existing research, provides a context for the executive pay and firm performance relationship and outlines the theory behind performance targets and measures. Section 1.4 introduces the concept of incentives and their various forms, with particular attention on the value of the annual bonus. Section 1.5 highlights the main aim of the research and provides some justification for it. Finally, section 1.6 provides an overview of the structure of the thesis.



## 1.1. EXECUTIVE COMPENSATION, CORPORATE STRATEGY, HUMAN RESOURCES AND CORPORATE GOVERNANCE

Executive compensation is a large and diverse topic that is both complex and emotive (Murphy, 1986b) and, despite a topic of intense interest and controversy, has generated an abundant but disjointed and inconclusive literature (J. Kerr & Bettis, 1987; Finkelstein & Hambrick, 1988). As a result, decades of work have been unable to show an unambiguous direct link between executive pay and firm performance (Jensen & Murphy, 1990), or have demonstrated a weak or statistically insignificant relationship (Barkema & Gomez-Mejia, 1998). Nevertheless, executive pay is potentially a powerful incentive alignment mechanism that can impact upon firm performance (Jensen & Murphy, 1990; Finkelstein & Boyd, 1998).

In his seminal work on executive compensation, Gomez-Mejia (1994) states that “multiple factors contribute to this empirical morass” (p. 174). He suggests that this weakness may be due to the various paradigms and traditions that influence the interpretation of data, the fact that accounting formulas are not homogenous across firms, the difficulty associated with calculating subjective assessments of executive behaviour, the impact of lag effects as a result of deferred payments, the use of crude proxies to measure executive behaviour and, finally, variables which are expected to influence executive pay tend to be highly correlated which poses a collinearity problem that makes it difficult to isolate the unique effect of a single factor.

Previous empirical research has been problematical in a number of ways. First, concerns have centred primarily on the sheer size of the executive’s pay package and the gains from share option schemes that are difficult to value (Blair, 1995; Greenbury, 1995). However, besides ‘excessive’ pay in absolute terms, research has begun to explore whether executives have ‘earned’ their rewards through firm performance improvements. Secondly, there has been a preoccupation with American data (Barkema & Gomez-Mejia, 1998). Thirdly, most of the work has focused entirely on the Chief Executive Officer (CEO) or highest paid director (Ezzamel & Watson, 2002) and, finally, it has tended to neglect short-term pay.

Essentially, existing research carried out by academics has focused on the relationship between aggregate executive pay and firm performance (see Main, Bruce, & Buck, 1996; Veliyath, 1999; Carpenter & Sanders, 2002), whereas remuneration consultants, like Incomes Data Services (IDS), have concentrated on the individual elements of executive pay. Furthermore, much of this research has been preoccupied with long-term, share-based incentive schemes as opposed to short-term rewards such as the annual bonus. As a result, few, if any, UK studies have examined the association between annual bonus pay, as a single feature of executive compensation, and firm performance. This short-term focus reflects part of this study's unique contribution.

At the same time, executive compensation has emerged as a significant theme within the strategic management literature and, according to Andrews (1980), a firm's corporate strategy determines the kind of economic and human organisation a firm is or intends to be, and the nature of the economic and non-economic contribution it intends to make to its shareholders, employees, customers, and communities. Corporate strategy is an organisational process that operates on different levels, affects the whole enterprise, and is defined as, "the pattern of decisions in a company that determines and reveals its objectives, purposes, or goals, produces the principal policies and plans for achieving those goals, and defines the range of business the company is to pursue" (Andrews, 1987, p. 13). Of all the components of strategic choice, "the combination of human resources and competence is most crucial to success" (Andrews, 1987, p. 20).

The theory, research and practice of human resource management (HRM) has evolved considerably over the past century and experienced a major transformation in both form and function over the past two decades (Ferris, Hochwarter, Buckley, Harrell-Cook, & Frink, 1999). Furthermore, Guest (1998) and Storey (2001) comment that the 1980s were a turning point in HRM development, which has progressed from a maintenance function to one of strategic importance. Consequently, far from being marginalized, the HRM function has become recognised as a central business concern (Dulebohn, Ferris, & Stodd, 1995; Storey, 2001).

Significantly, the notion that firm performance will be enhanced by the alignment of HRM practices with corporate strategy has gained considerable currency in recent years (Wright & McMahan, 1992). Consequently, this process of linking human resources to the broader longer-term and strategic needs of the firm is the essence of what is known as strategic human resource management (SHRM) (Butler, Ferris, & Napier, 1991; Schuler & Huber, 1993), and defined as, “the pattern of planned human resource deployments and activities intended to enable a firm achieve its goals” (Wright & McMahan, 1992, p. 298). Essentially, SHRM specialises in the management of people and emphasises that people are a pre-eminent organisational resource that determines the ultimate strengths and weaknesses of an organisation and is key to achieving outstanding performance and also critical in achieving sustainable competitive advantage (Huselid, 1995; Delaney & Huselid, 1996; I. Smith, 1996; Gratton, 1998; Legge, 2001; Skinner, Saunders, & Thornhill, 2002; Colbert, 2004).

The SHRM model recognises that people are central to improving firm performance. It is also acknowledged that reward management is a central theme in HRM (Poole & Jenkins, 1998) and a necessary management tool for sustaining and nurturing work motivation. Consequently, rewarding employee effort and performance effectively can have a positive impact on firm performance (Huselid, 1995; Huselid & Becker, 1997; Guest, Michie, Conway, & Sheehan, 2003). In addition to the SHRM issues mentioned, CG factors also contribute to, and influence, the pay-performance relationship and are now considered.

Donaldson (1990) describes CG as the structures whereby managers at the organisation’s apex are controlled through the board of directors, its associated structures, executive incentives, and other schemes of monitoring and bonding. Consequently, CG has become an important determinant in shaping executive pay which, as one part of a company’s CG strategy, is supposed to align executive and owner interests through salary, bonuses, and long-term incentives such as stock options (Hitt, Ireland, & Hoskisson, 1996; Carpenter & Sanders, 2002). According to Bushman and Smith (2003), CG motivates managers to maximise shareholder value. At the same time, of course, some critics assert that the notion that boards of directors hire executives is

mainly a sham, when executives themselves hold most power within the firm (Bebchuk & Fried, 2004).

Many of the major CG variables must be interrelated and each is discussed in greater depth in the literature review (see chapter 2, sections 2.4.1 to 2.4.6). However, in brief, the variables to be considered include: (a) the impact that institutional investors, as one type of shareholder, have in terms of maintaining strong CG; (b) the supervisory and monitoring arrangements introduced by shareholders to reduce executive excess. This involves examining the impact of the board of directors as a CG mechanism and in turn the composition of the remuneration and nomination committees and the subsequent ratio of Non-Executive Directors (NEDs); (c) the impact of the market for corporate control and the executive labour market as pure market forces that discipline executives to act in the interests of the firms' owners; and (d) executive power, e.g. through CEO/Chair duality or prolonged tenure on the board.

In summary, executive pay makes a potentially powerful contribution to improving firm performance, and existing research overlooks the possible bonus pay-performance relationship. Similarly, existing research neglects UK data and focuses, predominantly, on the CEO. However, rewarding people effectively has become a crucial HRM tool in achieving corporate success. In addition, it is recognised that for a firm to sustain a competitive edge and be successful, monitoring the pay-performance relationship, through appropriate governance structures, may be of value to shareholders. Again, in relation to annual bonuses, this is an area of research that has generally been overlooked.

The next section will outline the theoretical models used to underpin this research.

## 1.2. THEORETICAL UNDERPINNINGS: AN INTRODUCTION

Unlike other studies, this thesis will use two prominent theories gleaned from the executive pay literature, agency theory and the self-serving management/power perspective, in order to fully capture and explain the relationship between bonus pay and firm performance. This dual approach is supported by numerous academics who suggest that compensating employees is far more intricate than is represented in the standard

agency model (Holmstrom & Milgrom, 1991), and that one theoretical perspective is insufficient to fully explain how compensation relates to organisational performance (Brown, Sturman, & Simmering, 2003).

Furthermore, according to J. R. Platt (1964), testing opposing hypotheses is important for strong inference, and can generate a set of observations that permits researchers to “decide between two alternative theories, both of which according to present knowledge are quite likely” (Stinchcombe, 1983, p. 25). In addition, a simultaneous consideration of contradictory theories can potentially deepen understanding of CEO-board and pay-performance issues (Finkelstein & D'Aveni, 1994). A brief outline of the theoretical perspectives to be included in this study will follow.

Agency theory is often regarded as the dominant theoretical framework for examining the effects of contingent pay in general (Barkema & Gomez-Mejia, 1998), and has its roots embedded in Berle and Means' (1932) influential statement about the divorce of ownership from control and self-interested managers (Zajac & Westphal, 1995). Nevertheless, agency theory would argue that the association between bonus pay and performance might be strong and positive because of its potential to contribute to the integration and alignment of interests between the company's shareholder principals and executive agents.

Alternatively, the self-serving management hypothesis argues that executives are self-serving and opportunistic and, when given the necessary latitude, will participate in dysfunctional behaviour. This behaviour is termed managerial opportunism or moral hazard and results in a divergence of interests and lack of goal congruence between the company's owners and executives (Holmstrom, 1979; Veliyath, 1999; Conyon & Sadler, 2001; J. S. Miller, Wiseman, & Gomez-Mejia, 2002).

Closely associated with the self-serving management perspective, the managerial power model is heavily concerned with the separation of ownership and control (Garen, 1994). This refers to a situation where power and control of the corporation has shifted away from the common stockholders and, subsequently, ownership is becoming more

dispersed and control more concentrated (Berle & Means, 1991). This separation, therefore, has weakened many of the checks and balances that owners once exercised over management and with this rather unconstrained power, management may pursue its own interests, with some disregard for the welfare of the owners (Berle & Means, 1991; Werner & Tosi, 1995; Bebchuk & Fried, 2004). The relation between the value of bonus pay and firm performance, on this view, may be weakly positive or even negative.

Both of these competing perspectives will be used to capture the intricacies associated with pay and performance. Each has implications for executive pay and will be discussed in more detail in chapter 6. The next section will introduce the pay-performance relationship and performance targets in general.

### 1.3. EXECUTIVE PAY AND FIRM PERFORMANCE: AN OUTLINE

It has been argued that firm size is the most compelling explanation for absolute differences in executive pay (Berle & Means, 1991). Many of the earlier studies (see Finkelstein & Hambrick, 1988; Hill & Phan, 1991; Gregg, Machin, & Szymanski, 1992; Main & Johnston, 1993; McKnight, 1996; Cosh & Hughes, 1997; Conyon, 1998; Benito & Conyon, 1999; Laing & Weir, 1999; Henderson & Fredrickson, 2001) examining this executive pay and firm size relation would support this claim. However, there is a small body of research which opposes this view (see Finkelstein & Hambrick, 1989; Lambert, Larcker, & Weigelt, 1991; Murphy, 1998) and argues that executive pay is not associated with firm size. They suggest that factors other than firm size explain the majority of variance in executive compensation e.g. CG variables. In this thesis, however, size will be rather de-emphasised by the use of a transformed, relative measure of bonus as a proportion of total cash pay.

Significantly, much of the existing research on pay and performance is mixed. However, in general, the research is indicative of a weak association between executive pay and firm performance (Main, 1991; Conyon & Leech, 1993; Ezzamel & Watson, 1998; Aggarwal & Samwick, 1999a; Laing & Weir, 1999; McKnight & Tomkins, 1999; Conyon & Sadler, 2001).

Essentially, a company and its management are held accountable for their actions by various groups of stakeholders who impose standards defined by their interests (Demb & Neubauer, 1992). Therefore, firm performance (variously measured) typically becomes the principal determinant of compensation (Riahi-Belkaoui, 1992). Consequently, regulators like the Association of British Insurers (ABI) recommend that executive pay in general, and annual bonuses in particular, should be linked to performance, emphasising that performance targets should be related to what individuals can influence (Greenbury, 1995). They should also be tailored to the requirements of the business, reviewed regularly to ensure that they remain appropriate (ABI, 2002) and, ultimately, should be relevant, challenging and designed to enhance the business (The Combined Code, 2000; ABI, 2002).

Baker, Jensen, and Murphy (1988) suggest that all performance related pay (PRP) can be a powerful motivator of human action, and may create a commonality of interest between principal and agent (Forbes & Watson, 1993). According to Schuler and Huber (1993), it is argued that PRP is necessary for company survival in a volatile business environment and represents a move away from the traditional view of rewards as incentives and towards rewards as total pay systems, which are sensitive and responsive to company and employee needs. However, one of the main criticisms of executive pay is that rewards fail to reflect performance (Charkham, 2001), and the title of an influential recent text on executive reward is 'Pay Without Performance' (Bebchuk & Fried, 2004).

Standards for corporate performance refer to the explicit and implicit yardsticks used by stakeholders to evaluate the performance of a company (Demb & Neubauer, 1992). These may be stock market-based performance measures which are a more holistic evaluation of firm performance and less amenable to manipulation (Healy, 1985), internally generated earnings-based bonus schemes, which are to some extent under an executives' control and vulnerable to manipulation, and internal, non-financial performance measures which are even more prone to executive manipulation and are rarely subject to public verification (Ittner, Larcker, & Rajan, 1997). This raises the obvious research question, which will be returned to later: will internal, soft targets that are easier to manipulate be associated with larger bonuses?

Focusing on one performance measure can often lead to agents ignoring alternative un-rewarded objectives (S. Kerr, 1975). As a result, Feltham and Xie (1994) suggest that increasing the number of performance measures may, first, lead to a rise in the set of viable actions, which may increase the likelihood that a more preferred action will be implemented and, secondly, may reduce the risk imposed on the agent to induce a particular action. Essentially, a multi-dimensional performance measure system may represent a more accurate definition of the organisation's goals (Kaplan & Atkinson, 1998).

However, it is recommended that few measures, which are both clear and simple as well as easy to understand, manage and communicate, should be incorporated into performance target design (Lingle & Schiemann, 1996; Ho & McKay, 2002; Franco & Bourne, 2003). Consequently, it may be suggested that using simple targets can heighten CEO focus, facilitate the monitoring of CEO action, and the identification of CEO achievement. Simplicity, therefore, has the potential to limit CEO discretion and reduce the pay-performance gap.

In contrast, multi-tasking agents may misallocate effort across tasks (Holmstrom & Milgrom, 1991) or over-complicate the decision-making process (Yearta, Maitlis, & Briner, 1995). Consequently, combining external and internal performance targets may be associated with a heightened degree of complexity, which has the potential to hamper monitoring strategies, and limit the ability to identify achievement. Complexity, therefore, may dilute CEO incentives, encourage CEO discretion, and widen the pay-performance gap. As a result, will multiple, complex measures that are difficult to monitor be associated with larger bonuses?

Having outlined the pay-performance relationship and discussed performance targets and its associated variations, the next section will examine the value of incentive plans and the annual bonuses in particular.



#### 1.4. INCENTIVE PLANS AND ANNUAL BONUSES

Incentive plans are an integral part of management control since it has been widely recognised that incentives, as contributors to income and as measures of recognition of performance, are significant motivating factors for executives (Sarin & Winkler, 1980). They are not a gift (Tosi & Gomez-Mejia, 1989) nor the ‘gravy’ on top of an executive’s base salary (Mitchell, Lewin, & Lawler, 1990), but serve as recognition of managerial competence (Sundaramurthy & Lewis, 2003) and are an important precursor to effective monitoring (Hillman & Dalziel, 2003).

Extrinsic rewards can have a significant impact on performance (Vroom, 1964). As a result, money has become one of the most powerful motivators (Schuler & Huber, 1993), with some scholars claiming that an executives’ motivation and behaviour is a function of their pay package (Gomez-Mejia & Wiseman, 1997). Consequently, money matters more than most people would like to admit. However, it is also true that intrinsic psychological rewards may be just as, if not more, significant. Nevertheless, this study focuses on extrinsic rewards, which examines the relationship between monetary compensation and firm performance. Therefore, although recognising the value of intrinsic rewards, it would be outside of this study’s remit to examine this area of reward and, hence, has been excluded.

Returning to financial incentives, executive compensation arrangements in practice are diverse and encompass disparate elements including deferred pay such as stock options as well as short-term pay such as bonuses (Lewellen, Loderer, & Martin, 1987). A deferred compensation strategy is used as a means of ‘bonding’ executives to the firm (Eaton & Rosen, 1983), and consists of pensions, stock options and other long-term incentive plans (LTIPs). Stock-based incentives may offer a more efficient trade-off between risk and incentives and, subsequently, may be more effective at aligning the interests of the manager with that of the owner.

Finally, one alternative and important component of executive remuneration is the annual bonus, with most firms using short-term annual bonus plans to compensate their executives (Conyon, Gregg, & Machin, 1995; Holthausen, Larcker, & Sloan, 1995; Ittner

et al., 1997). Annual bonuses emphasise short-term performance and tend to use cash (rather than stock) as the mode of payment (Kaplan & Atkinson, 1998). They also represent the most direct and immediate link between managerial actions and consequences since cash incentives generate no further risk or commitment on the part of the executive since the value of a cash bonus is not affected by how well the firm does in the future (Rajagopalan, 1996; Murphy, 2001).

Short-term bonuses may, however, be notoriously susceptible to manipulation or tampering (Larker, 1983; Healy, 1985) and, according to Grant (2003), have played a large part in the rise of executive compensation. IDS (1993), for example, reported that in 1979 only 8% of large UK companies had an annual bonus scheme for their top executives and by 1993 almost all companies had some form of annual bonus scheme for their executives.

Bonus pay is argued to be an old and effective way to improve organisational performance and represents rewards for past actions or made to induce future contributions (Prasad, 1974; Lawler, 1990). However, regulators recommend that executives should not be automatically entitled to bonuses nor should it become a guaranteed element of remuneration (Greenbury, 1995; ABI, 2002). Essentially, bonuses should be lower when individual performance is poor (ABI, 2002).

Bonuses, regardless of ability, position and promotion prospects, may motivate individuals to be more productive (Indjejikian & Nanda, 2002). Additionally, bonus-based incentives may be more significant at higher levels in the organisation since the probability of future promotion is lower (Baker et al., 1988; Gomez-Mejia & Wiseman, 1997). They are a means to reward superior performance as well as compensating for heightened responsibility and pressure, and for recruiting and retaining exceptional talent (Vogt, 1995; Joyce, 1999; Sturman & Short, 2000; Osborne, 2001).

In theory, therefore, executive bonuses are an important and potentially effective form of short-term executive incentive. However, due to academic researchers largely ignoring bonus pay, this claim lacks rigorous empirical support. Consequently, this thesis

attempts to rectify this omission and the following section will introduce the primary aim of the research.

### 1.5. RESEARCH QUESTION

Using an independently constructed database of companies listed on the FTSE-350, the main aim of this study is to investigate the question, *what is the relationship between executive bonus pay, its detailed characteristics (i.e. form of payment, performance target type, firm size, and governance mechanisms), and firm performance in the UK?* The importance of this question is discussed in sections 1.1 to 1.4. However, to summarise this discussion, four points are made. First, most empirical studies on executive pay have used American data or focused on American contexts (Barkema & Gomez-Mejia, 1998), and there is little research on executive bonuses in the UK. Secondly, due to the preoccupation of existing research with aggregate or long-term pay (see Veliyath, 1999; Carpenter & Sanders, 2002), there is a real need to focus on short-term annual bonuses, which have been relatively neglected. Thirdly, in contrast to much of the research that focuses on the highest paid executive or CEO only (Ezzamel & Watson, 2002), the present study has a much wider scope and includes the top tier of management (i.e. the CEO and executive directors). Finally, this thesis for the first time addresses the detailed characteristics of executive bonus schemes in relation to the form in which the bonus is received and the type of performance targets used.

With this research question and the general approach in mind, the next section will provide an overview of the structure of the thesis.

### 1.6. THESIS STRUCTURE

Following this introduction of the main concepts and theories employed, the structure of the thesis is as follows.

Chapter 2, the literature review, reports an established link between bonus pay and firm performance, in both the UK and America and discusses this relationship from two prominent theoretical propositions that have emerged from the executive pay literature, including agency theory and the self-serving management/power perspective. In

addition, the chapter examines how a firm's corporate strategy, human resources, CG policy and practices, the form in which the bonus is received, and the type of performance targets and measures used in annual bonus design, interrelate with bonus pay in the UK.

Chapter 3 outlines the research hypotheses that will direct the investigation. This chapter develops a set of testable hypotheses, which examine the impact of firm performance, firm size, performance targets and measures, payment types, as well as aspects of CG on bonus payments. These governance elements consist of various features of the board of directors and include the composition of the remuneration committee in terms of NED ratio, CEO presence on the nominations committee, CEO/Chair duality, executive tenure and power.

Chapter 4 discusses the methodological considerations of the research. It outlines the ontological and epistemological approach and the methods used to collect the data. The chapter also specifies variables, models and tests to analyse the data.

Chapter 5 reports the main statistical findings for the executive director and CEO samples. The results are divided into three sections with each segment becoming more sophisticated, progressing from descriptive analyses to single period multiple regressions and, finally, to panel regressions.

Chapter 6 discusses the main findings of the thesis using the concepts and theories outlined in the literature review. The two chosen theoretical models (agency theory and the self-serving management/power perspective) will again be used as the main framework for the presentation of results.

Chapter 7 summarises the findings of chapters 5 and 6 and identifies the main limitations of the study as well as making recommendations for future research. Finally, the chapter also offers some implications for policy regulation and for practitioners.

## CHAPTER 2

### LITERATURE REVIEW

This chapter reviews the literature relating to executive pay and company performance and has ten sections. Sections 2.1 to 2.3 introduce the topic of employee compensation and how HRM supports a corporation's strategic goals. Section 2.4 examines the impact of CG practices and structures on executive pay. Section 2.5 addresses two prominent theoretical models, which provide some explanation for the pay-performance relationship. Section 2.6 reviews previous research, from both the UK and America, in relation to the impact of firm performance on executive compensation. Section 2.7 highlights additional factors that influence executive pay such as firm size. Sections 2.8 and 2.9 discuss the effect performance targets, measures, and incentives (in its various forms) have on firm performance, with particular attention on the value of the annual bonus. Finally, section 2.10 summarises this chapter.

#### 2.1. EMPLOYEE COMPENSATION

Compensation has a major role in modern perspectives on organisational control and its structure can be a powerful incentive alignment mechanism (Conlon & Parks, 1990; Jensen & Murphy, 1990). Schuler and Huber (1993) state that compensation has the potential to drive business by enhancing organisational competitiveness, survival and profitability. Supplementing this assertion, Finkelstein and Boyd (1998) claim that compensation is one of the most important incentives that exist in organisations, and is likely to impact upon managerial decision making and strategy, both of which have clear implications for firm performance. Fundamentally, compensation is a large and diverse topic which is enormously complex and emotive (Murphy, 1986b; Finkelstein & Hambrick, 1989; Baron & Kreps, 1999; McKnight & Tomkins, 1999).

According to Hoskisson, Hitt, Wan and Yiu (1999) a firm's unique resource is its strategic leader and, in most cases, this is the CEO. Consequently, the lead executive i.e. CEO, stands at the top of the corporate hierarchy and upholds an exalted position of supremacy who drives the corporation, maintains top executive authority, and serves as a custodian of corporate objectives (Charkham, 2001; Aggarwal & Samwick, 2003). Essentially, the CEO is often the most influential and visible leader in a firm and

recognised as the main strategist, whose pre-eminence is frequently reflected in their pay package (Charkham, 2001; Ezzamel & Watson, 2002; Combs & Skill, 2003).

However, the analysis of compensation for executives below the very top of the corporate hierarchy is valuable because many strategic decisions are made by top managers of business units, as opposed to the corporate CEO (Lambert et al., 1991). To further emphasise this point, Ezzamel and Watson (2002) claim that the limitation of previous research on executive pay is its predominant focus on the remuneration of the CEO or highest paid director to the exclusion of other board members.

Therefore, the value of a CEO, or executive director, to a firm and their level of compensation depends on what they can reasonably be expected to contribute to firm performance (Finkelstein & Hambrick, 1988). As a result, much of the research on executive compensation has been motivated by the concerns that have centred primarily on the sheer size of the lead executive's pay package and the gains from share option schemes, which have often coincided with staff reductions and pay restraints for other staff (Blair, 1995; Greenbury, 1995). Besides 'excessive' pay in absolute terms, research has been concerned with executives 'earning' their rewards through firm performance improvements. However, existing research indicates that many academics have focused on the relationship between aggregate executive pay and company performance (see Main et al., 1996; Veliyath, 1999; Carpenter & Sanders, 2002), whereas remuneration consultants, like IDS, have concentrated on the individual elements of executive pay. In addition, much of this research has been preoccupied with share-based incentives as opposed to short-term rewards like the annual bonus.

Executive compensation has emerged as a significant theme within the strategic management literature and corporate strategy in general (Conyon, Peck, & Sadler, 2001). Nevertheless, executive pay remains one of the most heavily researched but least understood areas of management studies (Buck, Bruce, Main, & Udueni, 2003). As a result, the next section highlights how important a firm's human resource is in order to maintain a competitive advantage and to what extent this impacts upon corporate strategy.

## 2.2. CORPORATE STRATEGY

As outlined in chapter 1, Andrews (1980) argues that a firm's corporate strategy determines the kind of economic and human organisation a firm is or intends to be, and the nature of the economic and non-economic contribution it intends to make to its shareholders, employees, customers, and communities. Strategy formulation is an organisational process that operates on multiple levels and is applicable to the whole enterprise. Furthermore, of all the components of strategic choice including market opportunity, corporate competence and resources, personal values and aspirations, and acknowledged obligations to segments of society other than stockholders, the combination of human resources and competence is most crucial to the success of an enterprise (Andrews, 1987). According to Purcell (1992), the single purpose of an organisation's strategies is to enhance shareholder wealth. However, opportunism remains the principal counter force to this alleged purpose. The following section, therefore, develops the notion that a firm's human resource is a significant strategic tool, which determines the strengths and weaknesses of an organisation and, when managed effectively, is central to the success of a firm.

## 2.3. STRATEGIC HUMAN RESOURCE MANAGEMENT

The theory, research and practice of HRM has evolved considerably over the past century and experienced a major transformation in both form and function over the past two decades (Ferris et al., 1999). Furthermore, Guest (1998) and Storey (2001) comment that the 1980s were a turning point in HRM development, which has progressed from a maintenance function to one of strategic importance. Redman and Wilkinson (2001) add that the study of HRM has adopted a cross-functional approach and expanded its breadth of analysis beyond the staple concerns of selection, training, and reward. They claim that SHRM has emerged as highly influential in this respect.

According to Marchington and Grugulis (2000), HRM has a greater impact on productivity and profits than a range of other factors such as research and development. However, the empirical evidence supporting this argument has been limited. First, Lengenick-Hall and Lengenick-Hall (1988) argue that there is little empirical evidence to suggest that SHRM directly influences organisational performance or competitive

advantage. In contrast, Guest et al. (2003) found some evidence of an association between HRM and performance. Significantly, they failed to provide any convincing indication that greater application of HRM will lead to an improvement in firm performance.

The idea that firm performance will be enhanced by the alignment of HRM practices with corporate strategy has gained considerable currency in recent years (Wright & McMahan, 1992). Consequently, this process of linking human resources to the broader longer-term and strategic needs of the firm is the essence of what is known as SHRM (Butler et al., 1991; Schuler & Huber, 1993). SHRM is also referred to as macro-level HRM (Wright & McMahan, 1992; Huselid, 1995), and described as a management process consisting of internal human resource practices that are integrated and aligned with the organisation's external corporate strategy (Torrington, Hall, & Taylor, 2002). Essentially, SHRM specialises in the management of people and, in conjunction with the resource-based view of the firm, emphasises that people are a pre-eminent organisational resource which determines the strengths and weaknesses of an organisation and who are key to achieving outstanding performance and critical in achieving sustainable competitive advantage (Huselid, 1995; Delaney & Huselid, 1996; I. Smith, 1996; Gratton, 1998; Larsen & Brewster, 2000; Legge, 2001; Redman & Wilkinson, 2001; Skinner et al., 2002; Colbert, 2004). Figure 1 overleaf illustrates how a firm's human resource may be a source of competitive advantage.



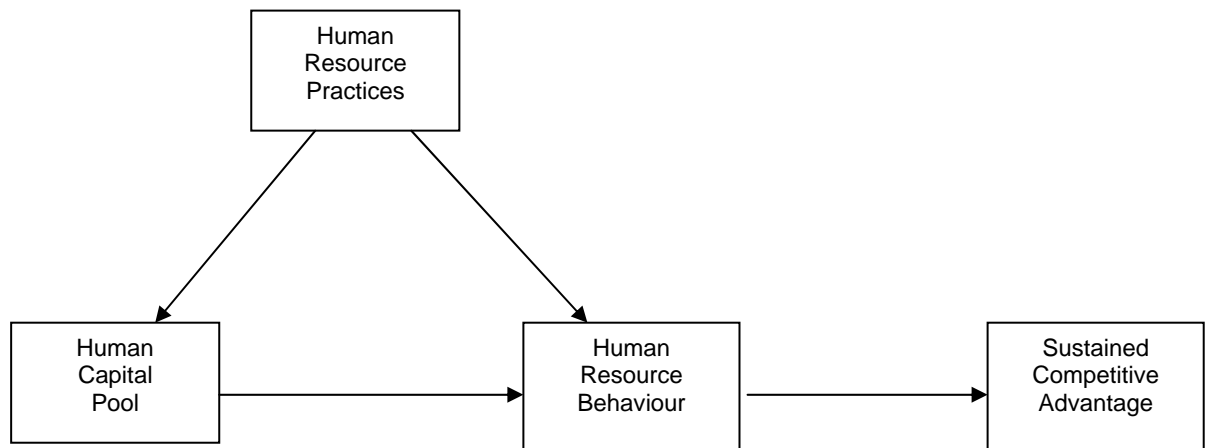


Figure 1. *A model of the human resource as a source of sustained competitive advantage* (Wright, McMahon, & McWilliams, 1994, p. 318).

Scarce resources create entry barriers for firms that do not have them (Wernerfelt, 1984). Therefore, in order to maintain a competitive edge over market rivals, it is imperative that organisation's ensure that their human resources are rare, valuable, inimitable, and non-substitutable (Barney, 1991). Consequently, an organisation's continued success and long-term survival in a global and hypercompetitive (D'Aveni, 1994) business environment is a function of its internal and unique competitive resources (Hoskisson et al., 1999; Storey, 2001).

Far from being marginalized, HRM is an important area for debate and practice in employment and personnel management (Bacon, Ackers, Storey, & Coates, 1996). It has also become recognised as a central business concern, evolving into a strategic partner and sharing comparable boardroom status with disciplines such as accounting and marketing (Dulebohn et al., 1995; Storey, 2001). However, it is acknowledged that this is not a reality for all companies but improvements have been made in the last ten years. For example, human resource issues are now often represented by maths formulas, which are then documented in the company's annual report. Essentially, this strategy of placing workers at the hub of human resource policy concerns and viewing them as means rather than objects of production is an approach likened to the 'soft' HRM model (Guest, 1999). This model is juxtaposed with the 'hard' HRM model which adopts a rational approach

to managing employees viewing workers as another economic factor to exploit and a cost to be controlled and minimised (Guest, 1999).

While SHRM theory strongly advocates a strategic role for human resources in business, empirical evidence supporting, unequivocally, a link between HRM practice and firm performance has thus far been inconclusive. Part of the problem in drawing such links relate to the range of other factors that may also influence firm performance. Therefore, the next section examines additional governance factors that are also known to influence pay and performance.

#### 2.4. CORPORATE GOVERNANCE

A loose description of CG is provided on page 4 but, more rigorously, Blair (1995) defines CG as, “the whole set of legal, cultural, and institutional arrangements that determine what publicly traded corporations can do, who controls them, how that control is exercised, and how the risks and returns from the activities they undertake are allocated” (p. 3).

According to Masson (1971), executives that feel safe from market and shareholder pressures do not need to be as effective at maximising profit in contrast to those executives who are acutely aware of these pressures. As a result, CG has become an important determinant in shaping executive pay which, as one part of a company’s CG strategy, attempts to align executive and owner interests through salary, bonuses and long-term incentives such as stock options (Hitt, Ireland et al., 1996; Carpenter & Sanders, 2002). According to Bushman and Smith (2003), CG structures serve two purposes. First, they ensure that minority shareholders receive reliable information about the value of the firm and the value of their investment and, secondly, they motivate managers to maximise shareholder value.

Charkham (2001) states that two principles underlie CG in the UK. First, executives must be free to drive their companies forward and, secondly, executives must exercise that freedom within a framework of effective accountability, which ensures that standards of competence are maintained. According to Monks (2002), CG creates the

framework within which management takes place. Figure 2 overleaf illustrates the many sources of CG, which have varying influences on the pay-performance relationship. Many of the major CG variables are interrelated and, subsequently, the following sequence has been segmented into four parts. Section 2.4.1 examines the effect institutional investors as one type of shareholder has in terms of maintaining strong CG. Section 2.4.2 discusses the supervisory power and monitoring strategies implemented by shareholders in order to nullify executive excess. This involves examining the impact of the board of directors as a CG mechanism and in turn the composition of the remuneration and nomination committees and subsequent ratio of NEDs. Finally, sections 2.4.3 and 2.4.4 review the impact of the market for corporate control in the first instance and the executive labour market in the second, as pure market forces that discipline executives to act in the interests of the firms' owners.

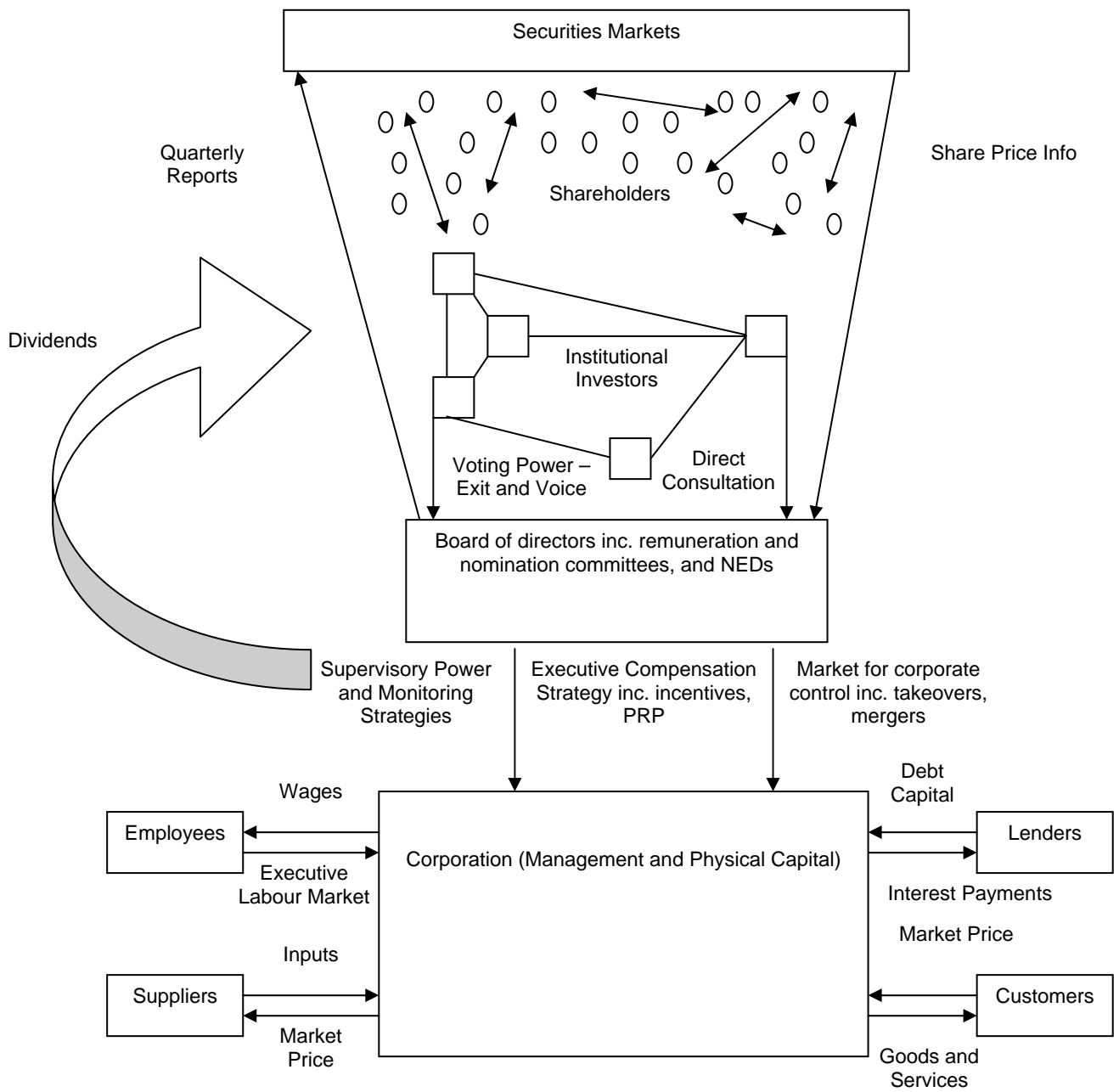


Figure 2. Revised 'Berle-Means' model of the corporation with institutional investors adapted from Blair (1995).

#### 2.4.1. *Institutional investors*

Institutional investors, who develop and act on shared values in order to directly influence corporate behaviour (Demb & Neubauer, 1992), have become the dominant shareholder in Anglo-American countries (Prodhan, 1993). They are regarded as a potentially important force for improving CG in the UK (Prodhan, 1993) and should use their power and influence to ensure the implementation of best practice (Greenbury, 1995). They also represent a force strong enough to serve as an adequate check on the power of management thus limiting executive discretion and reducing agency problems (Gomez-Mejia & Wiseman, 1997) and, therefore, should be more proactive in the use of their voting rights (Hampel, 1998).

However, Mayer (2000) argues that institutional investors, in general, prefer ‘exit’ (i.e. selling shares) to ‘voice’ (i.e. challenging management) and are reluctant to intervene unless there is very clear evidence of managerial failure. Despite this, pressure from external investors through frequent consultations encourages executives to pursue value-maximising investment policies (Bushman & Smith, 2003) and, according to Grant (2003), have been successful in leveraging their position and pressuring companies to take steps to improve firm performance and change practices that are not in the interest of their owners.

According to Demb and Neubauer (1992), concentrated ownership can exert control and accept a longer-term perspective on firm performance. However, some argue that the composition of a corporation’s equity holders has evolved from one of concentrated ownership to increasingly diffuse ownership, which creates a free-rider problem in corporate control. In this case, no individual owner is willing to invest in the costs of monitoring necessary to keep management acting in the owners’ interest and, therefore, makes it difficult to rely on ownership for guidance about priority interests (Boeker, 1992; Demb & Neubauer, 1992).

Consequently, the level and effect of monitoring will vary as a function of ownership dispersion (Tosi & Gomez-Mejia, 1989). For example, atomistic stockholders will exercise less monitoring on account of a limited equity stake in the firm and due to the

difficulties associated with coordinating their actions so as to curtail self-serving executive behaviour (Gomez-Mejia & Wiseman, 1997). In contrast, Mayer (2000) would argue that coalitions of shareholders can control a significant fraction of shares in a company so that together they are able to exercise control, although he does acknowledge that such coalitions are infrequent. In summary, concentrated ownership leads to stronger external influence on management while fragmentation tends to pacify shareholder voice (Aguilera & Jackson, 2003).

According to Holmstrom (1979), any monitoring is likely to result in benefits to the shareholders and is defined as the observation of an agent's effort or outcomes. However, the quality of information obtained through monitoring (or supervising) depends on the resources committed to this activity as well as on the available monitoring technology (Harris & Raviv, 1979). Nevertheless, this monitoring process is expected to prevent executives from making decisions that may have a negative impact on the welfare of a corporations owners (Jensen & Meckling, 1976; Tosi, Katz, & Gomez-Mejia, 1997).

Consequently, some of the strategies implemented by firms in an attempt to curb executive opportunism include objective and subjective monitoring systems (Baker et al., 1988). A criticism of the objective monitoring system, highlighted by Baker (1992), is that it can induce unintentional and dysfunctional consequences whereby resourceful employees 'game the system', optimising actual instead of intended measures, thus focusing only on those aspects of performance that are rewarded. Discretionary subjective monitoring systems also have their critics. Some argue that they are difficult to implement due to the employees lack of trust and confidence in their superiors in making unbiased and accurate performance evaluations (Prendergast, 1999). Superiors can be guilty of: centrality bias, a practice where supervisors give ratings to all workers that vary little from the norm; or leniency bias, which implies that, supervisors overstate the performance of the poor performers (Prendergast, 1999).

Research suggests that corporate ownership is becoming increasingly dispersed (Berle & Means, 1991) and, as a result, it becomes the board's responsibility to ensure that

management behave in accordance with owner interests. Consequently, the next section examines to what extent the board, as a governance mechanism, can control and manage executive behaviour and align pay with performance.

#### 2.4.2. *Board of directors*

The board of directors is “the shareholders first line of defence against incompetent management” (Weisbach, 1988, p. 431). They are the mechanism which holds professional management accountable to the owners, and are the most visible component of the CG system (Demb & Neubauer, 1992). Furthermore, Rodek (2004) adds that the board of directors are the shareholders’ advocate and watchdog on issues such as compliance and governance, and should act as constructive critics with a clear view of the external factors that may affect a company and its industry environment (Peterson, 2004).

Corporate boards arise endogenously as a control instrument and may be the representatives of all the important stakeholders in the firm, or they may support executives or just outside shareholders, but can only act as an effective governing and monitoring mechanism if it is independent (Fama, 1980; Williamson, 1988; Hart, 1995; Johnson, Daily, & Ellstrand, 1996). Essentially, boards are supposed to be the link between the shareholders who own the enterprise and the executives who manage it (Berle & Means, 1991; Short & Keasey, 1999). However, Porac, Wade, and Pollock (1999) warn that the board operates under a dual role whereby they balance their fiduciary responsibilities to provide informative peer comparisons against the obvious self-protective motivations to make themselves and management look as good as possible. Nevertheless, the board is of central importance in terms of CG, which consists of a group of elected individuals who actively support, advise and assist management (Shen, 2003). It is their duty to ratify and monitor crucial strategic decisions, and control the corporations top executives in order to mitigate executives’ myopic decision focus and protect shareholder interests (Fama & Jensen, 1983; Bushman & Smith, 2001; Hillman & Dalziel, 2003).

Demb and Neubauer (1992) suggest that through board deliberations executive perspectives are consolidated with outside perspectives in a ‘critical’ and ‘independent’ judgement of company performance. They define ‘critical’ in terms of discriminating, which is dependent on having a sufficient knowledge of a situation in order to discriminate the important from temporary irregularities. ‘Independent’, on the other hand, refers to being free from the bias of self-interest. However, a large board may restrict opportunities for ‘real’ discussion at board meetings. Yet, there is no perfect size. A board should be large enough to avoid becoming too intimate and small enough so that no one can escape the pressures of responsibility (Demb & Neubauer, 1992). Nevertheless, authority for final decisions does rest with the board (Main et al., 1996). But of course, boards may monitor managers ineffectively. Of particular interest is, first, how influential the NEDs that sit on the remuneration committee, which is a sub-committee of the main board and responsible for reviewing and approving pay and benefits policies and objectives (Brountas, 2004), are at aligning executive pay with firm performance and curbing managerial opportunism? Secondly, how independent is the nominations committee when the CEO has an active presence on the committee?

In the first instance, the absence of a remuneration committee would appear to suggest that executives may be to some extent writing their own contracts with one hand and signing them with the other (Williamson, 1985). This is reaffirmed by Main, O’Reilly, and Wade (1995) who found that the CEOs of companies without a remuneration committee were paid 24% more than CEOs whose board does have such a committee. Consequently, the board’s remuneration committee has an important and positive role in the exercise of boardroom control (Barkema & Gomez-Mejia, 1998; Conyon & Peck, 1998). It is the role of the remuneration committee to act as independent arbiters of executive compensation on behalf of shareholders, respond competitively towards market pressures, and design a compensation contract that ensures executives have an incentive to behave consonantly with shareholder interests (Jensen & Meckling, 1976; Bruce & Buck, 1997; Conyon, 1997b; Barkema & Gomez-Mejia, 1998; Conyon & Peck, 1998).

In contrast, Main and Johnston (1993) found little evidence to support the contention that the remuneration committee is an extension of CG that tailors executive pay to produce



incentive effects that are to the benefit of shareholders. In fact, results showed that executive pay was higher when a remuneration committee was present. This result may be interpreted as resembling a cosy collusion where executives and NEDs, who sit on each others remuneration committees, bidding-up executive earnings (Main & Johnston, 1993). This is supported by Daily, Johnson, and Ellstrand (1996) whose results provide little support for an association between remuneration committee composition and CEO pay. More recently, Daily, Johnson, Ellstrand, and Dalton (1998) confirmed that the compensation committee plays a major role in determining the level of CEO pay. However, they concluded that regardless of their degree of independence, the structure of a CEO's compensation package does not differentially advantage the CEO or the shareholder.

Despite this equivocal evidence, it has been widely recognised in the UK that boards should be diverse and composed largely of NEDs. Many regulators recommend that the minimum number of NEDs to sit on the board should be three (Cadbury, 1992; Greenbury, 1995), should constitute at least one-third of the board (Hampel, 1998), or should be composed exclusively of NEDs who are independent of management (The Combined Code, 2000).

British law, however, does not recognise any distinction between executive directors and NEDs; both are equal members of a unitary board, and both share, at least in principle, the onerous responsibility for the behaviour of the company and its consequences (E. Davis & Kay, 1993). Mangel and Singh (1993) argue that the percentage of NEDs that sit on the board of directors has no significant impact on executive compensation.

Executive directors who sit on the board provide first-hand, in-depth company knowledge, and bring a recognizable emotional commitment to, and involvement with, the company (Demb & Neubauer, 1992). However, executives frequently find it difficult to gain sufficient detachment from the development needs of the business in order to take a corporate-wide view (Demb & Neubauer, 1992). In addition, affiliated directors place more at risk than their position on the board in challenging management. However,

according to Daily et al. (1996) there is no evidence that directors who might be sympathetic to the CEO are any more, or less, likely to enhance the CEO's pay package.

In contrast, NEDs or outside directors are generally assumed to be more able to represent shareholders' interests and judge managerial performance impartially (Weisbach, 1988). They are seen as guardians of the corporate good and act as buffers between executive directors and the company's outside shareholders (Pass, 2004); providing a link between governance on the one hand and performance on the other (Jones, 2004).

As a result, it is thought that a board's detachment from operations equips it to analyse developing strategic decisions with fresh objectivity and breadth of experience (Blair, 1995). Therefore, a higher proportion of NEDs may indicate more vigilant external monitoring, diminish the ability of management to exploit insider information, and reduce potential agency problems (Wright & Kroll, 2002). Hillman and Dalziel (2003) also add that NEDs are thought to be better monitors because they lack any disincentive to monitor. In fact, Zajac and Westphal (1996) and Wright and Kroll (2002) both suggest that non-executive board members seek to develop and maintain a favourable reputation as active representatives of shareholder welfare, as a means to enhance their human capital on the boards they currently sit and increase their attractiveness as candidates for board appointments at other firms.

Empirical evidence provided by O'Reilly, Main, and Crystal (1988) and later by Daily, Johnson, Ellstrand, and Dalton (1998) reported that the amount of CEO compensation is related to the make-up of compensation committees. Furthermore, Conyon and Peck (1998) found that pay and performance was more closely aligned when there was a higher proportion of NEDs serving on the remuneration committee. In particular, Daily and Dalton (1993) found that a high proportion of NEDs had a positive impact on a firm's financial performance. In contrast, Muth and Donaldson (1998) and later by Dulewicz and Herbert (2004) in a follow up study concluded that significantly better results were achieved by companies whose boards had fewer independent directors. Consequently, it may be inferred that companies with independent boards are not more successful than those boards, which are composed of executive directors.

Finally, the nominations committee is a common feature in most firms. Based on Charkham's (2001) research into UK and American firms, over half of the companies in his sample had an active nominations committee. This committee is charged with identifying qualified candidates to serve on the board of directors (Brountas, 2004).

Top executives play a major role in appointing the board and use the board as a vehicle to legitimise decisions that may not be in the best interest of owners (Tosi & Gomez-Mejia, 1989). Consequently, the nominations committee is not impervious to the attempts made by the CEO to exert social influence, which relies on norms of reciprocity, liking, and social consensus to shape the board's decision-making and, ultimately, composition (Wade, O'Reilly, & Chandratat, 1990). Consequently, a CEO's control over the director selection process represents an important source of executive entrenchment and, under these circumstances, the CEO is able to nominate and select board members who are sympathetic to their desires (Wade et al., 1990). In support, O'Reilly et al. (1988) and O'Reilly, Wade, and Chandratat (1990) demonstrate that CEOs may be able to use social influence to affect their compensation. Therefore, by deliberately identifying or promoting people with similar philosophies on strategy and administration, CEOs can subtly enhance board support for their initiatives and decisions or minimise the risk of dissention (Westphal & Zajac, 1995).

Furthermore, Zajac and Westphal (1996) suggest that powerful actors in the CEO-board relationship may affect the diffusion of board independence through the selection and retention of directors whose prior directorship experiences suggest differential sympathy for their interests. This enables powerful actors in the CEO-board relationship to manage board interlocks so as to reinforce or increase their control (Zajac & Westphal, 1996). As a result, Westphal and Zajac (1997) claim that strategy and executive compensation are influenced by social and psychological dynamics that operate within the inner circle of corporate leaders. Consequently, it may be argued that the nominations committee is not truly independent because the CEO may control the nominations process, maintain social relations with board members, and thus expect board support (Bebchuk, Fried, & Walker, 2002). Through co-opting existing board members and nominating new directors that are sympathetic to the CEOs interests, increases the risk of entrenchment

and the possibility that an opportunistic executive will exploit company resources at the expense of shareholder wealth.

For example, a CEO may enhance their influence over the board by appointing NEDs that are sympathetic to their needs (Wade et al., 1990; Finkelstein & D'Aveni, 1994). Sources of power over the director selection process create an opportunity for political behaviour and, consequently, demographic similarity amongst the board will reflect and reinforce the existing power distribution and may produce bias in evaluation decisions (Westphal & Zajac, 1995). In contrast, demographic dissimilarity should minimise bias and enhance independence and objectivity in decision control activities (Westphal & Zajac, 1997).

Some argue that inside directors are more willing to accommodate CEO preferences and that an increase in the number of insiders reflects comparatively weak board control over the CEO (Westphal & Zajac, 1995). As a result, NEDs are better positioned to evaluate managerial performance impartially (Beatty & Zajac, 1994). However, Westphal and Zajac (1995) warn that NEDs who are demographically similar to the CEO may be more akin to insiders.

In addition to the governance mechanisms discussed above, it is just as important to consider market-wide governance factors, which can also affect pay and performance. Consequently, the following section addresses two particular external governance mechanisms and discusses how these factors influence the pay-performance relationship.

#### *2.4.3. Market for corporate control*

The market for corporate control works by threatening managers with takeover to keep them from abusing their power or misusing corporate resources (Blair, 1995). It is defined as the transferring of managerial control to new capital providers (e.g. shareholders) through acquisitions, divestitures, and other control-transfer mechanisms (Hitt, Hoskisson, Johnson, & Moesel, 1996). However, some argue that although the market for corporate control is a powerful mechanism for disciplining management, it is flawed because acquisitions or hostile takeovers produce little or no return to acquiring

shareholders (Jensen, 1988; Hart, 1995). Despite this, firms have substantial defences against hostile takeovers which include staggered boards, substantial premiums, and golden parachute provisions (Bebchuk & Fried, 2003). Essentially, Bebchuk and Fried (2003) argue that market for corporate control fails to impose tight constraints on executive pay.

#### 2.4.4. *Executive labour market*

According to Fama (1980), the external labour market may provide enough implicit incentives for executives to exert effort. Essentially, executives are willing to build a reputation as being efficient, and to do so they must exert their best efforts even in the absence of formal contracts (Fama, 1980). Lambert and Larcker (1985) add that the level of executive pay is, to a degree, determined by the operation of a labour market for executive services. They also comment that this labour market may provide an important means of motivating executives to serve their shareholders, and identify two key aspects of the labour market.

First, the labour market sets the executive's wage, and this provides a lower bound on the amount of total compensation that must be paid in order to retain their services. At the same time, the availability of other executives of comparable experience and ability at this wage provides some constraint on the level of compensation demanded by executives in their current jobs. Secondly, the labour market has the potential to control agency problems. It is suggested that if executives make decisions that harm stockholders the labour market should lower the executive's wage. To the extent that executives are penalised in this way for poor decisions may indicate that they have less incentive to behave in a manner that benefits themselves at the expense of the shareholders.

The prior discussion highlights some of the features of CG which impact upon pay and performance. However, it is suggested that a firm's ability to sustain strong CG may be hindered by CEO/Chair duality or extensive tenure on the board of directors. Each variable is often considered a feature of weak CG and is examined in turn next.

#### 2.4.5. *Chief Executive Officer (CEO)/Chair duality*

CEO/Chair duality refers to a board leadership structure in which the same person holds both the CEO and board chair positions in a corporation (Rechner & Dalton, 1991). In addition, Finkelstein and D'Aveni (1994) conceptualise CEO/Chair duality as a double-edged sword forcing boards to choose between the contradictory objectives of entrenchment avoidance and unity of command.

Critics of the independent structure argue that CEO/Chair duality “signals the absence of separation of decision management and control” (Fama & Jensen, 1983, p. 314). Harrison, Torres, and Kukalis (1988) also comment that CEOs holding both positions have greater informal stature and heightened formal authority over board members. As a result, many argue that a dual role increases CEO power, restricts the boards independence, reduces its ability to fulfil its governance function and, moreover, may constitute a clear conflict of interest (Donaldson & Davis, 1991; Rechner & Dalton, 1991). This means that uniting both roles in one person represents a formalised conflict of interest in which a CEO who is responsible for the overall strategic management of a firm is also in a position to evaluate the effectiveness of that strategy (Finkelstein & D'Aveni, 1994; Westphal & Zajac, 1997). Consequently, regulators also concerned with the considerable concentration of power that arises where the roles of CEO and chairman are combined, recommend that the roles should be divided (Cadbury, 1992; Hampel, 1998).

CEO/Chair duality can firmly entrench a CEO at the top of an organisation and occurs when executives gain so much power that they are able to use firm resources to further their own interests (Weisbach, 1988). This will enable the CEO to dominate board meetings and control the nominations process, facilitating the consideration of new directors that are sympathetic to their interests (Finkelstein & D'Aveni, 1994). It is often seen as an indicator of executive power over a board (Finkelstein & Hambrick, 1996), and in order for the board to effectively monitor and discipline top management, it is important to separate the CEO and board chair positions (Jensen, 1993; Mayer, 2000). In summary, Sora and Natale (2004) claim that merging the roles of the CEO and chairman into one individual is a recipe for corruption, the misuse of power, and the

disenfranchising of stockholders. Essentially, there is no balance of power, which allows the CEO to create a short-term environment that benefits them and risks any long-term investments.

Therefore, non-CEO/Chair duality has various positive consequences. These include: enables a more focused division of corporate functions and increases the balance of power (Demb & Neubauer, 1992), enhances a board's independent monitoring capacity and curtails management entrenchment (Beatty & Zajac, 1994; Finkelstein & D'Aveni, 1994; Lee & O'Neill, 2003), inhibits executives from critiquing feedback about their own performance, and ensures that the outsiders' voice is heard (Sundaramurthy & Lewis, 2003).

However, advocates of CEO/Chair duality argue that combining the role of CEO and chairman of the board removes ambiguities and conflicts that could otherwise arise where power is shared. Consequently, Harrison et al. (1988) state that the increase in power and responsibility that the combined position affords is accompanied by an increase in accountability; and that this increase in accountability may offset any additional advantage the CEO gains from also holding the board chair position. Also, establishing clear lines of authority and responsibility within a firm, helps to establish unity of command, which is defined as the existence of a single top manager with formal authority to whom all other managers report, and clarify decision-making authority (Finkelstein & D'Aveni, 1994). Furthermore, Sora and Natale (2004) suggest that a dual role facilitates the decision-making process by minimising conflict through the removal of checks and balances.

It is suggested that the diffusion of power attenuates strong leadership (Finkelstein & D'Aveni, 1994). Therefore, CEO/Chair duality may create an illusion of stability and a sense that a dominant leader is determining organisational identity (Finkelstein & D'Aveni, 1994). In this way, unification of the roles is predicted to lead to greater financial performance.

To date, there is a significant but limited body of research on CEO/Chair duality, which has yielded mixed results and focused primarily on the main effect of CEO/Chair duality on corporate performance (Finkelstein & D'Aveni, 1994). Despite this, Rechner and Dalton (1991) reported that CEO/Chair duality was negatively associated with firm performance. In addition, Main (1991), Boyd (1994), Core, Holthausen, and Larcker (1999), and Bebchuk, Fried, and Walker (2001) found that the dual role was positively associated with CEO compensation. In contrast, Donaldson and Davis (1991), Main and Johnston (1993), Conyon and Leech (1993), Finkelstein and D'Aveni (1994), Main et al. (1995), Baliga, Moyer, and Rao (1996), Conyon (1997a), Muth and Donaldson (1998) and Benito and Conyon (1999) demonstrate that dual CEO structures had no significant impact on executive pay, outperformed independent chair structures, are associated with higher return to shareholders, and did not harm long-term company performance. It may be inferred from this research that CEO/Chair duality has a positive effect on performance and that the key issue is not to heighten control of management but to empower executives.

#### *2.4.6. Tenure on the board of directors*

Supplementing the work of Llewellyn (1968), who claims that CEOs spend a significant period of time at the helm of an organisation, Charkham (2001) claims that tenure on the board is generally between 6 and 8 years. Research in this area and its influence on pay and performance is mixed. For example, scholars such as Deckop (1988) and Mangel and Singh (1993) argue that years of service to the company are not a significant determinant of executive pay. In contrast, Murphy (1986a), H. D. Platt (1987), Henderson and Fredrickson (1996), Lippert and Porter (1997), and Wright, Kroll, and Elenkov (2002) found a significant positive relationship between executive pay and tenure, which supports the contention that tenure plays a major role in determining an executive's total remuneration. Buchholtz, Ribbens, and Houle (2003) also suggest that this positive relationship may be explained due to long periods of tenure increasing the level of firm-specific human capital. Essentially, the company is paying for greater expertise.



Conversely, Hill and Phan (1991) claim that the sensitivity of pay to performance decreases as executive tenure increases. This may be explained in terms of entrenchment whereby an extended period of tenure allows the executive to control the board and exert their social influence in order to weaken the relationship between pay and performance (Harrison et al., 1988; Tosi & Gomez-Mejia, 1989; Wade et al., 1990; Hill & Phan, 1991). In addition, Lippert and Porter (1997) found a negative relationship between tenure and bonus pay. An interpretation of this finding is that as tenure increases, the CEO may be more willing to have compensation increases in the form of stock and options.

To summarise, the governance mechanisms discussed above make a significant contribution to the pay and performance relationship. In particular, institutional investors, which are a powerful pressure group, are becoming less common due to the rise in dispersed ownership. Therefore, the board of directors is the shareholders first line of defence against incompetent management (Weisbach, 1988). In general, it is suggested that an effective board that rewards executives fairly, i.e. does not reward poor performance, be composed entirely of NEDs. It is argued that independent NEDs are better positioned to judge managerial performance impartially. Furthermore, it is suggested that the CEO should not sit on the nominations committee. It is anticipated that this approach will limit the co-option of existing board members and the selection of new directors that are sympathetic to the CEOs interests. This strategy is expected to reduce the risk of entrenchment and opportunism, i.e. exploiting company resources at the expense of shareholder wealth. In addition, preventing the CEO from occupying the board chair position and limiting executive tenure is expected to have a similar effect.

However, in addition to these peripheral governance factors, this thesis also considers the impact of firm performance (variously measured) on executive pay. The next section provides a theoretical context for this pay-performance relation.

## 2.5. EXECUTIVE PAY IN THEORY

The problem of compensating agents and employees is far more intricate than is represented in the standard agency model (Holmstrom & Milgrom, 1991). Furthermore,

Brown et al. (2003) suggest that no single theory can fully explain how compensation relates to organisational performance. In addition, Daily, Dalton, and Rajagopalan (2003) claim that one theoretical perspective is insufficient for capturing the complexity of the differing interests of ownership types. Consequently, two of the most prominent theoretical propositions to emerge from the executive pay literature are agency theory and the self-serving management/power perspective.

In this study, these two theories offer contrasting views on the pay-performance relation and, subsequently, provide competing hypotheses that are discussed further in chapter 3. Essentially, agency theory predicts a positive association between bonus pay and firm performance whereas power theory expects a negative association. It is anticipated that by using two opposing theories will allow for a more complete explanation of this inherently complex pay and performance relation. Each theory is now discussed in detail.

#### 2.5.1. *Agency theory*

Agency theory is often regarded as the dominant theoretical framework for examining the effects of contingent pay in general (Barkema & Gomez-Mejia, 1998), and has its roots embedded in Berle and Means' (1932) influential statement about self-interested managers which highlighted the problems emerging from the growing separation of ownership and control in modern corporations (Zajac & Westphal, 1995). Consequently, agency theory would argue that the association between pay and performance may be strong, but weakened by the ineffective integration and alignment of interests between the company's shareholder principals and executive agents (For an illustration of the agency relationship refer to Figure 3 overleaf). In contrast, stewardship theory would argue that the executive is motivated to be a reliable steward of corporate assets and maintains that there is no inherent problem with executive motivation (Donaldson & Davis, 1991; J. H. Davis, Schoorman, & Donaldson, 1997).

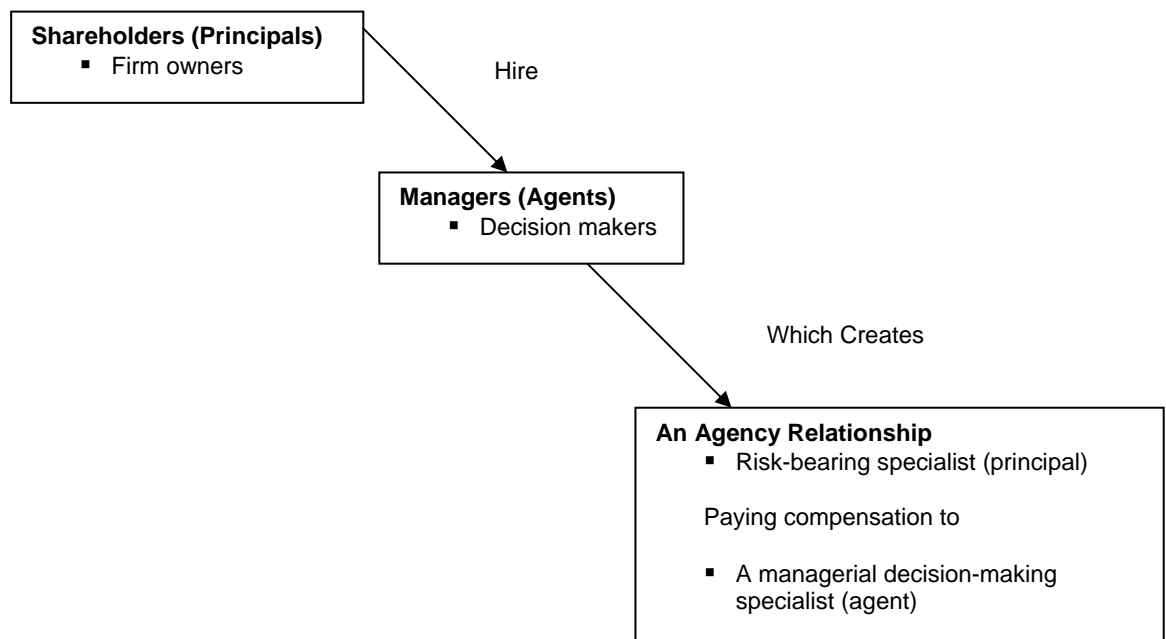


Figure 3. *An agency relationship* (Hitt, Ireland et al., 1996, p. 315).

The basic principal-agent model assumes principals are risk neutral because they can own shares in multiple, diverse companies, whereas agents are more risk averse owing to their un-diversified human and financial capital (Baron & Kreps, 1999; Elvira, 2001; Sundaramurthy & Lewis, 2003). Risk averse CEOs may become rigidly devoted to the status quo in an attempt to reduce their risk exposure and, subsequently, the benefit of alignment is that CEOs will be more likely to take greater risks (D. Miller, 1991; Carpenter, 2000). Fundamentally, this risk differential fosters goal conflict between the principal and agent.

Also referred to as the optimal contracting view, agency theory considers the firm's governance structure as a nexus of contracts which is described by Jensen and Meckling (1976) as,

Viewing the firm as a nexus of a set of contracting relationships serves to make clear that the firm is not an individual but a legal fiction which serves as a focus for a complex process in which the conflicting objectives of individuals are

brought into equilibrium within a framework of contractual relations (p. 311-312).

Consequently, agency theory is concerned with problems that can arise in any cooperative exchange when one party (the principals) contracts with another (the agents) to make decisions on behalf of the principals (Fama & Jensen, 1983). However, agency contracts allocate risks and responsibilities to the parties who are best able to bear and perform them, thus differentiating separation from ownership and control (Baysinger & Hoskisson, 1990). Therefore, shareholder interests must be safeguarded by controls on management, but these controls must not unduly shift residual risk onto management (Baysinger & Hoskisson, 1990). Essentially, without an effective system to control decisions, managers are apt to behave in ways that reduce their exposure to risks (Baysinger & Hoskisson, 1990).

Risk posture is an important element of corporate strategy (Beatty & Zajac, 1994). As a result, delegation causes a misalignment of incentives due to different preferences for risk (Lubatkin, Lane, Collin, & Very, 2003). For example, shareholders maximise returns at reasonable risk, focusing on high dividends and rising stock price whereas managers in some cases may prefer growth to profits (Aguilera & Jackson, 2003). In an agency context, CG is concerned with ways in which agents can be held to account for the attainment of the goals given to firms (Child & Rodrigues, 2003).

Managerial discretion refers to the latitude of options available to executives in making strategic choices (Hambrick & Finkelstein, 1987). Therefore, high discretion entails greater risk and multiple courses of action. Consequently, executives in high discretion firms can potentially earn more because higher pay levels are needed to compensate for bearing greater risk (Eaton & Rosen, 1983; Eisenhardt, 1989).

Agency theory would argue that managerial discretion, which focuses on the potential decision-making freedom of high discretion agents, will promote non-profit-maximising choices (Jensen & Meckling, 1976). Essentially, the greater the level of discretion, the greater the potential impact of an agent on a firm and, hence, the greater their potential

marginal product. Wright and Kroll (2002) add that when agents have greater opportunities to make a wider range of decisions, they are more likely to enhance firm performance, presumably benefiting the shareholder. However, they also caution that unless agents are monitored actively, discretion may not be desirable because, via discretion, agents may selfishly over-invest in projects that are non-value maximising.

Consequently, multi-tasking allows agents to misallocate effort across activities (Holmstrom & Milgrom, 1991; Baker, 1992). Therefore, when multiple courses of action are possible, uncertainty and complexity increase, and it becomes more difficult to predict firm performance with much accuracy (Finkelstein & Boyd, 1998). Complexity, therefore, distorts the relationship between executive action and firm performance (Balkin, Markman, & Gomez-Mejia, 2000). Consequently, incentive problems may arise when executives must allocate effort across multiple activities (Bushman & Smith, 2001). As a result, it is the board's responsibility to design compensation schemes that provide executives with efficient incentives to raise shareholder value and prevent managerial opportunism (Aggarwal & Samwick, 1999b). On this view, executive compensation plans are just one type of internal CG mechanism that attempts to tackle the agency cost trade-off between insuring executives against poor outcomes and incentive alignment concerns (Ezzamel & Watson, 2002). Conversely, stakeholder theory would argue that the main objective of the firm should be defined more widely and include the welfare of suppliers, customers and employees, and not solely governed in the interests of its shareholders (Purcell, 1992; Keasey, Thompson, & Wright, 1997; Short & Keasey, 1997).

Agency costs are associated with monitoring and disciplining agents in order to prevent abuse and the misallocation of effort (Holmstrom & Milgrom, 1991; Blair, 1995). They are the sum of incentive, monitoring, and enforcement costs and any residual loss incurred by the principal (Hitt, Ireland et al., 1996). It does cost to be informed and, consequently, significant free-rider problems arise as individual shareholders are reluctant to devote resources to managerial monitoring (Forbes & Watson, 1993; Bruce & Buck, 1997). Some argue that the cost to any small atomistic shareholder to monitor

the executive exceeds the benefits (Prodhan, 1993; Tevlin, 1996). Two associated factors that hinder monitoring efforts are moral hazard and information asymmetry.

The former refers to those actions that agents take that are unobserved by the principal (Laffont & Martimort, 2002), and which may be limited by adopting Holmstrom's (1979) 'informativeness principle'. The 'informativeness principle' incorporates any measure of performance that reveals information on the effort level chosen by the agent into the incentive contract, but will only be implemented into the portfolio of performance measures if it has incremental information content over and above the other available measures (Bushman, Indjejikian, & Smith, 1996; Prendergast, 1999).

The latter arises from the inability of managers to convey information about the firm and from the reluctance of investors to gather information about firm activities (Lee & O'Neill, 2003). Specifically, top managers are able to affect the information flow by gathering and redistributing information across key external actors and internal locales (Collins & Clark, 2003). As a result, information asymmetry and opportunism will lead to the misallocation of effort whereby executives will seek to maximise their own utility at the expense of the shareholders. According to Lubatkin et al. (2003), executives are opportunistic by nature and will act in their own self-interest in the absence of restraints, even if their actions diminish shareholder wealth.

In an attempt to redress this issue, regulators recommend that companies should adopt a philosophy of full transparency (Cadbury, 1992; Greenbury, 1995), establishing a formal and transparent procedure for developing policy on executive remuneration and for fixing the remuneration packages of individual directors (The Combined Code, 2000). The company's annual report should be the main vehicle through which the company reports to shareholders on directors' remuneration (Greenbury, 1995; The Combined Code, 2000) and should include complete details of all the elements in the remuneration package for each individual director (The Combined Code, 2000). According to the ABI (2002), performance targets should generally be disclosed, subject to commercial confidentiality considerations. When objectives are clear and transparent, the easier it is to determine whether an executive has failed to perform. At the very least, shareholders

expect to be informed of the basic parameters of performance targets that are set, in particular, over the short-term (ABI, 2002).

Gomez-Mejia and Wiseman (2003) and Walker and Louvari (2003) claim that dispersed shareholding ownership and the costs associated with increased disclosure reduces the intensity of monitoring executive behaviour. In contrast, Rothfeder (2004) would argue that this relative opaqueness is changing and companies are now entering an era of information transparency due to increasingly activist stakeholders, the growing influence of global markets, the spread of communications technology, and a new customer ethic demanding openness, honesty, and integrity from companies. According to Bushman and Smith (2003), corporate transparency is the widespread availability of relevant, reliable information about periodic performance, financial position, investment opportunities, governance, value, and risk of PLCs, which enhances efficiency by enabling managers and investors to identify value creation opportunities with less error.

Overall, therefore, the agency approach generates optimism concerning the governance mechanisms in place within public companies, and their ability to achieve an acceptable degree of goal alignment. Executive pay in general, and bonus in particular, may contribute to this alignment, leading to a positive relation between bonus pay and firm performance.

#### *2.5.2. Self-serving management/power perspective*

Although arguably related to agency theory, the self-serving management hypothesis emphasises the fundamental misalignment of interests between the principal and the agent. It argues that executives are self-serving and opportunistic and when given the necessary latitude will participate in dysfunctional behaviour. This behaviour is termed managerial opportunism or moral hazard and results in rent extraction, a divergence of interests and lack of goal congruence between the company's owners and executives (Holmstrom, 1979; Veliyath, 1999; Conyon & Sadler, 2001; J. S. Miller et al., 2002).

In conjunction with the self-serving management perspective, the managerial power model is heavily associated with the separation of ownership and control of the modern

corporation (Garen, 1994). This refers to a situation where power and control of the corporation has shifted away from the common stockholders and, subsequently, ownership is becoming more dispersed and control more concentrated (Berle & Means, 1991). As a result, the wealth of innumerable individuals is under the same central control (Berle & Means, 1991). This separation, therefore, has eliminated the checks and balances that owners once exercised over management and with this undaunted power, management may pursue its own interest, oblivious to the welfare of the owners (Berle & Means, 1991; Werner & Tosi, 1995). Certo, Daily, Cannella, and Dalton (2003) add that the entrenchment of CEOs with large equity stakes exacerbates self-serving behaviour. Consequently, the apparent entrenchment effect of executive ownership is something that remuneration committees need to consider when deciding the extent of share ownership they encourage amongst their top executives (Dedman, 2003).

Power in this context refers to the capacity of social actors to exert their will and to achieve their goals in a particular relationship (Pfeffer, 1981; Weisbach, 1988). In addition, Boeker (1992) argues that powerful CEOs are less likely than less powerful CEOs to be dismissed during performance downturns. As a result, power plays a central role in CG (Daily & Dalton, 1994; Finkelstein & D'Aveni, 1994), and is dependent on the ownership structure of the firm, the composition of the board, and whether or not the CEO operates as chairman (Bebchuk et al., 2001). According to Shen (2003), executive power increases over time and, without a vigilant board, a top executive may become entrenched in their position increasing their ability to exploit corporate assets and extract greater rents (Bebchuk & Fried, 2003).

Consequently, based on the research of Lambert, Larcker, and Weigelt (1993), Zajac and Westphal (1995), Sridharan (1996), and Bebchuk and Fried (2003; 2004), it may be inferred that executive power and control is an important determinant of executive compensation and a better explanation for the lack of positive pay-performance sensitivity. However, Murphy (2002) challenges this view and argues that the managerial power model is problematic as a theoretical approach and too simplistic to explain executive pay practices. He highlights some of the inconsistencies associated with power theory. First, the escalation in executive pay in the 1990s coincided with



increasingly independent boards and, secondly, CEOs hired from the outside with no ties to the existing board enjoy attractive pay packages, which contrast with the view that CEOs use their relationships with board members to extract rents.

To summarise, the managerial power model claims that incumbent executives exercise ‘unfettered’ power and influence over captive directors in order to extract rents through their compensation arrangements (Murphy, 2002; Dedman, 2003; Bebchuk & Fried, 2004). Therefore, power theory, in contrast with the agency view, argues that executive entrenchment will lead to a negative association between bonus pay and firm performance. As a result, the survival of the corporation depends on the construction of appropriate incentive arrangements, which encourage the agent to act in the best interests of the principal, i.e. shareholder wealth maximisation, and limit the effects of managerial opportunism (Veliyath, 1999).

Consequently, these two contrasting models with competing predictions provide a theoretical context for pay and performance. Therefore, it seems appropriate to now address what existing research, from both the UK and America, has concluded about this association. Consequently, section 2.6 to follow, first, considers the issues surrounding executive pay research in general, secondly, provides evidence from the UK and, finally, America.

## 2.6. EXECUTIVE PAY AND FIRM PERFORMANCE

The criticism of executive compensation in the financial press is based upon anecdotal evidence (Lambert & Larcker, 1985). It is, however, a topic of intense interest and controversy that lends itself to empirical inquiry but which has spawned an abundant but disjointed and inconclusive literature (J. Kerr & Bettis, 1987; Finkelstein & Hambrick, 1988). This is supported by Gomez-Mejia (1994) who states that, “it is amazing how little we know about executive pay in spite of the volume of empirical work available on this topic. Even more discouraging results are conflicting and disappointing” (p. 199). He claims that “multiple factors contribute to this empirical morass” (Gomez-Mejia, 1994, p. 174), and suggests that this weakness may be due to the various paradigms and traditions that influence the interpretation of data, the fact that accounting formulas are

not homogenous across firms, the difficulty associated with calculating subjective assessments of executive behaviour, the impact of lag effects as a result of deferred payments, the use of crude proxies to measure executive behaviour and, finally, variables which are expected to influence executive pay tend to be highly correlated which poses a collinearity problem that makes it difficult to isolate the unique effect of a single factor.

In addition, Barkema and Gomez-Mejia (1998) argue that "...adding more empirical studies on the statistical relationship between executive pay and firm performance to the vast literature that already exists on this issue leads researchers into a blind alley" (p. 143). However, despite generating a spirited debate among academics and practitioners alike for at least 75 years (Gomez-Mejia & Wiseman, 1997), executive compensation did not become a public issue until 1991, i.e. it was at this time that excessive executive pay practices were openly criticised in the popular press (Murphy, 1998). Recently, executive pay was criticised for its gross excesses (see Finch & Treanor, 2005; Finch, Treanor, & Moore, 2005; Watkins, 2005) and still remains a controversial topic of interest.

#### 2.6.1. *UK*

Research into UK executive pay has been criticised for, first, failing to provide a comprehensive measure of executive pay (Main et al., 1996), secondly, for unsuccessfully documenting a distinct relationship between pay and performance (McKnight & Tomkins, 1999) and, finally, due to the lack of available and consistent data (Canyon et al., 1995; Canyon, 1997b; Laing & Weir, 1999; Canyon & Sadler, 2001). One of the main grievances of executive pay is that rewards often fail to reflect performance (Charkham, 2001). This view is supported by much of the applied executive compensation literature based on UK evidence, which focuses on the strength of the relationship between executive pay and company performance.

Results indicate that executives' compensation is only weakly related to company performance (Canyon & Leech, 1993; McKnight, 1996; Ezzamel & Watson, 1998; Laing & Weir, 1999; Canyon & Sadler, 2001). In particular, Gregg, Machin, and Szymanski (1993) found evidence of a declining relationship between executives' pay and

shareholder returns. In addition, although focusing on the private utilities sector, Conyon (1995) found that the growth in executive pay generally exceeds the growth in company performance. Furthermore, McKnight and Tomkins (1999) discovered an insignificant relationship to exist between executive bonuses and changes in earnings per share (EPS). To summarise, these studies confirm that it is difficult to isolate a robust relationship, or infer direction of causation, between top executive pay and corporate performance and even when a link can be determined the quantitative impact appears to be negligible (Conyon, 1995, 1997a).

In contrast, alternative studies have discovered a positive and significant relationship to exist between executive pay and firm performance (Main, 1991; Main et al., 1996; Cosh & Hughes, 1997; Conyon, 1998). Specifically, Conyon (1997a) concluded that executive compensation was positively related to shareholder return. In addition, McKnight and Tomkins (1999) found a modest association between executive bonus and shareholder return. Furthermore, Benito and Conyon (1999) concluded that a 10% increase in shareholder return predicts a £1,852 increase in executive compensation when evaluated by average pay. This mixed set of results, however, suggests that performance may have a persistent effect on executive pay (Boschen & Smith, 1995). But, is this UK based research consistent with studies using American data?

### 2.6.2. *America*

Similarly, decades of work have been unable to show an unambiguous direct link between CEO pay and firm performance (Jensen & Murphy, 1990). Rajagopalan (1996) suggests that these contradictions may be partly attributed to the problems stemming from estimating the value of deferred, stock-based incentive payments. Consequently, comparable studies based on data from America have also found a weak or statistically insignificant relationship between directors' compensation and company performance (see Baker et al., 1988; Deckop, 1988; Leonard, 1990; Mangel & Singh, 1993; Akhigbe, Mandura, & Tucker, 1995; Henderson & Fredrickson, 1996; Aggarwal & Samwick, 1999a; Veliyath, 1999; Attaway, 2000; Balkin et al., 2000; Conyon & Murphy, 2000). In particular, Jensen and Murphy (1990) conclude from their analysis of performance pay and top-management incentives that the relation between executive wealth and

shareholder wealth is small. They discovered that executive wealth changes by \$3.25 for every \$1000 change in shareholder wealth and that a 10% increase in firm value is associated with a 1% rise in salary and bonus pay. In addition, B. J. Hall and Liebman (1998) discovered that a 10% increase in firm performance will increase salary and bonus by 2.2% or about \$23,400 when evaluated at the median CEO salary and bonus.

There is considerable controversy surrounding the relationship between shareholder return and top executive pay (J. Kerr & Bettis, 1987). First, because there are so many forms of financial compensation, and as they are so complex, calculating an executive's financial income is either intractable or misleading (Finkelstein & Hambrick, 1988). Secondly, changes in shareholder wealth can be attributed to a multitude of factors (Wallace, 1997).

However, the assumption is that high levels of pay are evidence that executives are doing a good job for shareholders and are "worth every nickel they get" (Murphy, 1986b, p. 125). On the contrary, ballooning pay packages may be evidence that executives are out of control and the systems that are supposed to make them accountable to investors have broken down (Blair, 1995). Consequently, in order to resolve this controversy, Masson (1971), Murphy (1985), Coughlan and Schmidt (1985), Gomez-Mejia, Tosi, and Hinkin (1987), Abowd (1990), Gibbons and Murphy (1990), Hubbard and Palia (1995), and Tevlin (1996) have examined the correlation between changes in executive pay and changes in shareholder wealth and all documented a positive and significant correlation.

As early as 1971, Masson concluded that executives whose financial rewards were more closely aligned with the goals of the shareholders and the long-term profitability of the firm do indeed outperform other firms in stock return. In addition, Coughlan and Schmidt (1985) explained 5.4% of the variance in executive pay as a function of stock market performance. Furthermore, Murphy (1986b), B. J. Hall and Liebman (1998), Abowd and Kaplan (1999), and Garvey and Milbourn (2003) state that the links between executive wealth and firm performance have remained positive over time and become stronger in recent years. Nevertheless, there remains little consensus regarding the relationship between pay and performance (Daily et al., 2003).

Although the primary thrust of Ciscel and Carrol's (1979) analysis of the pay and performance relationship were negative, they concluded that executive pay was influenced by several aspects of corporate performance. Pavlik, Scott, and Tiessen (1993), Murphy (1998), and Tosi, Werner, Katz, and Gomez-Mejia (2000), through a meta-analysis of previous studies on executive pay, also identify many factors that are known to influence executive compensation. Some of these alternative performance indicators include profitability, sales, firm size and industry. Note that industry is not considered as a measure of performance but has been included in the discussion because previous research has identified the variable as being a significant determinant of executive pay. As a result, the next section highlights and discusses these alternative determinants.

## 2.7. DETERMINANTS OF EXECUTIVE PAY

This section examines the extent to which profit, sales, firm size, and industry influence executive pay.

### 2.7.1. *Profitability versus sales*

Despite being criticised as a performance indicator for inadequately reflecting a firm's underlying value due to it being easily manipulated (Gomez-Mejia et al., 1987), American based research has suggested that profitability rather than sales had a significant influence on executive compensation (Llewellyn & Huntsman, 1970; Prasad, 1974; Finkelstein & Hambrick, 1989). In contrast, Ciscel (1974) suggested that profitability was not a primary determinant of executive reward. In addition, Conyon and Leech's (1993) study of UK companies concluded that sales was indeed a good predictor of executive pay.

### 2.7.2. *Firm size*

Berle and Means (1991) state that top executives in larger companies are paid more than their counterparts in smaller firms. They suggest that size is the most compelling explanation for this difference and, subsequently, the bigger the company, the larger the rewards. In addition, as the size of the company increases the tendency to dispersion also

increases. In general, the larger the company, the more likely its ownership will be diffused among a multitude of individuals (Berle & Means, 1991).

One of the earliest British attempts to analyse the relationship between executive pay and firm performance is conducted by Cosh (1975). He discovered that company size was a major determinant of the remuneration of executives, a conclusion receiving support from numerous scholars from both the UK and America (see Ciscel, 1974; Meeks & Whittington, 1975; Agarwal, 1981; Coughlan & Schmidt, 1985; Baker et al., 1988; Deckop, 1988; Finkelstein & Hambrick, 1988; Kostiuk, 1990; Hill & Phan, 1991; Gregg et al., 1992; Main & Johnston, 1993; Mangel & Singh, 1993; Garen, 1994; Conyon, 1995; Hubbard & Palia, 1995; McKnight, 1996; Cosh & Hughes, 1997; Conyon, 1998; Daily et al., 1998; Benito & Conyon, 1999; Hoskisson et al., 1999; Laing & Weir, 1999; Veliyath, 1999; Pass, Robinson, & Ward, 2000; Henderson & Fredrickson, 2001). In particular, Masson (1971) concluded that companies perform better with respect to firm growth when there is a close alignment of interest between the executives, the shareholders, and the long-term profitability of the firm. In addition, Santerre and Neun (1989) in their study of American firms in the 1930s found that executive compensation was positively related to corporate size and for every 10% rise in organisational size culminated in a 3% increase in executive pay. Furthermore, Tosi et al. (2000) discovered that company size and performance explained about half of the variance in executive compensation.

In contrast, Finkelstein and Hambrick (1989) found that bonus pay is not associated with firm size. Additionally, Lambert et al. (1991) found that changes in size did not exhibit a high correlation with changes in compensation and that factors other than firm size explain the majority of variance in executive pay. Further support is provided by Pavlik et al. (1993), Main et al. (1995), and Murphy (1998) who argue that executive pay is weakly related to company size.

Compensation based on firm size alone is justified because more hierarchical layers and greater complexity increase the challenge of top executive jobs (Gomez-Mejia et al., 1987). Also, managing a billion-dollar enterprise with hundreds of thousands of

employees may require more expertise, more effort, entail a greater responsibility and stress and thus deserve more compensation (Gomez-Mejia & Wiseman, 1997). This interpretation builds upon the logic of human capital theory. Under this proposition, pay premiums represent the worth of an executive to a firm as a function of unique and valuable managerial skills which directly influences pay levels and contracts (Castanias & Helfat, 1991; Pavlik et al., 1993; Gomez-Mejia, 1994; Gomez-Mejia & Wiseman, 1997). Adding to this debate and relating to the managerial talent hypothesis, Bebchuk et al. (2001) comment that compensation levels are explained by the inelasticity in the supply of executive talent who are qualified to run large firms.

### *2.7.3. Industry*

Adding to the work of Antle and Smith (1986) whose results were consistent with a partial filtering of systematic industry risk in evaluating the performance contributions of their CEOs, Deckop (1988) found that CEO compensation practices vary significantly among various industries. In addition, J. Kerr and Kren (1992) found boards consider the uniqueness of corporate-level strategies as compared with industry peers. Therefore, industry categories are key factors that boards rely on in order to interpret company and CEO performance (Porac et al., 1999). Porac et al. (1999) comment further and suggest that company performance is “inherently equivocal in the absence of background comparisons with other firms in similar business situations” (p. 115). More recently, Datta, Guthrie, and Wright (2005) in their study examining how industry characteristics affect human resource systems, concluded that industry context has a moderating impact on the relationship between human resource systems and organisational effectiveness and, subsequently, is an important part of the environment within which organisational policies and practices are framed and executed.

Existing empirical studies of executive compensation have consistently documented that industry is an important factor in determining levels of executive pay (Conyon & Murphy, 1998). Examples of which include Roberts (1956), who in his study of American firms, concluded that industry was related to the amount of executive compensation, and Rajagopalan and Prescott (1990) who discovered that industry had a significant, although not pervasive, effect on the relationship between total cash

compensation and its antecedents. In contrast, Kostiuk (1990) found little convincing evidence of industry differences in executive pay.

In summary, the preceding section has highlighted that there are many factors, other than shareholder wealth maximisation, that can influence executive pay levels. But, how do firms ensure that executives are motivated to achieve performance targets that are in line with shareholder interests? One such method is to use performance targets, measures and incentives, and these are discussed next.

## 2.8. PERFORMANCE TARGETS, MEASURES AND INCENTIVES

Willingly or not, a company and its management are held accountable for their actions by various groups of stakeholders who impose standards defined by their interests (Demb & Neubauer, 1992). Therefore, performance may be expected to become the principal determinant of compensation (Riahi-Belkaoui, 1992). Consequently, regulators recommend that executive pay and annual bonuses in particular should be linked to performance, emphasising that performance targets should: relate to what individuals can influence (Greenbury, 1995); are tailored to the requirements of the business; reviewed regularly to ensure that they remain appropriate (ABI, 2002); and, ultimately, should be relevant, challenging and designed to enhance the business (The Combined Code, 2000; ABI, 2002).

Essentially, standards for corporate performance refer to the explicit and implicit yardsticks used by stakeholders to evaluate the performance of a company (Demb & Neubauer, 1992). However, Baker (1992) suggests that it is always possible to measure performance in some way but the question is not whether performance is easy to measure but whether the available performance measure accurately reflects the firm's objective and is thus a good measure. As a result, Barney (2002) asserts that firm performance is an outcome of the strategy-making process that is broadly consistent with the interests of all of a firm's stakeholders, not just its equity holders.

Research conducted by Healy (1985) suggests that internal earnings-based bonus schemes are a popular means of rewarding executives as they reflect factors that are more



under an executives' control. However, Healy (1985) acknowledges that executives may manipulate earnings figures in order to maximise their multi-period bonus payments and, according to Hunt (1986), executives tend to report financial data in the best possible light using accounting practices that overstate earnings. Additionally, Lambert and Larcker (1987) argue that accounting numbers provide a less useful measure of the agent's performance when the consequences of the agent's current-period actions tend to occur in the future and are not reflected in current-period accounting numbers. However, research conducted by Holthausen et al. (1995) based on an American sample found no evidence that executives manipulate earnings in response to their bonus plans. Nevertheless, the manipulation of accounting earnings exists and is referred to as "window dressing" (Feltham & Xie, 1994, p. 442) and more recently as "camouflage" (Bebchuk & Fried, 2004, p. 61) and, according to the latter, under the power model executives prefer pay practices that obscure the total amount of compensation and appear to be more performance based than they actually are.

Some academics would argue that market-based performance measures provide a more holistic evaluation of the firm's performance and are also less amenable to manipulation by executives than accounting measures, since share price is dictated by the atomistic decisions of shareholders on the performance of the firm (Healy, 1985). At the same time, Murphy (1986a) argues that external market-wide movements in equity values are typically cited as a major source of uncontrollable noise and may, therefore, represent an inappropriate proxy for managerial effort.

Consequently, linking managerial rewards to agreed-upon performance outcomes may prevent opportunistic managers from attributing poor performance to the vagaries of the marketplace and other factors over which they have no control (Baysinger & Hoskisson, 1990). Therefore, earnings-based measures help shield executive compensation from market-wide movements in equity values (Sloan, 1993). However, although profit is the most widely used measure of performance for a business firm, it does have a short-term orientation and executives may sacrifice long-term profitability in order to improve short-term profits (Kaplan & Atkinson, 1998). Nevertheless, Bushman and Smith (2003) suggest that objective, verifiable accounting information facilitates shareholder

monitoring and the effective exercise of shareholder rights. It also enables directors to enhance shareholder value by advising, ratifying, and policing managerial decisions and activities.

Ittner et al. (1997) suggest that internal, non-financial performance measures provide one mechanism for increasing the level of executive compensation, and report that 98% of sample firms use at least one performance measure in their annual bonus plans. Furthermore, they report a negative relation between the use of non-financial performance measures and the correlation between accounting returns and stock returns. However, their research does indicate that non-financial measures, such as internal customer satisfaction surveys, are more prone to executive manipulation and are rarely subject to public verification. In a later study, Murphy (1998) reports that 161 of 177 sample firms explicitly use at least one measure of accounting profits in their annual bonus plans. He also documents large increases in the pay-performance sensitivities of cash compensation with respect to contemporaneous changes in shareholder wealth. In contrast, Aggarwal and Samwick (1999b) document a robust, inverse relation between pay-performance sensitivity and the variance of the performance measure.

Extending this research, Murphy (2001) examined the use of internal and external performance standards in executive bonus contracts and how the choice of standard affects company performance and realised compensation. He discovered bonuses were not based strictly on an absolute performance measure but rather performance was measured relative to a performance standard, and found that less than half of the companies in his sample used a single performance measure, with most adopting two or more measures. In most cases, the companies in his sample utilised a mixture of internal and external performance standards such as budget, prior year or timeless standards. The findings showed no obvious relation between performance standards and firm performance. It did, however, conclude that internally determined standards are subject to ratcheting and provide incentives to smooth earnings, while external standards are not influenced by managerial actions. Executives in companies with external performance standards also receive, on average, a larger portion of their pay in the form of annual

bonuses. Consequently, it may be inferred that this dependence on short-term annual bonuses may be due to the volatility associated with market-based measures.

Individual Performance Evaluation (IPE) is the term for a mixture of performance measures which include subjective evaluations of individual performance, explicit non-financial performance criteria such as customer satisfaction, aspects of managerial input such as leadership, and indications of discretion or subjectivity in determining awards (Bushman et al., 1996; Bushman & Smith, 2001). However, Bushman et al. (1996) do highlight the difficulties associated with characterising the specific performance criteria or the judgements upon which IPE payoffs are based. It is also argued that short-term bonus plans based on current accounting profits are responsible for managerial myopia, i.e. encouraging a preoccupation with current operations and short-term results, and discouraging strategic initiatives and long-term investments with deferred and highly uncertain returns (Bushman et al., 1996).

As a result, Baker, Gibbons, and Murphy (1994) argue that discretionary awards may be a way to offset certain dysfunctional aspects of an objective incentive system. In support, Bushman et al. (1996) suggest that IPE can be used to supplement traditional corporate financial measures, focusing on aspects of managerial performance that are not fully captured in current accounting and market-price-based measures of performance.

Research examining the value of IPEs conducted by Bushman et al. (1996) revealed that one-third of the sample firms used some form of IPE in determining a CEOs' bonus. In contrast, two-thirds reported no weight given to the CEOs' individual performance. Furthermore, 20% of sample firms base the annual bonus exclusively on financial performance measures, giving no indication that any part of the bonus payout was determined subjectively or subject to the discretion of the board (Bushman et al., 1996). The remainder of the firms were difficult to classify, reporting a complex variety of non-financial and qualitative performance measures, and sometimes vague references to the use of discretion or subjectivity in determining awards (Bushman et al., 1996). In a related analysis, Ittner et al. (1997) document a positive but imperfect relationship between IPE and the use of non-financial performance measures.

According to London and Oldham (1976), the process of goal setting involves establishing a standard of excellence against which performance is evaluated and found that performance and goal difficulty were positively related. Therefore, the better the performance the more difficult the goal to be achieved is. Research conducted by Locke, Shaw, Saari, and Latham (1981) and Chidester and Grigsby (1984) reported that setting either difficult or specific goals was associated with increased performance. Specifically, the latter found that difficult or specific goals accounted for approximately 4% of the variance in performance. In addition, Feltham and Xie (1994) suggest that increasing the number of performance measures may, first, lead to a rise in the set of viable actions, which may increase the likelihood that a more preferred action will be implemented and, secondly, may reduce the risk imposed on the agent to induce a particular action. Essentially, a multi-dimensional performance measure system may represent a more accurate definition of the organisation's goals (Kaplan & Atkinson, 1998).

Locke and Latham (1990) argue that, in order to optimise decision-making, an executive needs to process more information than in a single goal setting. However, the skill and effort needed to process this information can be beyond the capacity of many executives, which may lead to a greater number of sub-optimal decisions and lower performance. In addition, time and effort involved in making these decisions means that less time and effort can be devoted to achieving these goals resulting in lower overall goal achievement and performance (Kernon & Lord, 1990). Consequently, Lingle and Schiemann (1996) suggest that the clarity of performance measures may contribute to executive uncertainty. It is recommended that few measures, which are both clear and simple as well as easy to understand, manage and communicate, be incorporated into performance target design (Lingle & Schiemann, 1996; Ho & McKay, 2002; Franco & Bourne, 2003). As a result, it may be suggested that using simple targets can heighten CEO focus, facilitate the monitoring of CEO action, and identify achievement. Simplicity, therefore, has the potential to limit CEO discretion and reduce the pay-performance gap. In conclusion, Emsley (2003) claimed that uncertainty is likely to reduce performance because it might lead to an increasing number of inappropriate decisions.

A study by S. Kerr (1975) highlighted that most agents focus on the activities that are being rewarded. Therefore, focusing on one performance measure can often lead to agents ignoring alternative un-rewarded objectives. In addition, Holmstrom and Milgrom (1991) argue that multi-tasking agents may misallocate effort across tasks. Therefore, combining external and internal performance targets may be associated with a heightened degree of complexity, which has the potential to hamper monitoring strategies and limit the ability to identify achievement. Complexity may dilute CEO incentives, encourage CEO discretion and widen the pay-performance gap. Furthermore, Yearta, Maitlis, and Briner (1995) claim that multiple goals complicate the decision-making process which, in turn, can affect executive performance. They suggest that as executives pursue multiple goals, decisions about prioritising goals as well as allocating resources and making trade-offs between them are likely to become more complicated. According to Davidson (2002), human beings work best when they handle one thing at a time. This is supported by Emsley (2003) who found that as the number of goals increases performance deteriorates.

In accordance with performance targets and measures, incentives are a popular approach when attempting to motivate executives to achieve performance targets that are in line with shareholder interests. Furthermore, given the difficulty of directly observing an executive's effort and behaviour, monitoring is made possible through pay practices that align the interests of executives with those of the owners (Jensen & Meckling, 1976). Therefore, incentive compensation is not intended to be a gift to the CEO (Tosi & Gomez-Mejia, 1989), nor the 'gravy' on top of an executive's base salary (Mitchell et al., 1990). According to Prendergast (1999), agents do respond to incentives and subsequently incentives do matter. Therefore, adding to the work of Antle and Smith (1986), Conyon and Schwalbach (2000) suggest incentives can be a powerful mechanism by which to align the behaviour of corporate executives with the overall business strategy.

Incentive plans are an integral part of management control since it has been widely recognised that incentives, as contributors to income and as measures of recognition of performance, are significant motivating factors for corporate executives (Sarin &

Winkler, 1980). Essentially, an incentive system should encourage effective planning and honest reporting of targets, and should simultaneously motivate managers to work harder to achieve a better performance once these targets are specified (Sarin & Winkler, 1980). Significantly, many incentive contracts are based on a single performance measure, even if the agent's action is multidimensional (Feltham & Xie, 1994).

Incentives are held out at the beginning of a time period (Rajagopalan, 1996), serve as recognition of managerial competence (Sundaramurthy & Lewis, 2003), and are an important precursor to effective monitoring (Hillman & Dalziel, 2003). In addition, incentives provide information about where people should direct their effort and are rarely used in isolation but linked implicitly or explicitly with goals (Callahan, Brownlee, Brtek, & Tosi, 2003).

Incentive alignment is defined as the degree to which the reward structure induces executives to make decisions that are in the best interests of stockholders (Tosi & Gomez-Mejia, 1989). Consequently, the management of mutuality (Wright, Dunford, & Snell, 2001), i.e. the alignment of interests, between shareholders and executives through the effective employment of incentive systems can increase worker output. However, this is only at the cost of imposing greater risk on workers and is reflected in higher wages (Prendergast, 1999).

In the economic theory of incentives, most models support the view that extrinsic rewards can have a significant impact on performance (Vroom, 1964). As a result, money has become one of the most powerful motivators (Schuler & Huber, 1993), with some scholars claiming that an executives' motivation and behaviour is a function of their pay package (Gomez-Mejia & Wiseman, 1997). That is, in formal models employees prefer more money than less, dislike effort, and the employer motivates higher levels of distasteful effort by offering higher levels of income for better outcomes (Baron & Kreps, 1999). In addition, Bebchuk and Fried (2004) suggest that executives prefer cash rewards as opposed to options and are intent on enjoying as much slack as possible.

Consequently, money is a factor that can motivate people at work (Marchington & Wilkinson, 2000), and often matters more than most people would like to admit. However, it is also true that intrinsic psychological rewards may be just as, if not more, significant. Despite this, the focus of this study is on extrinsic rewards, which examines the relationship between monetary compensation and firm performance. Therefore, although the literature review recognises and discusses, to an extent, the value of intrinsic rewards, it would be outside of this studies remit to examine this area of reward closely and, hence, has been excluded.

The topic of employee motivation plays a central role in the field of management; and often a motivated workforce is cited as a hall mark of competitive advantage and a critical strategic asset (Steers, Mowday, & Shapiro, 2004). According to Locke and Latham (2004), motivation refers to internal factors that impel action and to external factors that act as inducements to action. Consequently, motivation influences task performance by directing attention, increasing persistence, and increasing effort toward task accomplishment (Callahan et al., 2003). For example, Callahan et al. (2003) found that performance increased with the simultaneous use of both intrinsic and extrinsic motivational sources, but that intrinsic motivation exerted the greatest effect on performance. However, Child and Rodrigues (2003) warn that motivation cannot be sustained without fair compensation and recognition.

Individuals who reach the apex of organisations are typically driven by higher-order needs such as reputation and status (Maslow, 1943). At the same time, people are spending less time working for more money and more security (Herzberg, 1968). Masson (1971) suggests that executives have “alternative objective functions” (p. 1281) whereby elements other than pure monetary return are of value to them. In essence, pay provides a key representation of an executive’s achievement and worth to an organisation (Finkelstein & Hambrick, 1988). However, monetary rewards can be counter-productive, can cause dissatisfaction at work, and can eliminate the intrinsic desire to perform some activity (Baker et al., 1988; Torrington et al., 2002). Furthermore, it is argued that financial incentives lack power and efficiency when the employee has little

control over measures on which their compensation is based (Baron & Kreps, 1999). Consequently, there must be a close association between the performance and reward.

Further evidence suggests that incentive systems adopted by firms are varied and that its structure is vital to a firm's performance (Jensen & Murphy, 1990; Buck et al., 2003). Consequently, in addition to aggregate incentive systems, which link an individual's compensation to the overall performance of the firm and discussed earlier, companies may adopt promotion-based incentive schemes based on the tournament model. In this instance, promotions serve to match individuals to the jobs which they are best suited, and to provide incentives for lower level employees who value pay and prestige associated with a higher rank in the organisation (Baker et al., 1988). Bloom (1999) describes the distribution of pay in a tournament model as hierarchical where pay is concentrated in a few levels, jobs or individuals that are near the top of the distribution. It is the prospect of higher wages that induces effort (Prendergast, 1999).

Most companies award annual bonuses if and when pre-determined performance targets are achieved. Consequently, two of the most prominent incentive devices, which to some degree are subsets of performance-related-pay (PRP), include deferred compensation and bonus-based incentive schemes. The next section, therefore, outlines and reviews PRP and examines the value of deferred compensation and bonus-based incentive strategies.

## 2.9. PERFORMANCE-RELATED PAY

PRP systems are powerful motivators of human action (Baker et al., 1988) and create a commonality of interest between shareholders and executives (Forbes & Watson, 1993). According to Schuler and Huber (1993), PRP is necessary for company survival in a volatile business environment and represents a move away from the traditional view of rewards as incentives and towards rewards as total pay systems. Reward management is one of the central pillars of HRM (Poole & Jenkins, 1998), concerned with distributing rewards fairly between the good and poorer performers whilst also contributing towards improved corporate performance (Torrington et al., 2002).



In support, Greene and Podsakoff (1978) in their American based study concluded that removing performance-contingent pay resulted in a decline in performance. However, PRP encompasses a delicate set of motivational tools that can be powerfully effective in one setting and utterly dysfunctional in another (Baron & Kreps, 1999). On the one hand they create greater incentive alignment between owner and executive but, on the other hand, they accentuate a natural propensity toward risk aversion on the part of the agent, leading to sub-optimal returns to shareholders (Gomez-Mejia, Larraza-Kintana, & Makri, 2003).

Essentially, the objective of PRP is to improve performance by converting the pay bill from an indiscriminate machine to a more finely tuned mechanism, sensitive and responsive to a company's and employee's needs (Brading & Wright, 1990). However, Marchington and Wilkinson (2000) warn that the links between performance and the level of pay are not always clear and effective.

Nevertheless, based on Mahoney's (1992) non-traditional classification of executive bonus pay systems, PRP has two distinct varieties. The first is a merit-based system whereby a proportion of future remuneration is linked to a subjective performance assessment conducted by a supervisor (Torrington et al., 2002). It is a one-time adjustment to pay that must be earned each evaluation period (Lowery, Beadles, Petty, Amsler, & Thompson, 2002). The second variety is a goal-based system, and in this instance, a proportion of future remuneration is linked to an objective performance assessment where the employee is tasked with achieving certain performance targets. It is part of an individual's compensation package that is not guaranteed but must be earned only if pre-determined performance targets are met (Sturman & Short, 2000; Torrington et al., 2002).

Compensation arrangements in practice are diverse and encompass disparate elements including deferred pay such as stock options as well as short-term pay such as bonuses (Lewellen et al., 1987). The following section discusses both elements in turn.

### 2.9.1. *Deferred compensation*

A deferred compensation strategy is used as a means of bonding executives to their firm (Eaton & Rosen, 1983), and consists of pensions, stock options and other LTIPs. Stock-based incentives offer a more efficient trade-off between risk and incentives and, subsequently, are more effective at aligning the interests of the manager with that of the owner. Blair (1994) suggests that pressures to tie executive pay to stock market performance came out of an extended episode in which the way to improve stock performance was often corporate restructuring, for example, to downsize and cut costs. However, such incentives are skewed because they can give executives an unlimited potential for gain if stock prices rise but may inflict no penalty if stock prices fall (Blair, 1995). This view is echoed by Certo et al. (2003) who state that because executives incur no cash outlay until they exercise options, they experience less downside risk. Essentially, deferred rewards are worth less to the executive than instant cash.

Despite these drawbacks, stock-based compensation initiatives are the largest component of long-term compensation and have come to dominate the pay of top executives (Jensen & Murphy, 1990; Blair, 1995; Tosi et al., 1997). This shift in executive pay from cash to equity sees the executive being paid like owners in order to act like owners (Berle & Means, 1991; B. J. Hall, 2000; Ezzamel & Watson, 2002). It is an attempt to align the interests of executives with those of shareholders, decrease the degree of risk aversion of executives (Vogel & McGinnis, 1999), discourage managerial opportunism, promote shareholder-wealth maximisation, and increase firm performance (Sanders, 1999; B. J. Hall, 2000; Pass et al., 2000; Sanders, 2001). This view is supported by Certo et al. (2003) who found that investors view stock option compensation positively, and believe stock options and equity ownership are distinct, but complementary, incentive mechanisms.

B. J. Hall and Liebman (1998) report that a majority of the variation in executive wealth associated with changes in firm value stems from the executives' holdings of stock options. Furthermore, McKnight and Tomkins (1999) comment that much of the research on executive pay has focused on long-term pay such as stock options rather than short-term compensation such as the annual bonus. In addition, Hayes and Schaefer

(2000) suggest that salary and bonus payments may be superfluous as incentive instruments. Consequently, McGuire and Matta (2003) question this widespread reliance on stock option programs as a means to align executives' and shareholders' interests and, subsequently, call for a focus on bonus-based incentive programs.

### *2.9.2. Bonus-based incentives*

One important component of executive remuneration is the annual bonus with most firms using short-term or annual bonus plans in their executive compensation programs (Conyon et al., 1995; Holthausen et al., 1995; Ittner et al., 1997). According to Rajagopalan (1996) and later Kaplan and Atkinson (1998), annual bonuses emphasise short-term performance and tend to use cash (rather than stock) as the form of incentive. In addition, Baron and Kreps (1999) argue that onetime bonus payments are more salient to the workforce resulting in a long-term trend toward bonuses and away from rises in base pay. It is also suggested that bonuses are a ubiquitous component of executive compensation in virtually every for-profit company and a separate and distinct component of pay (Sturman & Short, 2000; Murphy, 2001). Furthermore, short-term bonuses represent the most direct and immediate link between managerial actions and consequences as cash incentives generate no further risk or commitment on the part of the executive since the value of a cash bonus is not affected by how well the firm does in the future (Schuler & Huber, 1993; Rajagopalan, 1996; Murphy, 2001).

Short-term bonuses are notoriously susceptible to manipulation or tampering (Larker, 1983; Healy, 1985) and, according to Grant (2003), have played a large part in the rise of executive pay. Despite this, the annual bonus as an incentive device has continued to grow in popularity, which is supported by a number of UK and American studies.

Studies based on UK firms conducted by IDS (1993) in the first instance reported that in 1979 only 8% of large companies had an annual bonus scheme for their top executives and by 1993 almost all companies had some form of annual bonus scheme for their executives. Secondly, McKnight (1996) found that the mean annual bonus figure for 1993 and 1994 were £94,709 and £112,058 respectively revealing a growth rate of

18.32% (£17,349). Finally, Conyon and Murphy (1998) found that, on average, bonuses equated for 18% of an executive's total pay.

Alternatively, studies based on American firms conducted by Leonard (1990) in the first instance revealed that between 1981 and 1985 the proportion of sampled firms using bonus systems increased from 95.6% to 98.3% demonstrating a growth rate of 2.7% over a 5-year period. Finally, S. E. Hall and Koors (2004) highlighted that bonus pay for CEOs rose from 16% in 2002 to 21% in 2003.

Bonus pay is an old and effective way to improve firm performance and represents rewards for past actions or made to induce future contributions (Prasad, 1974; Lawler, 1990). The annual bonus, which is typically tied to short-term measures, is any cash payment earned during the previous twelve months that was based exclusively on one year's worth of performance information (Abowd, 1990; McKnight, 1996; Bloom & Milkovich, 1998; Abowd & Kaplan, 1999). It must also be re-earned each pay period and as it is a onetime payment does not have a permanent effect on labour costs (Milkovich & Newman, 2002). In support, regulators recommend that executives should not be automatically entitled to bonuses nor should it become a guaranteed element of remuneration (Greenbury, 1995; ABI, 2002). Essentially, bonuses should be cut or eliminated when individual performance is poor (ABI, 2002).

Studies that specifically examine the annual bonus and its subsequent relationship to company performance include Finkelstein and Hambrick's (1989) and Gerhart and Milkovich's (1990) study of American firms and McKnight's (1996) study of UK organisations. All three studies found that bonus pay was positively and significantly associated with firm performance as measured by return on equity in the first example, return on assets in the second, and EPS in the final instance. However, McKnight (1996) also discovered that alternative performance indicators such as sales turnover and total shareholder return (TSR) were insignificantly related to bonus pay. In a later study conducted by McKnight and Tomkins (1999), which was also based on a UK sample, indicated that EPS was insignificantly related to bonus pay.

Smyth (1959) discovered that many executives considered the bonus payment as a regular and permanent addition to salary and as a right of their position. Lawler (1990) would argue, however, that executives have to earn their bonus. Despite this, a study conducted by ECS Wyatt Data Services (1992) found that most firms provide a bonus to the CEO regardless of firm performance variations, so that in many cases, it is difficult to distinguish bonuses from base salary. Consequently, bonuses often constitute salary supplements that the CEO comes to expect as part of their annual cash compensation (Gomez-Mejia, 1994). It is further suggested that because bonuses are regularly awarded they become more like an entitlement and, hence, more like fixed pay (Gomez-Mejia & Wiseman, 1997). Conversely, Sturman and Short (2000) argue that bonus pay is part of an executive's compensation that is not guaranteed and contingent upon performance criteria.

Following the work of Smyth (1959) and Baker et al. (1988), Indjejikian and Nanda (2002) suggest that bonuses are an integral component of an organisation's management control systems and that bonuses regardless of ability, position, and promotion prospects motivate individuals to be more productive (See Figure 4 overleaf for a typical executive annual bonus plan). Additionally, bonus-based incentives will be more significant at higher levels in the organisation since the probability of future promotion is lower except through the market to enter organisations (Baker et al., 1988; Gomez-Mejia & Wiseman, 1997). Short-term bonus plans, which can vary in terms of the type of payment, i.e. cash or equity, and in the timing of payment, are a popular inclusion in the design of executive pay packages (Ittner et al., 1997). They are a means to reward superior performance as well as compensating for heightened responsibility and pressure, and recruiting and retaining exceptional talent (Vogt, 1995; Joyce, 1999; Sturman & Short, 2000; Osborne, 2001). However, Bushman and Smith (2001; 2003) argue that the contribution of cash compensation to the overall intensity of top executive incentives has diminished in recent years.

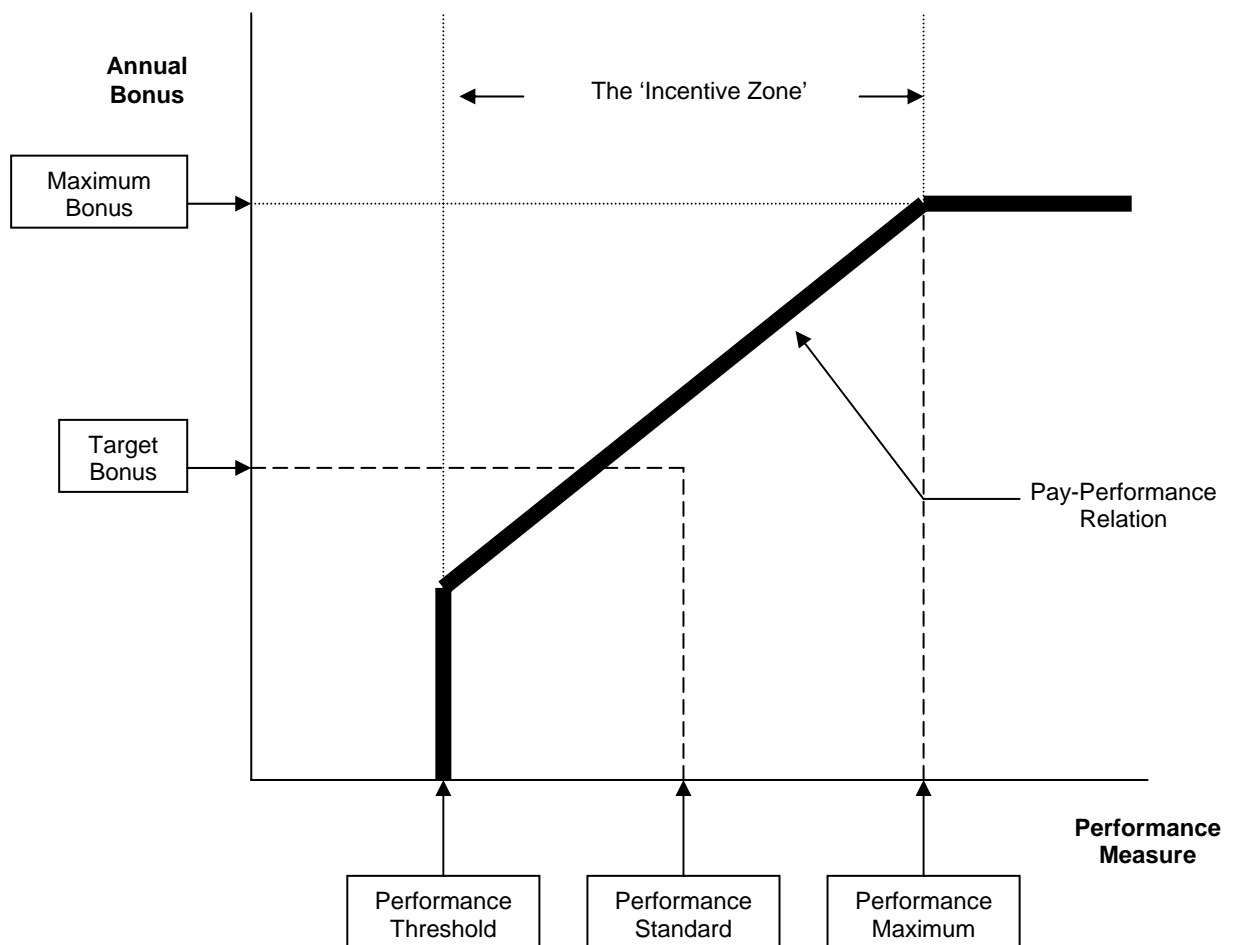


Figure 4. *A typical executive annual bonus plan adapted from Murphy (2001) (Indjejikian & Nanda, 2002, p. 797).*

## 2.10. SUMMARY

Pay and performance is a topic that has generated an abundance of research but produced a mixed set of results (Gomez-Mejia, 1994). The consensus is that executive pay has a weak or statistically insignificant association with firm performance (Barkema & Gomez-Mejia, 1998). As a result, academics have called for a more concentrated effort to research aspects of pay that have been mainly neglected such as the annual bonus. The annual bonus is shown to be a significant and popular component of executive reward (Conyon et al., 1995; Holthausen et al., 1995; Ittner et al., 1997), and one in need of further analysis (McGuire & Matta, 2003). Consequently, this study, as outlined in chapter 1, considers the relationship between executive annual bonus pay and firm performance in the UK. The agency model alone cannot fully explain the intricacies

associated with the research question identified in chapter 1. Therefore, in order to provide greater clarity the self-serving management/power model is used in tandem with the agency model to explain the pay-performance relation.

The next chapter uses this literature and agency theory in conjunction with the self-serving/power model to develop a set of competing hypotheses. These will guide the subsequent research and address the overall research question specified in section 1.5 namely: *what is the relationship between executive bonus pay, its detailed characteristics, and firm performance in the UK?*

## CHAPTER 3

### HYPOTHESIS DEVELOPMENT

This chapter develops a set of testable hypotheses using two contrasting theories: agency theory and the self-serving management/power model. They examine the relationship between the value of an executive's short-term annual bonus and a series of independent variables including firm performance (i.e. TSR and EPS), firm size (i.e. total number of employees), payment type (i.e. cash/shares), performance target type (i.e. hard/soft and simple/complex), and specific CG features (i.e. NED ratio on the remuneration committee, CEO presence on the nominations committee, CEO/Chair duality, tenure, and power). In addition, the association between firm performance and the form of payment and performance target type is examined. It has nine sections.

Each section presents competing hypotheses: (a) based on agency and (b) power theory. Applying (a) and (b) in turn:

- Section 3.1 explores the relationship between the value of the bonus and firm performance;
- Section 3.2 examines the relationship between the value of the bonus and firm size;
- Sections 3.3 to 3.4 analyse the value of the bonus and its association with payment types and how these forms of payment relate to company performance;
- Sections 3.5 to 3.6 investigate the value of the bonus and its association with hard/soft performance targets and how these targets relate to company performance respectively;
- Sections 3.7 to 3.8 conduct the same analysis but using a simple/complex dichotomy; and
- Section 3.9 explores the value of the bonus and firm-level characteristics, since governance as well as firm performance may be expected to influence the level of executive pay (Jensen & Murphy, 1990). It has five sub-sections:
  - Section 3.9.1 develops hypotheses in relation to the composition of the firm's remuneration committee and bonus;
  - 3.9.2, similarly addresses the nominations committee;



- 3.9.3, looks at the relation between CEO/Chair duality, whereby the roles of the CEO and the chairman of the board are combined, and the value of the bonus;
- 3.9.4, examines the relation between executive tenure and the value of the bonus; and
- 3.9.5, considers executive power and entrenchment as an influence on bonus value.

### 3.1. THE VALUE OF THE ANNUAL BONUS AND FIRM PERFORMANCE

Agency theory identifies agency problems between shareholders and managers based on the misalignment of interests between the principal and the agent. Consequently, it is the board's responsibility to design compensation schemes that provide managers with efficient incentives to raise shareholder value (Aggarwal & Samwick, 1999b; Bebchuk & Fried, 2003). As a result, it is assumed that shareholders will design bonus schemes based on performance targets that contribute to shareholder value. Consequently, from an agency perspective, it is hypothesised that:

*H1a. The value of executive bonus will be positively associated with firm performance, as measured by TSR and EPS*

By implication, a mirror image of this hypothesis will be based on the self-serving management/power model, which argues that the conflict of interest between principal and agent arises because of opportunistic, self-serving executives (Holmstrom, 1979; Veliyath, 1999; Conyon & Sadler, 2001; J. S. Miller et al., 2002). In addition, it suggests that because ownership and control has become more dispersed, executives are able to fully entrench themselves within the firm and extract greater rents through their compensation arrangements (Bebchuk & Fried, 2004), oblivious to the welfare of the owners. Therefore, under the power model, it is hypothesised that:

*H1b. The value of executive bonus will be negatively associated with firm performance, as measured by TSR and EPS*

### 3.2. THE VALUE OF THE ANNUAL BONUS AND FIRM SIZE

In this study, as a control variable and primary indicator of firm size, the total number of employees is taken as a proxy for firm size. According to Berle and Means (1991), firm size is the most compelling explanation for levels of executive pay. In addition, tournament theory and an association between firm size, task complexity and needed executive effort (Gomez-Mejia & Wiseman, 1997) suggests that executive compensation is positively correlated with firm size (Santerre & Neun, 1989; Tosi et al., 2000). However, from an agency perspective, because an executive's primary responsibility is to raise shareholder value through raising a company's share price, strategies to increase firm size that were considered to be non-value maximising would be avoided as a course of action. Consequently, due to the focus on shareholder welfare, it is hypothesised that:

*H2a. The value of executive bonus will not be positively associated with firm size*

Based on power theory, a mirror image of this hypothesis would argue that entrenched executives will focus on self-interested goals that are, generally, non-value maximising and, therefore, may be more inclined to grow firm size rather than TSR or EPS. This may be due to the positive affirmations associated with running large corporations. Therefore, it is hypothesised that:

*H2b. The value of executive bonus will be positively associated with firm size*

### 3.3. THE VALUE OF THE ANNUAL BONUS AND PAYMENT TYPES

Bonus as shares, and this better alignment of shareholder/executive interests, may also be associated with greater executive effort, improved firm performance and higher bonus. Thus, agency theory argues that this may lead to a reduction in risk aversion (Vogel & McGinnis, 1999), discourage managerial opportunism, promote shareholder-wealth maximisation, and increase firm performance (Sanders, 1999; B. J. Hall, 2000; Pass et al., 2000; Sanders, 2001). Therefore, consistent with agency theory, external, verifiable performance measures better align the relationship between share-based pay and performance. Consequently, it is hypothesised that:

*H3a. The value of executive bonus will not be positively related to cash bonuses*

In contrast, short-term cash bonuses are, in general, awarded on the basis of achieving subjective, less transparent and internally generated performance targets such as aspects of managerial input like leadership. As a result, they are notoriously susceptible to manipulation or tampering (Larker, 1983; Healy, 1985). Therefore, a mirror image of this hypothesis would suggest that, consistent with power theory, entrenched executives will attempt to extract greater rents through short-term cash bonus contracts. Consequently, it is hypothesised that:

*H3b. The value of executive bonus will be positively related to cash bonuses*

#### 3.4. FIRM PERFORMANCE AND ANNUAL BONUS PAYMENT TYPES

As the name would suggest, share-based bonuses are closely associated with share price performance. Agency theory argues that the alignment of interests between shareholder and executive is improved when using share-based (rather than cash) bonuses (Berle & Means, 1991; B. J. Hall, 2000). Shares that embody the present value of future income flows give the executive an incentive to invest in financial and human assets, including acquisitions. Cash-based bonuses, however, are considered to have the opposite effect, distorting effort, and encouraging short-term achievement rather than long-term improvements in shareholder value (Rajagopalan, 1996). Therefore, agency theory would expect share-based bonuses to be linked directly or indirectly with the long-term goals of the firm, and it is hypothesised that:

*H4a. Share-based bonuses will be positively associated with firm performance as measured by TSR*

However, consistent with power theory, it is argued that entrenched executives prefer cash to shares (Bebchuk & Fried, 2004). Essentially, cash incentives generate no further risk or commitment on the part of the executive since the value of a cash bonus is not affected by how well the firm does in the future (Schuler & Huber, 1993; Rajagopalan, 1996; Murphy, 2001). Consequently, due to a short-term focus with no incentive to develop long-term strategies that may raise shareholder value, it is hypothesised that:

*H4b. Cash bonuses will be negatively associated with firm performance as measured by TSR*

### 3.5. THE VALUE OF THE ANNUAL BONUS AND HARD/SOFT PERFORMANCE TARGETS

Performance targets, both hard (i.e. external targets and/or internal targets that are published in annual reports) and soft (i.e. unspecified targets), are a common feature in the design of an executive's remuneration package. Hard targets such as share price and published internal targets are difficult to manipulate but are influenced by uncontrollable exogenous factors (Healy, 1985; Murphy, 1986a; Rajagopalan, 1996). Consequently, the transparency and tight shareholder monitoring often associated with hard targets may lead to smaller bonuses. Therefore, from an agency view, it is hypothesised that:

*H5a. The value of executive bonus will be negatively associated with hard performance targets*

In contrast, unspecified or non-financial measures such as customer satisfaction (based on internal surveys) are more prone to executive manipulation and are rarely subject to public verification (Ittner et al., 1997). Based on the power model, other things equal, entrenched executives prefer less risk, more slack, and greater compensation (Bebchuk & Fried, 2004). Therefore, powerful executives may ensure that soft, unspecified targets (because they are considered opaque, easy to manipulate, difficult to verify, and may distort the pay-performance relationship) are the preferred choice of performance measure. Consequently, larger bonuses may be linked with softer, unspecified bonus indicators. As a result, it is hypothesised that:

*H5b. The value of executive bonus will be positively associated with soft performance targets*

### 3.6. FIRM PERFORMANCE AND HARD/SOFT PERFORMANCE TARGETS

Hard performance targets are, in general, external, visible and more difficult to attain. However, they do give executives an incentive to improve external performance measures that may increase the demand for company shares and hence TSR or the size of the dividends released through EPS. Therefore, consistent with agency theory, it is hypothesised that:

*H6a. Firm performance, as measured by TSR and EPS, will be positively related to hard performance targets*

Conversely, soft targets are generally internal, less visible and easier to attain. In addition, they are easy to manipulate (Healy, 1985; Rajagopalan, 1996) or camouflage (Bebchuk & Fried, 2004), enabling powerful executives to extract greater rents. However, this practice may not be associated with stronger overall firm performance. Therefore, power theory predicts that entrenched executives will prefer soft, unspecified targets and with incentives to improve internal less visible measures of performance may neglect actions that increase shareholder value in preference for non-value maximising opportunities. As a result, it is hypothesised that:

*H6b. Firm performance, as measured by TSR and EPS, will be negatively related to soft performance targets*

### 3.7. THE VALUE OF THE ANNUAL BONUS AND SIMPLE/COMPLEX PERFORMANCE TARGETS

An extension of the performance target hypothesis includes the dimension of simple versus complex performance targets. Lingle and Schiemann (1996) suggest that the clarity of performance measures contributes to executive uncertainty. As a result, it is recommended that few measures, which are clear and simple as well as easy to understand, manage and communicate, be incorporated into performance target design (Lingle & Schiemann, 1996; Ho & McKay, 2002; Franco & Bourne, 2003). Therefore, it may be suggested that simple targets facilitate executive focus, the monitoring of executive action, and the identification of executive achievement. Simplicity has the potential to limit executive discretion and reduce the pay-performance gap through improved transparency and tighter shareholder monitoring, which may lead to smaller bonuses. Consequently, based on an agency view, it is hypothesised that:

*H7a. The value of executive bonus will be negatively associated with simple performance targets*

However, combining external and internal performance targets may be associated with a heightened degree of complexity, which has the potential to hamper monitoring strategies and limit the ability of shareholders to identify achievement. Holmstrom and Milgrom (1991) argue that multi-tasking agents may misallocate effort across tasks. Complexity, therefore, complicates the decision-making process (Yearta et al., 1995), dilutes

executive incentives, creates opportunities for powerful executives, encourages executive discretion, and widens the pay-performance gap. Consistent with power theory, entrenched executives want to maximise their multi-period bonus payments and in doing so prefer complex targets because they are opaque and open to manipulation, which makes identifying achievement with any certainty difficult. As a result, it is hypothesised that:

*H7b. The value of executive bonus will be positively associated with complex performance targets*

### 3.8. FIRM PERFORMANCE AND SIMPLE/COMPLEX PERFORMANCE TARGETS

As in section 3.7, it is argued that simple targets can facilitate executive focus, the monitoring of executive action, and identifying achievement. Therefore, simplicity has the potential to limit executive discretion and tighten the pay-performance gap through improved transparency and closer shareholder monitoring. Consequently, based on an agency view, it is hypothesised that:

*H8a. Firm performance, as measured by TSR and EPS, will be positively related to simple performance targets*

In contrast, Yearta et al. (1995) argue that complexity complicates the decision-making process. It may also dilute executive incentives, create opportunities for powerful executives, encourage executive discretion, and widen the pay-performance gap. Therefore, consistent with the power model, entrenched executives want to maximise their bonus payments and, subsequently, prefer complex targets because they are opaque and vulnerable to manipulation, which makes identifying achievement with any real accuracy difficult. As a result, it is hypothesised that:

*H8b. Firm performance, as measured by TSR and EPS, will be negatively related to complex performance targets*

### 3.9. THE VALUE OF THE ANNUAL BONUS AND GOVERNANCE CHARACTERISTICS

#### *3.9.1. Remuneration committee NEDs*

Research suggests that the composition of the remuneration committee will influence executive pay (O'Reilly et al., 1988). On the one hand, Mangel and Singh (1993) argue that the percentage of NEDs that sit on the board of directors has no significant impact on executive compensation, whereas Conyon and Peck (1998) found that pay and performance was more closely aligned when there was a higher proportion of NEDs serving on the remuneration committee. Despite these conflicting results, an agency view predicts that a higher proportion of NEDs on the committee will provide greater shareholder representation. They are thought to be more equipped to analyse strategic decisions objectively (Blair, 1995) and are considered better monitors because they lack any disincentive to monitor (Hillman & Dalziel, 2003). Therefore, a higher proportion of NEDs may indicate more effective external monitoring, limit management's ability to exploit insider information, and reduce potential agency problems (Wright & Kroll, 2002). Consequently, it is hypothesised that:

*H9a. A high percentage of NEDs will be negatively related to the value of executive bonus*

A mirror image of this hypothesis, based on power theory, would argue that entrenched executives are in a position to influence the number and identity of NEDs that are appointed to the committee. Essentially, powerful executives prefer 'insiders' as opposed to 'outsiders'. However, unmotivated outsiders may be easier to manipulate than knowledgeable insiders. In any case, executives may be able to pack the remuneration committee with sympathetic outsiders (see section 3.9.2 below in relation to board nominations). Therefore, from a power perspective, it is hypothesised that:

*H9b. A low percentage of NEDs will be positively related to the value of executive bonus*

#### *3.9.2. CEO presence on the nominations committee*

Executive or insider nominations provide first-hand, in-depth company knowledge, and bring a recognizable emotional commitment to, and involvement with, the company

(Demb & Neubauer, 1992). This ‘informativeness’ may facilitate the decision-making process by removing the ambiguities and conflicts that could otherwise arise when board composition is mixed. From an agency perspective, it is suggested that this efficiency will provide an environment that supports and is focused on raising shareholder value rather than exploiting corporate assets to extract greater rents. As a result, it is hypothesised that:

*H10a. CEO presence on the nominations committee will be negatively associated with the value of executive bonus*

Control over employee selection is an efficient means of building or protecting power bases (Pfeffer, 1981) and, according to Tosi and Gomez-Mejia (1989), executives play a major role in appointing the board and using the board as a vehicle to legitimise decisions that may not be in the best interest of owners. Consequently, executive control over the director nomination process represents an important source of managerial entrenchment (Wade et al., 1990). For instance, CEOs who have an active presence on the nominations committee can co-opt the board by favouring the appointment of sympathetic new directors (Finkelstein & Hambrick, 1989), whereby NED interests are aligned with those of management rather than shareholders. This rise in the level of CEO entrenchment may lead to the weak monitoring and control of executive pay packages. Consequently, under the power model, it is hypothesised that:

*H10b. CEO presence on the nominations committee will be positively associated with the value of executive bonus*

### *3.9.3. CEO/Chair duality*

CEO/Chair duality may be interpreted by agency theory as being consistent with an efficient arrangement involving synergy. Alternatively, it may be seen as just another dimension of the variety of ways in which executives exert their power over the firm at the expense of shareholders.

Looking first at the agency view, combining the role of CEO and chairman of the board facilitates the decision-making process by removing the ambiguities and conflicts that could otherwise arise where power is shared. In addition, Harrison et al. (1988) state that



the increase in power and responsibility that the combined position affords is accompanied by an increase in accountability. It is argued that this accountability may limit the misuse of power to extract greater rents regardless of the level of performance and may indeed concentrate CEO efforts to improve shareholder value. As a result, it is hypothesised that:

*H11a. The value of executive bonus will be negatively related to CEO/Chair duality*

Executive power commonly manifests itself in the form of CEO/Chair duality whereby the CEO also operates as chairman of the board (Rechner & Dalton, 1991). Prior research on whether or not CEO/Chair duality influences executive pay is mixed (Finkelstein & D'Aveni, 1994). Nevertheless, a dual role may increase CEO power, restrict board independence, reduce its ability to fulfil its governance function and, moreover, may constitute a clear conflict of interest (Donaldson & Davis, 1991; Rechner & Dalton, 1991). Consequently, combined roles may be expected to weaken shareholder monitoring, since the CEO is also the shareholders' chief representative. This may result in weaker controls on executive pay, with the value of rewards positively associated with duality. Therefore, based on power theory, which argues that entrenched executives will act in their own self-interest (Lubatkin et al., 2003) and use corporate assets to extract greater rents (Bebchuk & Fried, 2004), it is hypothesised that:

*H11b. The value of executive bonus will be positively related to CEO duality*

#### *3.9.4. Executive tenure*

Long-periods of tenure increase the executive's level of firm-specific human capital (Buchholtz et al., 2003). It is suggested that long tenure leads to greater expertise and experience, which may culminate in the executive being better qualified to enhance shareholder value. In addition, it is suggested that as tenure increases, the executive may be more willing to receive compensation in the form of stock and options (as opposed to cash bonuses). Therefore, with increased executive knowledge on how to raise shareholder value, increased tenure may reduce the need for bonus as an alignment mechanism. As a result, from an agency view, it is hypothesised that:

*H12a. The value of executive bonus will not be positively associated with years of tenure*

Executive power also manifests itself in terms of executive tenure on the board of directors, as entrenched executives control boards. Research indicates that tenure has a significant effect on executive pay (see Murphy, 1986a; H. D. Platt, 1987; Henderson & Fredrickson, 1996; Lippert & Porter, 1997; Wright et al., 2002). From a power perspective, this may be explained in terms of entrenchment whereby an extended period of tenure allows the executive to control the board and exert their social influence in order to weaken the relationship between pay and performance (Harrison et al., 1988; Tosi & Gomez-Mejia, 1989; Wade et al., 1990; Hill & Phan, 1991). Consequently, it is hypothesised that:

*H12b. The value of executive bonus will be positively associated with years of tenure*

#### *3.9.5. Executive power*

Executive power may manifest itself in terms of CEO/Chair duality and increased executive tenure. As indicated in section 3.9.3, a dual role may facilitate the decision-making process by removing the ambiguities and conflicts that could otherwise arise where power is shared. This increase in power and responsibility that the combined position affords is accompanied by an increase in accountability, which may limit the misuse of power to extract rents regardless of performance. In addition, increased tenure may bring to the firm (and shareholders) the fruits of executives' knowledge, experience and contacts. On an agency view, therefore, CEO/Chair duality and tenure would not be expected to be positively associated with bonus value. Consequently, it is hypothesised that:

*H13a. Executive power will be negatively associated with the value of executive bonus*

Over time, power may increase and, without a vigilant board, top executives may become entrenched in their positions, increasing their ability to exploit corporate resources and extract greater rents (Bebchuk & Fried, 2003; Shen, 2003). Essentially, incumbent executives exercise unfettered power and influence over captive directors in order to extract rents through their compensation arrangements (Murphy, 2002; Dedman, 2003; Bebchuk & Fried, 2004). Therefore, it is hypothesised that:

*H13b. Executive power will be positively associated with the value of executive bonus*

### 3.10. SUMMARY

This chapter has presented the main hypotheses to be tested in this thesis. In particular, it has been hypothesised using two competing theories (agency and the self-serving management/power theory) that firm performance will generally be positively and negatively associated with the value of executive bonus pay, respectively. Bonus features may be viewed as micro governance characteristics, and, again, pairs of competing hypotheses have been generated for each one.

The next chapter discusses the methodology adopted to test these proposed hypotheses. It specifies the philosophical position adopted, the data collection methods employed, together with the choice of variables, and econometric models.

## CHAPTER 4

### RESEARCH METHODOLOGY

#### 4.1. RESEARCH AIM

The aim of this research is to examine the relationship between an executive's annual bonus and firm performance. This is a unique research endeavour as much of the existing literature on executive pay has focused on long-term incentives, almost to the exclusion of short-term rewards such as annual bonuses. In addition, the originality of this research centres on the independently constructed database of UK companies<sup>1</sup> that are listed in the FTSE-350. In relation to other studies in the field, the database demands standard methods and tools for analysis. This study, however, has these characteristics that make it distinctive.

- 1) Almost all empirical studies on executive pay conducted in the past have utilised American data or focused on American contexts (Barkema & Gomez-Mejia, 1998). Consequently, data on other countries represents a rich, virtually untapped, source of increased understanding of what determines executive pay (Barkema, Geroski, & Schwalbach, 1997). Therefore, due to a shortage of research on executive pay that utilises UK evidence, the present study will focus on UK firms and practices.
- 2) Much of the past research on executive pay has focused on aggregate pay measures (see Veliyath, 1999; Carpenter & Sanders, 2002). As a result, few, if any, UK studies have analysed exclusively the relationship between annual bonus pay, as a single feature of executive compensation, and company performance. Evidence also indicates a shortage of UK research that examines the association between performance targets, the value of the annual bonus and firm performance.
- 3) The analysis of compensation for executives below the very top of the corporate hierarchy is valuable because many strategic decisions are made by top managers of business units, as opposed to the corporate CEO (Lambert et al., 1991). To further emphasise this point, Ezzamel and Watson (2002) claim that the limitation of previous research on executive pay is its predominant focus on the remuneration of the CEO, or highest paid director, to the exclusion of other board members. In

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<sup>1</sup> UK companies – this refers to companies listed on the FTSE-350. It is acknowledged that some of these companies e.g. Antofagasta plc (Chile), Eurotunnel plc (France), SABMiller plc (South Africa), etc, have their main offices located outside of the UK. However, for the purpose of this study, companies that trade on the UK's stock exchange, i.e. the FTSE, are considered a UK company.

response, this study's scope is much wider and, hence, examines the top tier of management in addition to the CEO.

- 4) The data is current and based on two consecutive years (2001/02 and 2002/03). It is anticipated that this contemporary data will reflect and accommodate the many political and economic changes that have occurred over the past decade.
- 5) As a result of poor response rates, or as a deliberate methodological decision, previous studies have employed small sample sizes ranging from 50 to 150 firms (see McKnight, 1996; Conyon & Sadler, 2001). The present study, however, has used a sample framework that is relatively large, comprising 299 separate companies and 1,542 individual executives.
- 6) The inclusion of qualitative interviews into the research design is a strategy that is unique to the field. The semi-structured interviews are a means to validate the objectivity of the annual reports and inform some of the methodological choices, which are referred to later in the chapter.
- 7) Unlike other studies, this research uses two prominent theories gleaned from the executive pay literature, i.e. agency theory and the self-serving management/power perspective, in order to explain the relationship between bonus pay and firm performance. According to J. R. Platt (1964), testing opposing hypotheses is important for strong inference. In addition, Stinchcombe (1983) argues that such an approach generates a set of observations that allows researchers to “decide between two alternative theories, both of which according to present knowledge are quite likely” (p. 25). Furthermore, Zajac and Kratz (1993) and Finkelstein and D'Aveni (1994) both support the view that research on CG might benefit when potentially contradictory theories on organisations and agency relations are considered simultaneously, with the latter adding that their reconciliation can reveal promising contingency relationships that may deepen understanding of board-CEO issues.

Hughes (1990) states that every research tool or procedure is embedded in commitments to particular visions of the world and to knowing that world, and that no method of investigation is self-validating but operates within a given set of assumptions. “Every philosophy presupposes a reality” (Lawson, 1997, p. 48), therefore, the explanation of behaviour depends on the vantage point from which it is observed, that is, “where you

stand can influence what you see” (Fischer, 1998, p. 128). Consequently, the epistemological stance of any research project will influence its design and the methods employed for data collection. Therefore, the particular ontological and epistemological assumption adopted by the researcher is outlined next.

#### 4.2. POSITIVISM

Positivism is “a philosophy of the natural sciences” (Blaikie, 1993, p. 14) and is the dominant philosophy of this study. From an ontological perspective, positivist research is conducted in an observable and tangible social reality, which is viewed as a complex set of causal relations between events which are depicted as an emerging patchwork of relations between variables (Blaikie, 1993; Denscombe, 2002b; Easterby-Smith, Thorpe, & Lowe, 2002). In terms of epistemology, the researcher is an objective, value-free analyst, independent of and detached from the phenomena under investigation with the end product being the derivation of covering laws (Hussey & Hussey, 1997; Denscombe, 2002b; Easterby-Smith et al., 2002).

Remenyi, Williams, Money, and Swartz (1998), supplementing the work of Denzin (1989), Blaikie (1993), and May (1993), describe positivism as a perspective that views people as phenomena to be studied externally, explaining behaviour on the basis of quantifiable observations, which lend themselves to statistical analysis. Such an approach assumes there are independent causes that lead to observed effects and that evidence and prudence are important to ensure findings can be generalised to the wider population (Remenyi et al., 1998). In addition, Remenyi et al. (1998) claim that one of the key tenets of positivism is that it employs a reductionist approach to exploring the relationships among the variables to be studied. This simplification of the real world environment is necessary in order to control the investigation and understand how the variables concerned are behaving. However, this simplification may lead to complicating factors, and possibly some of the most interesting, being omitted from the research.

Giddens (1974) points out that the term positivist has become one of opprobrium, with Jung (1995) suggesting that, despite science providing enormous quantities of

knowledge, the insights are sparse and specialised in nature. Jung (1995) also comments that science is far too general and has failed to adequately manage the subjective variety of individual life.

Therefore, aware of the limitations of a pure positivist approach, this study is incorporating an interpretive aspect into the research. By substantiating empirical findings with interpretive data, which is concerned with understanding social phenomena from the participants frame of reference (Hussey & Hussey, 1997), the reliability and validity of the results may be heightened. In this study, a total of six interviews will be conducted due to the reasons outlined in 4.1 point six.

#### 4.3. RESEARCH DESIGN

Remenyi et al. (1998) claim that it is difficult to generate theory without data and at the same time difficult to collect data without a theoretical framework. Consequently, based on Bulmer's (1986) assumption that these two aspects of research are interdependent, Remenyi et al. (1998) add that a dialectical relationship exists between the two aspects, which act to reinforce each other. Essentially, both are central to any significant research activity and both are required to make any real scientific progress. Therefore, this study amalgamates both the empirical and theoretical approaches into the research design.

From an ontological perspective, the empiricist assumes that evidence is collected from a natural world which is depicted as tangible, objective, and measurable (Frankfort-Nachmias & Nachmias, 1996; Hussey & Hussey, 1997). In addition, it is epistemologically assumed that to be of any significance knowledge needs to be based on evidence from this external reality in order to be able to make a satisfactory claim to have added to the body of knowledge (Remenyi et al., 1998; Easterby-Smith et al., 2002). In contrast, the theoretical approach, which refers to ideas and constructs that are contemplative or abstract (McNeill, 1990), is concerned with the acquisition of theory conceptualised by Hammersley (2000) as "knowledge of general relationships among types of phenomena" (p. 225). In this instance, theory directs and supports the collection of data and econometric analysis.

It is also suggested that the theoretical phase of the research is representative of a deductive method whereby theorising comes before the research enquiry (Finn, Elliot-White, & Walton, 2000). In this context, the deductive strategy ensures that theory, in an extensive and mature area of study, develops incrementally. In addition, under a deductive framework, science and knowledge develop through advancing hypotheses, making deductions from them and using empirical observations to test these deductions until they are accepted or refuted (Hussey & Hussey, 1997; Finn et al., 2000; P. K. Smith, 2000).

Consequently, it may be suggested that this study adopts a pure but exploratory research approach. The former leads to theoretical development by re-examining existing theories on executive pay, whilst the later, seeks out and explains observed patterns and trends in the pay-performance relationship by discovering and measuring causal relations (Hussey & Hussey, 1997; Easterby-Smith et al., 2002).

#### 4.4. A MULTI-METHOD APPROACH

According to Sayer (1992), in order to confirm quantitative empirical data, qualitative information is needed on the nature of the objects involved. As a result, using Cresswell's (1998) three types of research design this study adopts a two-phase design whereby the main quantitative phase is supported by a qualitative phase. In addition, Downward, Finch, and Ramsay (2002) suggest that using a variety of research techniques enhances the accounts afforded to types of phenomena.

Although conclusions are not drawn from the interviews, this study nevertheless combines two methods of data collection. The quantitative method tests hypotheses and identifies patterns in variables whereas the qualitative method validates corporate information and informs some of the methodological decisions. This use of multiple, but independent, research methodologies to study the same phenomenon is a strategy advocated by Fielding and Fielding (1986) and what Denzin (1989) broadly terms methodological triangulation. Specifically, this study employs a between-method triangulation strategy, as opposed to a within-method approach, which combines dissimilar methods to measure the same unit as well as act as a vehicle for cross



validation between the quantitative and qualitative data (Jick, 1979; Denzin, 1989). Therefore, the effectiveness of triangulation rests on the premise that the unique deficiencies of each single method will be compensated by the counter-balancing strengths of another (Jick, 1979; Denzin, 1989). Fisher (1998), complementing the work of Jick (1979), states that multiple perspectives and measures opens the door to a more subtle and complex form of rigour thus allowing for greater accuracy and robustness.

#### 4.5. QUANTITATIVE RESEARCH: THE DATABASE

With its origins in the scientific empirical tradition the quantitative approach relies on numerical evidence to draw conclusions, to test hypotheses or theory, and is concerned with: measurement, causality, generalisation, and replication (Bryman, 1989). It is infused with positivism and is based on the collection of quantifiable observations, which permit the deduction of laws and the establishment of relationships (Bryman, 1989; Burns, 2000).

As a result, the quantitative aspect of this investigation is based on a database independently self-assembled from primary sources, i.e. the annual reports of firms. Prior research indicates that the database is a reliable and popular resource when examining executive pay. This is often due to the low response rates associated with getting compensation departments of large publicly held corporations to participate in survey research (Eskew & Heneman, 1996). The newly constructed database is a FTSE-350 composite using an FMLX directory as at 2 September 2003. It consists of significant details pertaining to executive demographics, and remuneration and corporate performance figures, which are taken from company annual reports.

Companies' annual reports are a common resource tool when examining compensation and CG details (see Main & Johnston, 1993), which are freely and cheaply accessible and open to public scrutiny. They are also a worthy and reliable source of data, which provides relatively clean disaggregated information on salaries and annual bonuses of individual executives which can be easily matched to company performance data (McKnight, 1996; Murphy, 1998; McKnight & Tomkins, 1999).

However, some argue that using published data, rather than collecting data from personal observation, may culminate in measurement error existing in the data (Ciscel & Carroll, 1979). Such errors, as highlighted by Lewellen et al. (1987), may occur not only because the proxy measures chosen to define company characteristics may, as in any empirical study, not perfectly capture those characteristics, but also because – even if perfect – they are inevitably subject to short-run fluctuations that are not truly indicative of underlying longer-run changes. Furthermore, Tosi and Gomez-Mejia (1989) are doubtful that continued number crunching of these databases will provide much additional insight on the determinants of executive pay. Others claim that the extent of compensation disclosure in company accounts is woefully inadequate (Conyon et al., 1995). As a result, descriptions of executive bonus plans in the literature are anecdotal, non-representative, or gleaned from voluntary (and non-random) disclosures in company proxy statements (Murphy, 1998).

Further limitations associated with unobtrusive measures such as public or private archival documents include recognising that calculating procedures in order to formulate accounting figures such as EPS may vary from one company to the next. Essentially, there is no way to ensure consistency among the sample so that the same calculating practices are adopted. Additionally, accounting documents may not be completely accurate and may have been written with a specific audience and purpose in mind (Burns, 2000). Therefore, these documents may represent the imprint of the organisation that produced it, with bias arising simultaneously from both the author and the organisation. Nowadays, executives have become much more adept at manipulating and massaging accounting and compensation figures (Charkham, 2001). Consequently, in order to offset some of these concerns, interviews are used in this study.

It seems appropriate at this stage to provide some justification for adopting particular variables, and their subsequent measures, which have a prominent role in the analysis. Each significant variable and measure is now discussed.

- 1) The annual bonus figure refers only to the short-term aspects of bonus pay such as cash and shares. However, compensation of an executive in their last or first year at the firm may reflect a partial year payment (Barron & Waddell, 2003). These partial

year payments, if documented, are included whereas deferred bonuses and discretionary elements are excluded. If details of how the bonus is paid are not provided it would be assumed that the bonus is paid in cash. Also, unlike Barron and Waddell (2003) who excluded from their sample those cases with a zero total compensation figure, executives in this study with a zero bonus figure remain in the sample.

- 2) Logarithm  $(1 + \text{Bonus}_{i,t} / \text{Salary}_{i,t})$  (Bruce, Skovorova, Fattorusso, & Buck, 2005). Using Logarithm  $(1 + \text{Bonus}_{i,t} / \text{Salary}_{i,t})$  for executives in company  $i$  at year  $t$ , is the equivalent of having Logarithm  $(\text{Salary}_{i,t} + \text{Bonus}_{i,t})$  and Logarithm  $(\text{Salary}_{i,t})$  as an offset (an explanatory variable with the coefficient constrained to be equal to 1). Therefore, changes in the bonus are technically estimated through relative changes in the executives total cash rewards  $(\text{Salary}_{i,t} + \text{Bonus}_{i,t})$  holding salary constant, i.e. dividing this expression throughout by  $\text{Salary}_{i,t}$  and taking logarithms, reduces it to the variable Logarithm  $(1 + \text{Bonus}_{i,t} / \text{Salary}_{i,t})$ .
- 3) TSR is a market measure, which is the calendar year holding period return per share of common stock. The numerator of TSR is dividends per share earned over the calendar year plus the capital gain per share between the end of last year and the end of the current year (Abowd, 1990). TSR is a primary benchmark for shareholders and investors in assessing firm performance, and a principal performance element UK companies exploit for measuring executive effort (see McKnight, 1996; Pass et al., 2000; Conyon et al., 2001). However, some argue that shareholder return is subject to a wide variety of influences that could introduce noise into assessments of managerial performance (Forbes & Watson, 1993; Pavlik et al., 1993; Conyon, 1997a; Benito & Conyon, 1999; Dulewicz & Herbert, 2004). In line with this opinion, interview responses indicate that, in general, TSR is an imperfect and inappropriate performance measure, especially over the short-term, due to the influence of wider market factors. Nevertheless, the participants did acknowledge the importance of delivering value to shareholders through TSR. Despite these comments, TSR will remain a primary performance indicator because of its inherent value to shareholders.
- 4) EPS indicates the profitability of a company and will be used as an alternative measure of firm performance. According to McKnight (1996), company's frequently

adopt EPS to gauge executive effort and, usually considered from the shareholders perspective, may be calculated as follows: net profit after taxation and preference dividend divided by the number of ordinary shares in issue during the year (Dyson, 2001). In relation to the interview responses, some participants claim that EPS is imperfect, inappropriate, too myopic, and needs additional measures to provide a balance. However, because it is post-tax and more difficult to manipulate than a straight profit measure, the general consensus is that EPS is indeed an appropriate measure of firm performance. Again, despite these comments, like TSR, EPS will remain a primary performance indicator not only because it is difficult to manipulate but also because it is a fair reflection of a firm's internal performance.

- 5) Roberts (1956) discovered that, despite using net sales as the index of corporate size, other measures of corporate size did not alter his conclusions significantly. This suggests that using total number of employees, as a measure of firm size, would not be inappropriate. Evidence also indicates that total number of employees is a standard and common measure for firm size (see Eaton & Rosen, 1983; Murphy, 1985; Hill & Phan, 1991; Krug, 2003; Datta et al., 2005).
- 6) Logarithm values are used in the analysis in order to control for extreme values and ensure that the results remain unbiased (Porac et al., 1999).
- 7) Measures of weak CG, which are indicative of a powerful and entrenched executive include:
  - a) CEO/Chair duality – a popular measure to evaluate executive power (see Wade et al., 1990; Rechner & Dalton, 1991);
  - b) CEO presence on the nominations committee – a common indicator to examine selection bias (see Westphal & Zajac, 1995; Zajac & Westphal, 1996);
  - c) Ratio of NEDs to inside directors – a frequently used measure to assess corporate control (see Beatty & Zajac, 1994); and
  - d) Tenure on the board of directors – a popular indication of executive entrenchment (see Hill & Phan, 1991).
- 8) Based on Weisbach's (1988) three-fold classification of board directors which consisted of 'insiders', 'outsiders' and 'grey' directors, this study adopts the following classification. 'Insiders' are full-time employees of the corporation and NEDs or 'outsiders' refer to board members that neither work for nor have extensive

dealings with the company. 'Grey' directors are those members that have had an extensive business relationship or family tie with the company and/or management and in this study are not a distinct category but classified as 'insiders'.

- 9) According to Finkelstein and Hambrick (1989) research methods and the composition of samples in past research have typically ignored potential industry effects. As a result, this study has recorded industry details for all the companies in the sample. The industry variable is used as a control variable and implemented as one strategy of localising the variance in bonus pay.

Table 1 overleaf summarises all the significant variables that are included in the database.

Table 1. *Summary of all significant variables included in the database.*

Variable	Specification
industry (dummy)	Industry type dummy variables (n = 13 including: chemical and pharmaceuticals; oil, gas and minerals; finance; media, marketing and telecommunications; other services; food, drink and tobacco; construction and building material; engineering, electrical and other manufacturing; retail and distribution; e-business, software and computer services; property; transport and leisure; utilities).
finyren1	Company's financial year-end date for 2001/02.
finyren2	Company's financial year-end date for 2002/03.
noexec	Number of executive directors that sit on the board of directors.
age	Current age of executive director.
nation	Nationality of executive director.
nationality (dummy)	Nationality dummy variables (n = 4 including: UK, American, other, unknown).
gender	Executive director gender.
status	Current employment status of executive director (n = 7 including: resigned, replaced, retired, no change, NED, redundant, died).
logemp1	Logarithm value of total number of employees including directors, full-time and part-time staff for 2001/02.
logemp2	Logarithm value of total number of employees including directors, full-time and part-time staff for 2002/03.
growloemp	Growth in the logarithm value of total number of employees including directors, full-time and part-time staff from 2001/02 to 2002/03.
eps1	'Basic' earnings (+ve) or loss (-ve) per share for 2001/02.
eps2	'Basic' earnings (+ve) or loss (-ve) per share for 2002/03.
groeps	Growth in EPS from 2001/02 to 2002/03
tsr1	Logarithm value of TSR for 2001/02.
tsr2	Logarithm value of TSR for 2002/03.
grotsr	Growth in logarithm value of TSR from 2001/02 to 2002/03.
sal1	Salary details for executive director for 2001/02.
logsal1	Logarithm value of salary details for executive director for 2001/02.
sal2	Salary details for executive director for 2002/03.
logsal2	Logarithm value of salary details for executive director for 2002/03.
annbon1	Dichotomous variable that determines whether or not the executive director received an annual bonus for 2001/02.
annbon2	Dichotomous variable that determines whether or not the executive director received an annual bonus for 2002/03.
bonfig1	Annual bonus figure for executive director for 2001/02.
logbo1	Logarithm value of annual bonus figure for 2001/02.
segbo1	Ranges of bonus payments for 2001/02.
bonfig2	Annual bonus figure for executive director for 2002/03.
logbo2	Logarithm value of annual bonus figure for 2002/03.
segbo2	Ranges of bonus payments for 2002/03.
percbo1	Calculates the annual bonus as a percentage of salary for 2001/02.
percbo2	Calculates the annual bonus as a percentage of salary for 2002/03.
logbosal1	Logarithm $(1 + \text{Bonus}_{i,t} / \text{Salary}_{i,t})$ for 2001/02.
logbosal2	Logarithm $(1 + \text{Bonus}_{i,t} / \text{Salary}_{i,t})$ for 2002/03.
cashother1 (dummy)	Dummy variables for the form in which the annual bonus was paid in 2001/02 (n = 4 including: instant cash, other, unspecified, n/a).
cashother2 (dummy)	Dummy variables for the form in which the annual bonus was paid in 2002/03 (n = 4 including: instant cash, other, unspecified, n/a).
pertarg1	Dichotomous variable that determines whether or not the company incorporates performance targets into the annual bonus element of an executive directors' remuneration package for 2001/02.
tytarg11	Details of the first performance target, if any, in 2001/02.
tytarg12	Details of the second performance target, if any, in 2001/02.
tytarg13	Details of the third performance target, if any, in 2001/02.
tytarg14	Details of the fourth performance target, if any, in 2001/02.
noperta1 (dummy)	Dummy variables for the number of performance targets used in 2001/02 (n = 4 including: one performance target only, more than one performance target, unspecified, n/a).
hardsoft1 (dummy)	Dummy variables for the use of hard/soft performance targets in 2001/02 (n = 3 including: external target and/or published internal target, unspecified, n/a).

compsimp1 (dummy)	Dummy variables for the use of simple/complex performance targets in 2001/02 (n = 4 including: one performance target only, more than one performance target, unspecified, n/a).
pertarg2	Dichotomous variable that determines whether or not the company incorporates performance targets into the annual bonus element of an executive directors' remuneration package for 2002/03.
tytarg21	Details of the first performance target, if any, in 2002/03.
tytarg22	Details of the second performance target, if any, in 2002/03.
tytarg23	Details of the third performance target, if any, in 2002/03.
tytarg24	Details of the fourth performance target, if any, in 2002/03.
noperta2 (dummy)	Dummy variables for the number of performance targets used in 2002/03 (n = 4 including: one performance target only, more than one performance target, unspecified, n/a).
hardsoft2 (dummy)	Dummy variables for the use of hard/soft performance targets in 2002/03 (n = 3 including: external target and/or published internal target, unspecified, n/a).
compsimp2 (dummy)	Dummy variables for the use of simple/complex performance targets in 2002/03 (n = 4 including: one performance target only, more than one performance target, unspecified, n/a).
remcomm	Dichotomous variable that denotes the presence of a remuneration committee.
nooutdir	Number of NEDs that occupy a position on the remuneration committee.
noinsdir	Number of inside directors that occupy a position on the remuneration committee.
totinout	Total number of members on the remuneration committee (i.e. sum of NEDs plus inside directors).
nomceo	Dichotomous variable that denotes a situation where the CEO has an active presence on the nominations committee.
dualfunc	Whether or not the CEO operates under a dual function (i.e. operates as both CEO and chairman of the board).
tenure	Calculates how many years the executive director has spent on the board of directors by subtracting the start date from the current year.
power	CG indicators determine the executive directors level of power within the organisation. A powerful executive would have one of the following features: their tenure on the board of directors is greater than 10 years, the CEO is also chairman of the board, the executive director has an active presence on the nominations committee, there is a permanent 'insider' on the remuneration committee, or simply there is no active remuneration committee.

#### *4.5.1. Sampling frame*

This research adopts a single sampling frame. In relation to the quantitative methodological approach, this study selects a sample from a much larger group i.e. the entire population of large companies in the UK, and comprises 350 UK companies that are listed on the FTSE-350 index. This non-probability sampling technique is termed a judgement or purposive sample and refers to procedures directed toward obtaining a certain type of element (Dane, 1990).

The rationale behind this selection is, first, the sample consists of large companies that feature the wide range of governance elements included in the database. Secondly, such a sample consists of a wide range of large corporations that are distributed across the UK and who operate in various industries and market sectors. Note that small firms are not included in this study due to difficulties associated with obtaining the relevant management, share price and company data. Finally, the size of the sample is substantial, which is likely to increase the probability of the sample being representative of the population (Hussey & Hussey, 1997; Remenyi et al., 1998). It is also noted that companies who are listed on the FTSE have an obligation to publish annual reports making access to the required data more feasible. However, data availability continues to represent a fundamental constraint on progress (Bushman & Smith, 2001).

In addition, by purposefully sampling the top tier of the population of quoted companies and concentrating solely on the top tier of management, to the neglect of lower levels of the corporate hierarchy, is to employ an upper-echelons perspective (Hambrick & Mason, 1984; Mueller & Barker, 1997; Cannella, 2001). This orientation is derived from the belief that an organisation becomes a reflection of its top executives and if we want to understand organisational outcomes, we must understand the experiences, values, motives, and biases of the top executives (Hambrick & Mason, 1984; Mueller & Barker, 1997; Cannella, 2001).

The sample consists of 299 publicly traded companies listed on the FTSE-350 index as at 2 September 2003. Financial institutions such as pension funds and insurance companies, who do little else but invest in shares, are excluded from the sample (see



Walker & Louvari, 2003). Companies of this nature have few employees, massive financial assets, and boards made up entirely of NEDs.

Banks and the like, however, remain in the sample. The data includes demographic and remuneration details relating to main board executive directors, including CEOs, as well as firm-level information relating to CG and firm performance. All these variables are extracted from company annual reports for two consecutive years. The data for 2001/02 included annual reports published between 01 June 2001 and 31 May 2002 and 2002/03 consisted of annual reports published between 01 June 2002 and 31 May 2003.

The firms in the sample cover most sectors of the economy with finance (13.4%, n = 40), transport and leisure (11.4%, n = 34), and retail and distribution (10.7%, n = 32) being the most highly represented industries. Since unit trusts, etc, were excluded, this sample represents the FTSE-350 population minus those firms.

#### *4.5.2. Data analysis*

According to Ostle and Malone (1988), the statistical analysis of data only describes what is; it cannot determine what ought to be, except insofar as it may throw light upon probable concomitants and consequences of certain situations. The role of statistical research is to function as “gatekeepers” (Cook, Campbell, & Peracchio, 1990, p. 493), a tool in designing research, analysing data, and drawing conclusions (Ostle & Malone, 1988). As a result, the levels of data acquired by the research consist of a combination of both nominal and ratio data. The nominal level data refers to those responses in which numbers are used to classify observations such as does the company implement an executive bonus strategy? 0 = Yes, 1 = No (Frankfort-Nachmias & Nachmias, 1996). The ratio level data refers to those variables that have a natural zero point and consist of continuous data such as TSR and EPS which are measured to the nearest small unit, and discrete data such as the monetary bonus payment the executive receives and total employment figures which are measured to the nearest whole number (Frankfort-Nachmias & Nachmias, 1996; Denscombe, 2002a).

Data analysis is sequential and progressive, and there are three stages to the analysis. The first phase is descriptive, which highlights and illustrates graphically some of the associations between variables. The second phase is a more sophisticated, cross-sectional exploration of the interrelationship among the variables and a single period multiple regression analysis achieves this. The final and most advanced phase of the analysis involves panel regressions.

The first two phases use the Statistical Package for the Social Sciences and refers to descriptive and inferential statistics, i.e. tests of significance. Descriptive results are a graphical representation of associations and, according to Glenberg and Langston (1992), such an approach makes it easier to identify relations among data. Inferential statistics, however, find correlations or relationships between variables. Consequently, through combining verbal with the graphical representation of concepts can lead to greater comprehension (Glenberg & Langston, 1992).

At this stage it is worth emphasising that correlation does not imply causation (Holland, 1986). This is highlighted by Pavlik et al. (1993) who argue that most studies rely on ex post correlations and one cannot infer causation from them. Also, most variables expected to influence executive pay tend to be highly correlated and this poses a collinearity problem that makes it difficult to isolate the unique effect of any single factor (Gomez-Mejia, 1994). For the purpose of the investigation it is proposed that one of the tests to be conducted is a multiple regression analysis which, according to Hinton (1995), is an appropriate statistical test when correlating more than two variables.

Multiple regression is an extension of the bivariate regression and is used for prediction as well as explanation (Lewis-Beck, 1993). It offers a fuller explanation of the dependent variable since few phenomena are products of a single cause, and ensures that the effect of a particular independent variable is made more certain, for the possibility of distorting influences from the other independent variables is removed (Lewis-Beck, 1993). This reflects the exploratory approach previously cited on page 82 and relates specifically to explaining hypotheses outlined in chapter 3. Fundamentally, multiple regressions hold constant the other independent variables through statistical control as

opposed to experimental control. In this instance, the test is used to find the differences and significance of relations in a cross section of data spanning two concurrent years (2001/02 and 2002/03) between executive bonus pay, which acts as the dependent variable and TSR and EPS, which acts as the independent variables. Due to a wide variety of internal and external contingencies surrounding executive bonuses, it is worth acknowledging that direction of causation with regard to bonus pay and firm performance is, if at all, difficult to determine. The results, therefore, are discussed in terms of associations rather than causations.

The final phase of the analysis uses STATA and examines the data longitudinally. Data on two moments in time enable the bonus and its responsiveness to firm performance to be modelled as well as assess immediate reaction effects on year-to-year changes in bonus design. Essentially, the panel regression provides more data points, thereby increasing the degrees of freedom and reducing the collinearity among explanatory variables and, hence, improving the efficiency of the econometric estimates (Hsiao, 2003). As an additional attempt to preserve degrees of freedom variables that proved to be insignificant were omitted from the regression equation (Fey & Denison, 2003).

#### 4.6. QUALITATIVE RESEARCH: THE INTERVIEW

Ackroyd and Hughes (1983) define the fundamentals of the interview as, “encounters between a researcher and a respondent in which the latter is asked a series of questions relevant to the subject of the research” (p. 66). Considered the most widely applied technique for conducting a systematic social enquiry, the interview is regarded as a special form of purposeful conversation that can elicit the candid expression of opinions residing in the respondent (Stroh, 2000; Holstein & Gubrium, 2002). However, the purpose of the interview in this study is to validate and cross-verify data extracted from company annual reports and inform some of the methodological choices. Advocates of incorporating qualitative interviews into the research design include Bushman et al. (1996), Franco and Bourne (2003), Chidambaran and Prabhala (2003) and Fey and Denison (2003).

Aware of the ethical issues associated with face-to-face interviews, the researcher, before conducting the interviews fully discloses their role to the participant, informed consent is acquired, and all details relating to confidentiality and anonymity is explained to the participants. In terms of anonymity, it is possible, following content analysis, to separate the identity of the individual from the information they have supplied, thereby making it difficult to associate a name with the data. It is anticipated that guaranteeing anonymity and confidentiality encourages a greater freedom of expression from the participants. Also, in order to reduce the potential effect of interviewer bias, the interviews are conducted in an environment where the participant is most comfortable and able to provide honest answers.

#### *4.6.1. Interview sampling frame*

In terms of the sampling method adopted for the qualitative interviews, although the sampling frame is the same, the size of the sample is greatly reduced. Therefore, the interview sample consists of five with pay and benefits managers and one with a globally recognised remuneration consultancy. This reduction in sample size is necessary as quality of responses, in contrast to quantity, is sought after. Consequently, the investigation adopts a probability sampling approach, which works on the premise that each individual has a known and equal chance of being selected (Dane, 1990). Therefore, a simple random sampling technique that involves an unsystematic random selection process is employed thus reducing selection bias (Dane, 1990).

Based on the research conducted by Tosi and Gomez-Mejia (1989) who chose the chief compensation officer as their primary interviewee, the pay and benefits manager is selected for these reasons. They are, typically, a key member of the compensation committee and among the most informed about organisational pay policies, practices, the processes used to set executive pay, monitoring activities, and the incentive structure for executives. In addition, as few organisations are willing to tolerate and give their time to researchers (Cook et al., 1990; Eskew & Heneman, 1996) and due to the difficulties associated with gaining access to senior executives (Currall, Hammer, Baggett, & Doniger, 1999), by purposefully selecting pay and benefits managers as opposed to executive directors increases the likelihood of achieving the interview target.

Finally, the interview with a remuneration consultant provides an additional but alternative perspective on executive pay. It is included for two reasons. First, it tests whether the views and opinions on executive pay of the remuneration consultant are shared by the pay and benefits managers. Secondly, like the pay and benefits managers, the remuneration consultant is very well informed about pay policies, practices, processes, monitoring strategies, and incentive structures, but the difference being that they make ‘real’ recommendations on how to remunerate corporate executives. They are instrumental in designing compensation schemes in terms of ratio of short-term and long-term pay, the form of payment (e.g. cash, shares, deferred or matching shares), and the number and type of performance targets to be used (e.g. internal, external, or both). It is this point of view that is of most interest.

#### 4.7. SUMMARY

This chapter has outlined the methodology for testing the set of hypotheses specified in chapter 3. An empirical, positivist approach using quantitative methods (i.e. an independently assembled database), supported by qualitative interviews in order to validate the objectivity of the annual report and inform some of the methodological choices, is the chosen methodology. The database is considered a reliable and popular research tool. Data collection using company annual reports are common to the executive pay field (see Main & Johnston, 1993) and a reliable source of data (McKnight, 1996; Murphy, 1998; McKnight & Tomkins, 1999). Variables and models have also been specified and the next chapter presents results for both the executive director and CEO samples which include descriptive statistics, and multiple and panel regression analysis. In this discussion and in its Figures and Tables, reference is made to each hypothesis above, e.g. H1, H2, etc.

## CHAPTER 5

### DATA ANALYSIS

The data analysis is divided into two sections. Section one examines a broad population of all executive directors ( $n = 1,542$ ) in the sample, whereas section two explores a sub-population that focuses solely on the CEO ( $n = 300^2$ ). Evidently, the samples differ in terms of case volume. However, the number of companies included in both samples will remain the same. As a result, firm-level characteristics for both samples are identical and are discussed in further detail next.

#### 5.1. FIRM DEMOGRAPHICS

In relation to firm size, the median value as measured by the total number of employees for 2001/02 equals 7,909 and for 2002/03 equals 8,005. In addition, alternative firm-level governance characteristics include: CEO/Chair duality, the presence of a remuneration committee and subsequent insider/outsider ratios, and whether or not the CEO sits on the nominations committee. The details relating to NEDs and in turn the remuneration and nominations committee are based on information taken from the 2002/03 annual report only, given that few changes are expected after one year.

First, results indicate that 5% of CEOs ( $n = 15$ ) also operate as chairman of the board, whereas the remaining 95% ( $n = 285$ ) function solely as CEO. Secondly, all but one company confirmed the presence of an active remuneration committee. The median size of a remuneration committee is 4 and, in terms of composition, independent NEDs dominate the committee. Consequently, executive directors constitute a negligible fraction (8.4% of boards have insiders) within the committee (See Table 2 overleaf).

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<sup>2</sup> ( $n = 300$ ) – 300 CEOs were taken from 299 firms. One firm (Pennon Group plc) had two CEOs of equal importance and, consequently, both were included in the study.

Table 2. *Number of inside directors on the remuneration committee.*

Number of Inside Directors	Frequency	Percent
0	274	91.6
1	19	6.4
2	5	1.7
3	1	0.3

Thirdly, of the 299 companies in the sample, only 32.3% (n = 97) actively prevent the CEO from sitting on the nominations committee. Therefore, in 67.7% (n = 203) of companies the CEO is eligible to sit on the nominations committee.

Finally, as a means of approximating the level of power and control a CEO has in an organisation, CG variables are used as indicators of CEO power and examined on an individual basis. The variables under analysis include: CEO/Chair duality, remuneration committee presence, number of inside and outside directors on the remuneration committee, CEO presence on the nominations committee, and tenure on the board of directors (more than 10 years on the board was indicative of strong executive power). For example, weak CG/powerful executive will have at least one of the following features: the CEO is also chairman of the board, there is no active remuneration committee, there is a permanent insider on the remuneration committee, the CEO has an active presence on the nominations committee, or tenure on the board of directors is greater than 10 years. By implication, strong CG/less entrenched executive will be represented by: non-CEO/Chair duality, an active remuneration committee, remuneration committee is made up entirely on NEDs, the CEO does not have an active presence on the nominations committee, and tenure on the board is less than 10 years.

Results indicate that 78% (n = 234) of CEOs operate within a weak governance framework and, subsequently, occupy a strong executive position in the firm. The remaining 22% (n = 66) function within a strong governance framework and, consequently, occupy a weak position in the firm (See Table 3 overleaf).

Table 3. *Distribution of executive power.*

Executive Power	Frequency	Percent
Strong Executive Power	234	78
Weak Executive Power	66	22

The data analysis is sequential and progressive. This approach is applied to both samples and is discussed in detail in section 4.5.2. However, in brief, there are three stages to this analysis. The first phase is descriptive and illustrates graphically some of the associations between variables. The second phase is a cross-sectional exploration of the interrelationship among the variables, which is achieved through single period multiple regressions. The final phase involves panel regressions and examines the data longitudinally, which allows the bonus and its responsiveness to firm performance to be modelled as well as the assessment of immediate reaction effects on year-to-year changes in bonus design (Hsiao, 2003).

Therefore, sections 5.2 and 5.3 present the results from the descriptive analysis for both the executive directors and CEOs respectively.

## 5.2. EXECUTIVE DESCRIPTIVE ANALYSIS

### 5.2.1. *Executive demographics*

In the 299 publicly traded companies, details of 1,542 individual executives are recorded. Included within this sample are details of 300 CEOs. In a very small number of cases ( $n = 6$ ) the chairman, executive chairman, or managing director is used as an appropriate substitute for an absent CEO. Averages, using the median as the preferred measure of central tendency due to its resistance to extreme values, indicate that:

- The median number of executives per company is 5;
- The median age of an executive is 51;
- Males dominate the sample and constitute 97% ( $n = 1,495$ ) of the total;
- Despite being unable to confirm nationality details for 18.4% ( $n = 283$ ) of the total sample, the results do indicate that UK nationals dominate the sample and represent 72.6% ( $n = 1,120$ );



- The median number of years an executive will spend on the board of directors is 6;
- Of the 1,542 individual executives the results indicate that 79.2% (n = 1,222) remained in full-time employment with the same company over the two-year period under analysis. Conversely, 20.8% (n = 320) did not and Figure 5 below provides some explanation for departure.

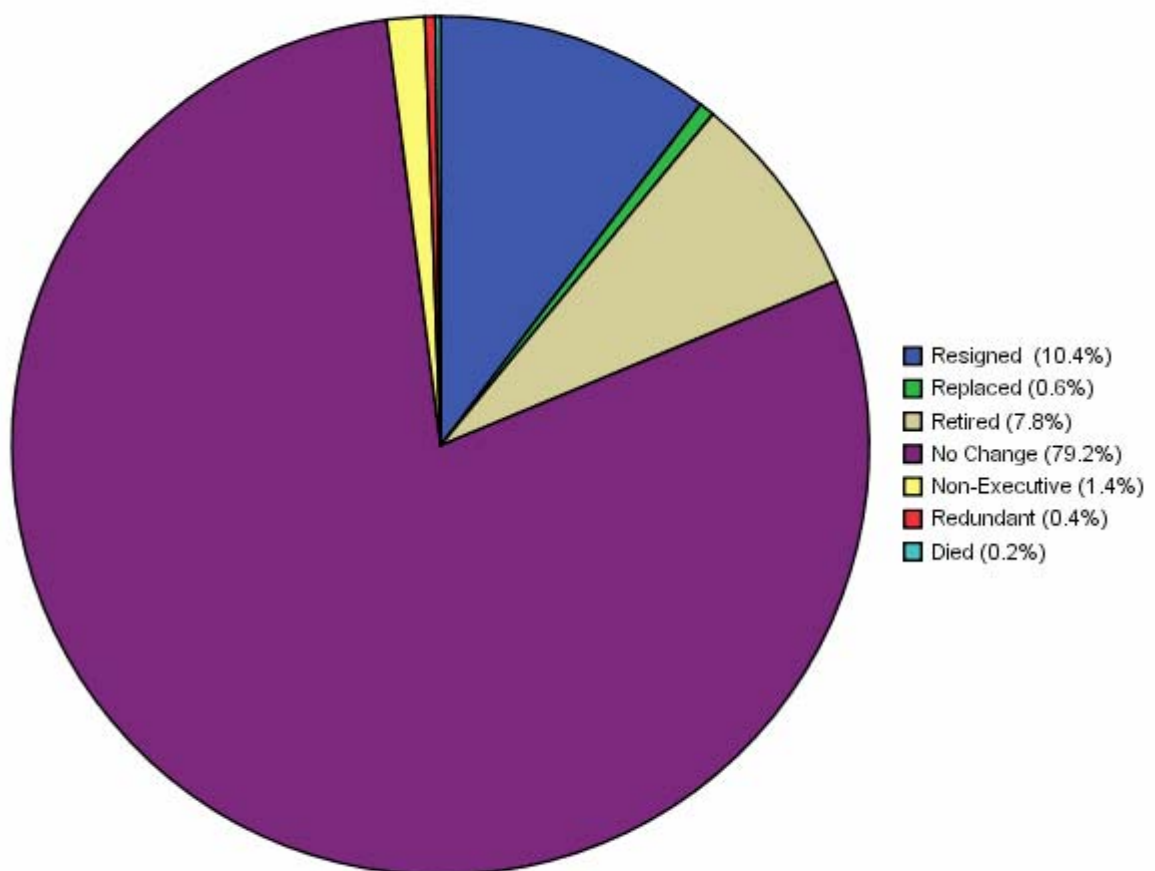


Figure 5. *Executive employment status at the end of 2002/03.*

Industry type has been identified as an influencing factor on executive pay (Conyon & Murphy, 1998). As a result, the following section attempts to identify some of the differing characteristics between industries by examining variation in annual bonus pay, TSR, EPS and number of employees.

### *5.2.2. Executive industry differences*

#### *5.2.2.1. Executive industry differences based on annual bonus pay*

Figure 6 and 7 overleaf indicate that the variance between the smallest and the largest average bonus for 2001/02 and 2002/03 was £288,995 and £241,404 respectively. This resulted in a 16.5% reduction and a total range of variation of £47,591 from year one to year two. In addition, the industries that pay the largest average bonus for both years include oil, gas and minerals (2001/02 = £327,634; 2002/03 = £289,158), finance (2001/02 = £273,928; 2002/03 = £295,536), and food, drink and tobacco (2001/02 = £249,256; 2002/03 = £262,965).

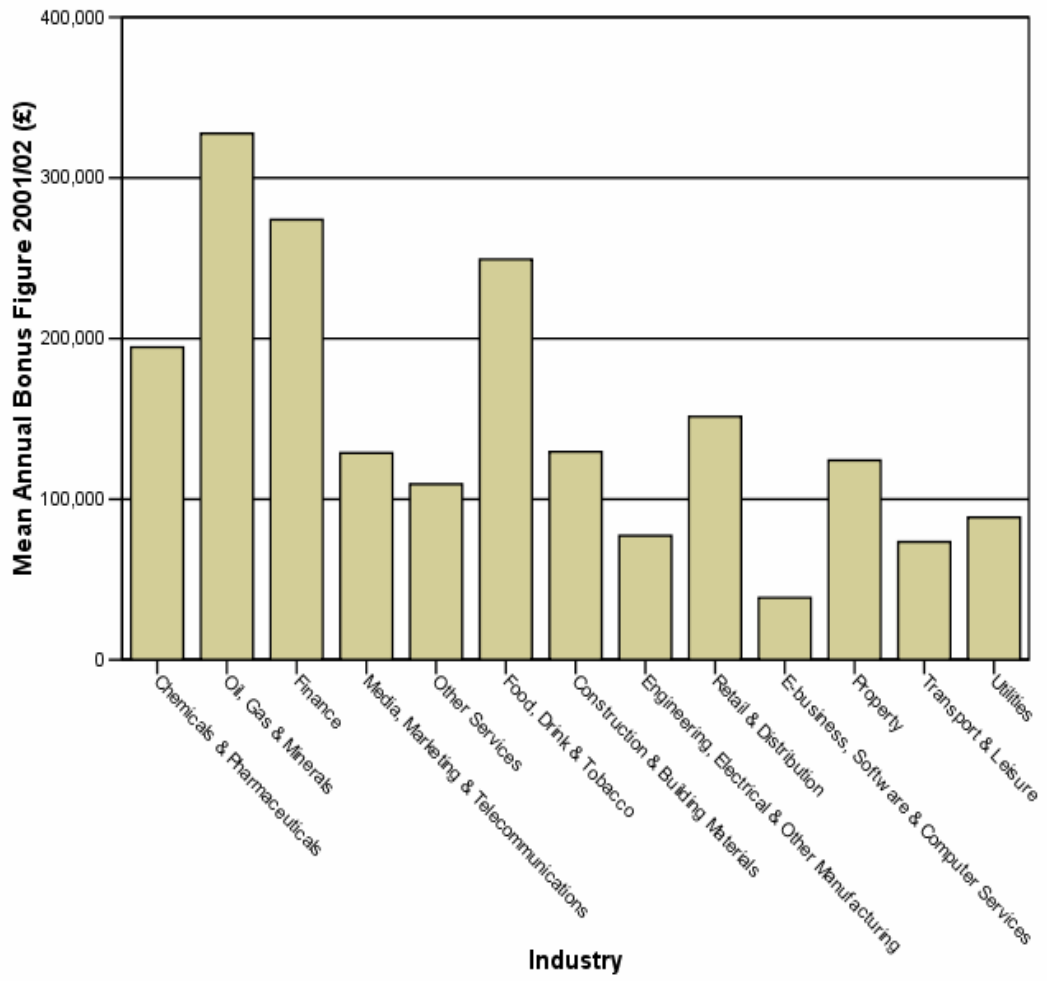


Figure 6. Executive mean annual bonus for 2001/02 based on industry.

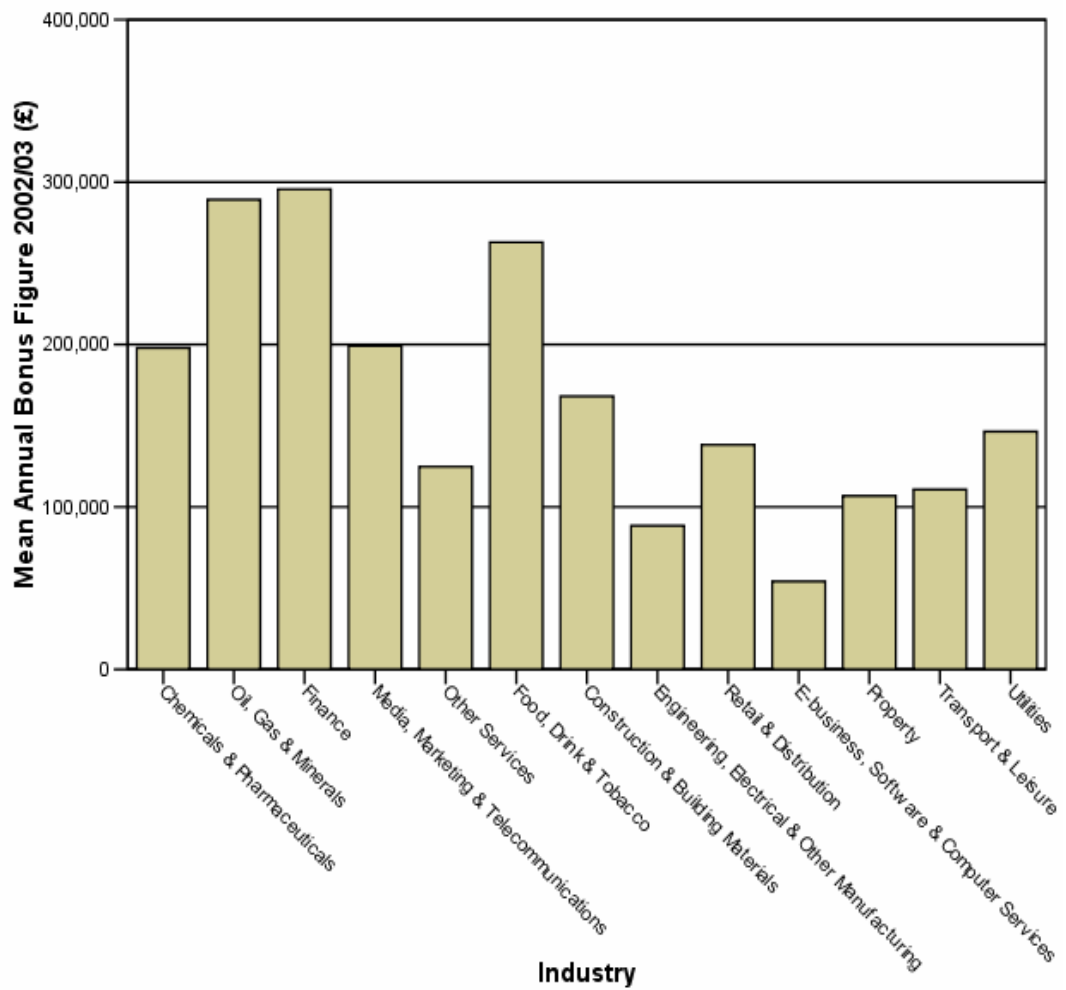


Figure 7. Executive mean annual bonus for 2002/03 based on industry.

#### 5.2.2.2. Executive industry differences based on total shareholder return (TSR)

Figure 8 overleaf illustrates a range differential of 1.5 and, with the exception of the e-business/software and computer services (-1.2) and media, marketing and telecommunications industries (-0.5), on the whole, average TSR values in 2001/02 did not fluctuate dramatically but remained relatively stable.

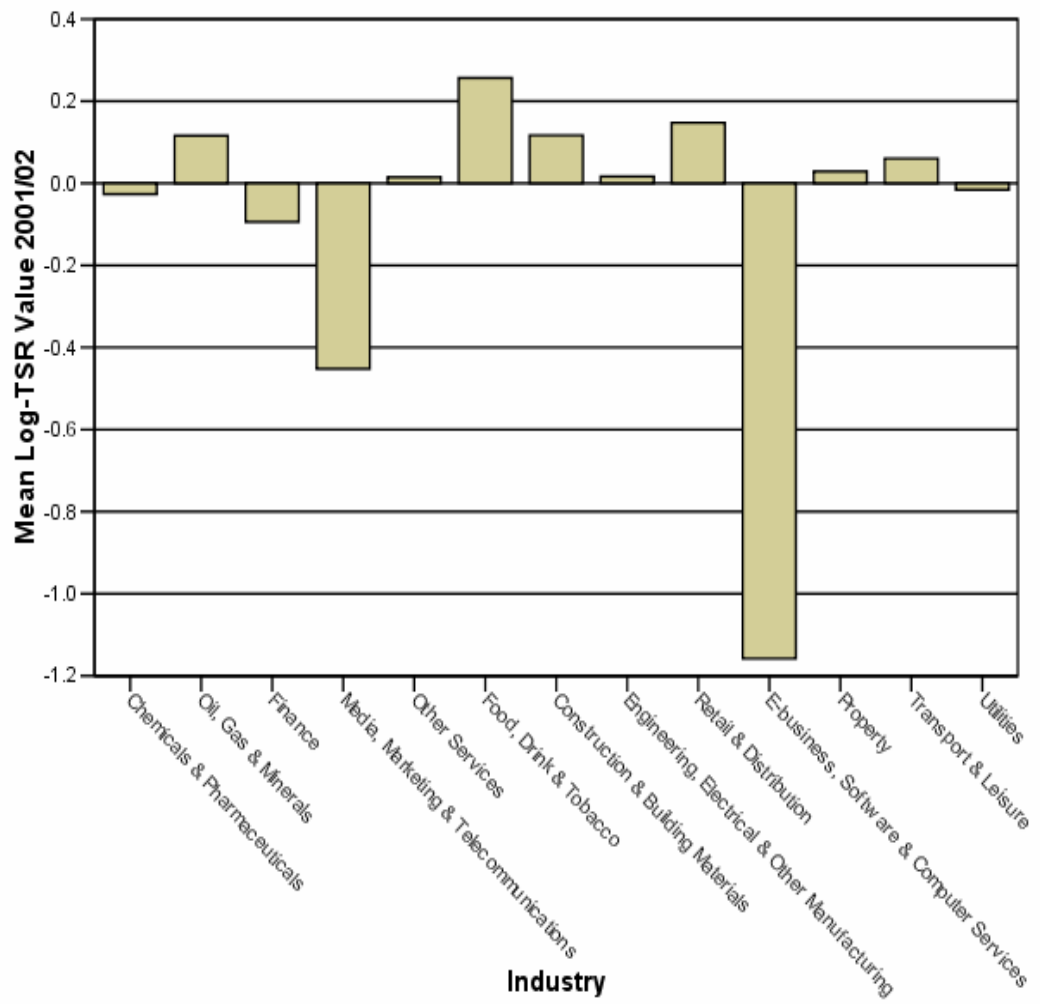


Figure 8. Executive mean log-TSR value for 2001/02 based on industry.

In contrast, Figure 9 overleaf reveals a range differential of approximately 0.7 with all industries experiencing a negative average TSR value in 2002/03. In particular, the e-business/software and computer services (-0.8), and other services (-0.5) industries have the lowest average TSR value.

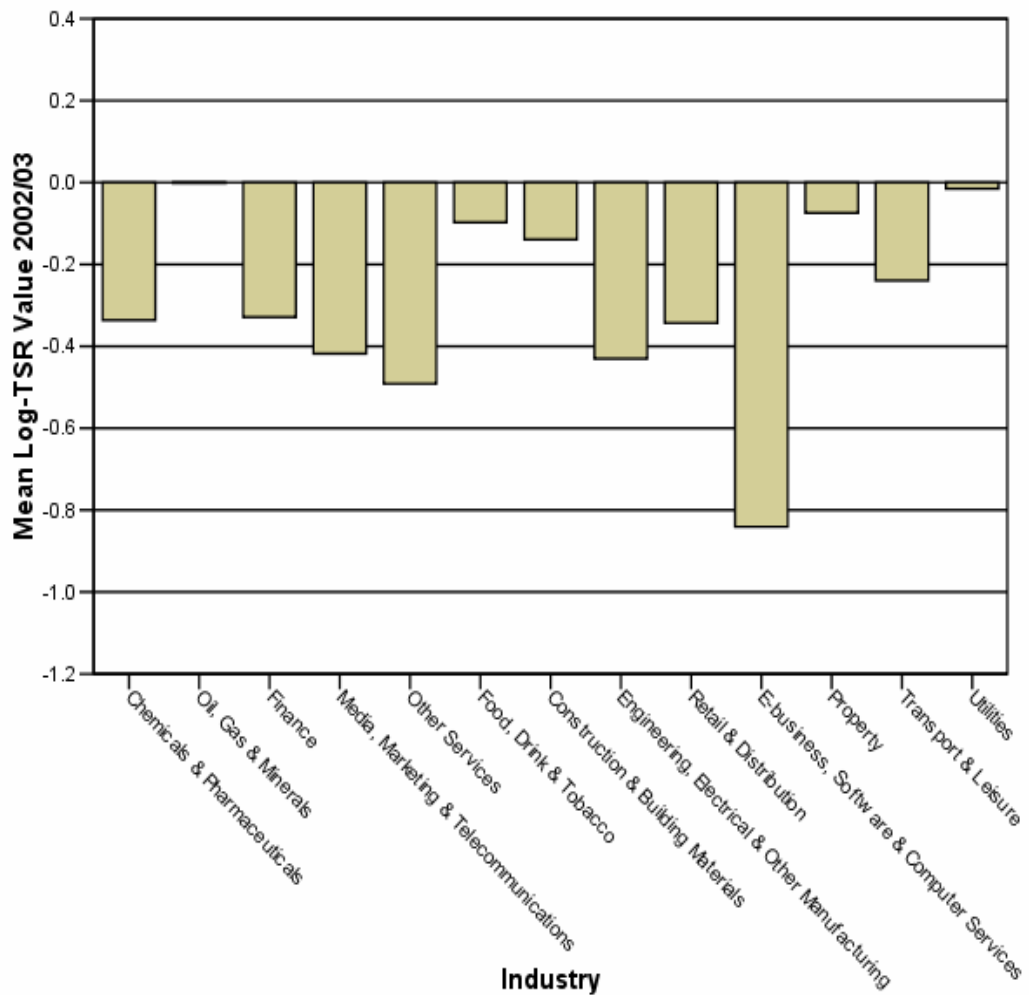


Figure 9. Executive mean log-TSR value for 2002/03 based on industry.

### 5.2.2.3. Executive industry differences based on earnings per share (EPS)

Figure 10 and 11 overleaf illustrate an average variation of 64 pence in EPS during 2001/02 and 54 pence during 2002/03. Furthermore, with the exception of the media, marketing and telecommunications (2001/02 = -19; 2002/03 = -16) and e-business/software and computer services industries (2001/02 = -31; 2002/03 = -8), the remaining 11 industries have a positive average EPS value throughout 2001/02 and 2002/03. In particular, the construction and building material (2001/02 = 33; 2002/03 = 38) and food, drink and tobacco industries (2001/02 = 29; 2002/03 = 34) have the largest average EPS values for both years.

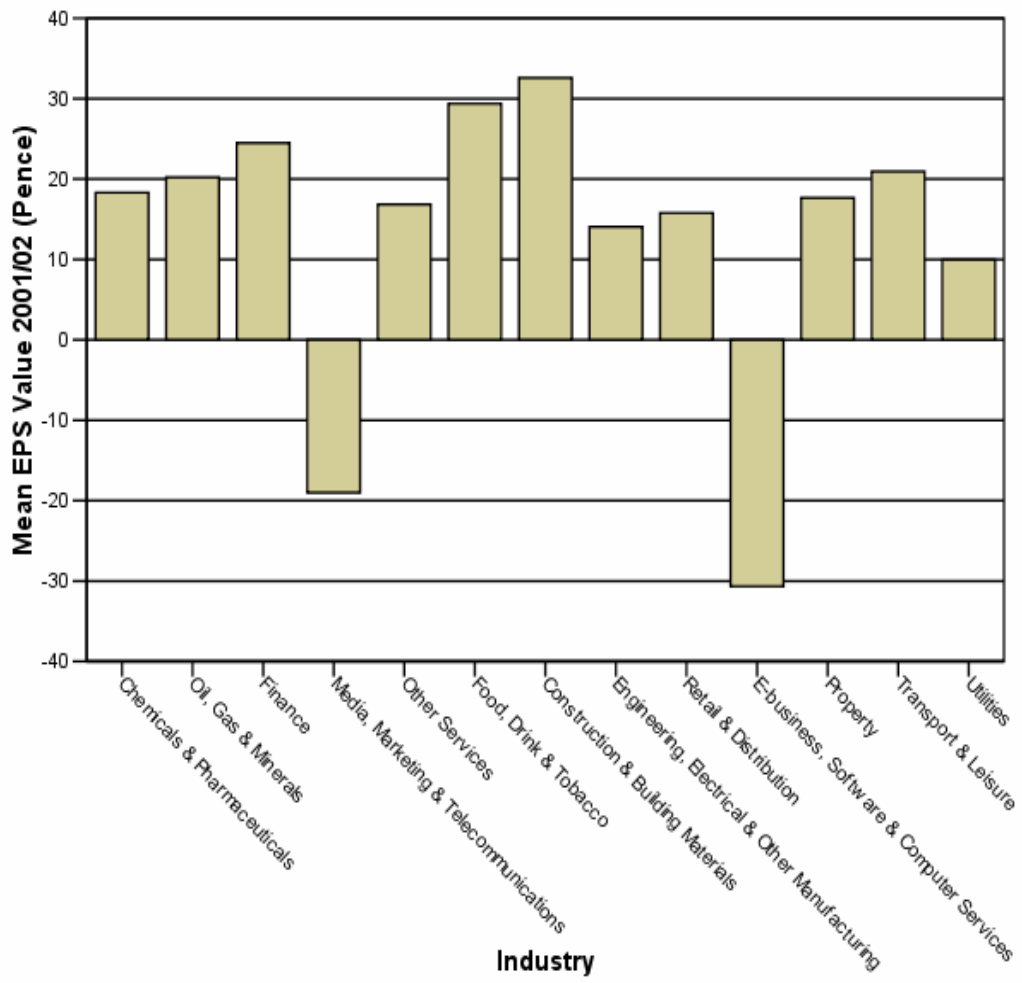


Figure 10. Executive mean EPS value for 2001/02 based on industry.

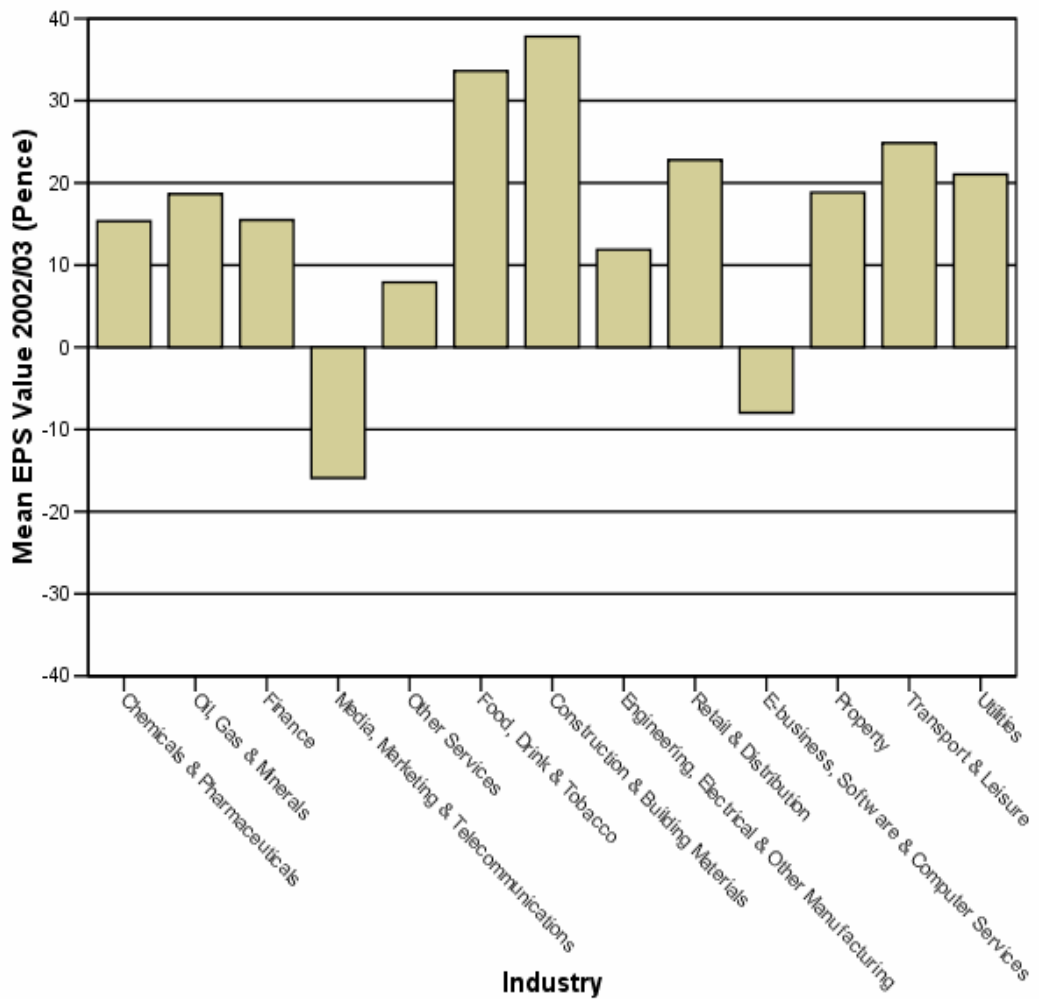


Figure 11. Executive mean EPS value for 2002/03 based on industry.

#### 5.2.2.4. Executive industry differences based on number of employees

Figure 12 and 13 overleaf indicate that the firms with the largest average number of employees for both years include food, drink and tobacco (2001/02 = 60,591; 2002/03 = 60,183), retail and distribution (2001/02 = 46,769; 2002/03 = 47,570), oil, gas and minerals (2001/02 = 42,697; 2002/03 = 41,415), and other services (2001/02 = 37,470; 2002/03 = 34,767). In contrast, the property (2001/02 = 1000; 2002/03 = 1000) and e-business/software and computer services (2001/02 = 5,962; 2002/03 = 5,523) industries have the lowest average number of employees for both years.



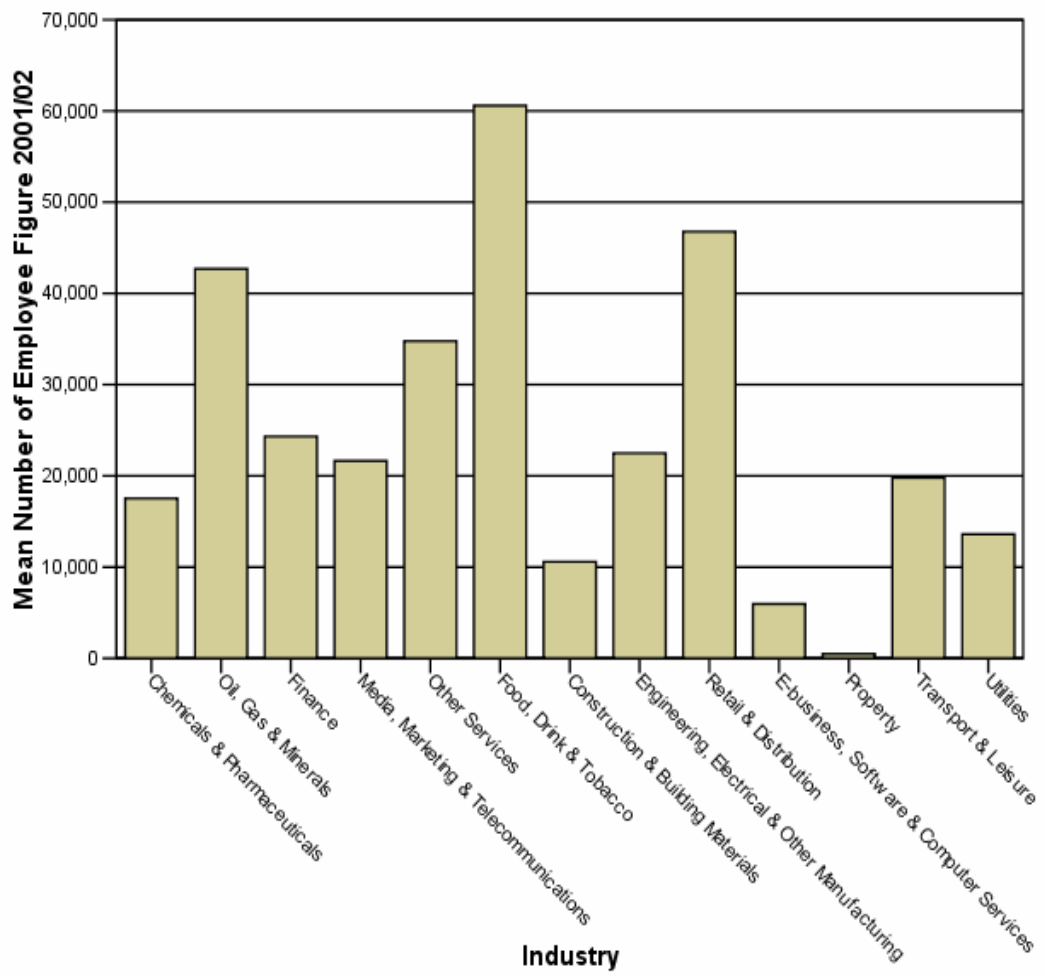


Figure 12. Executive mean number of employees for 2001/02 based on industry.

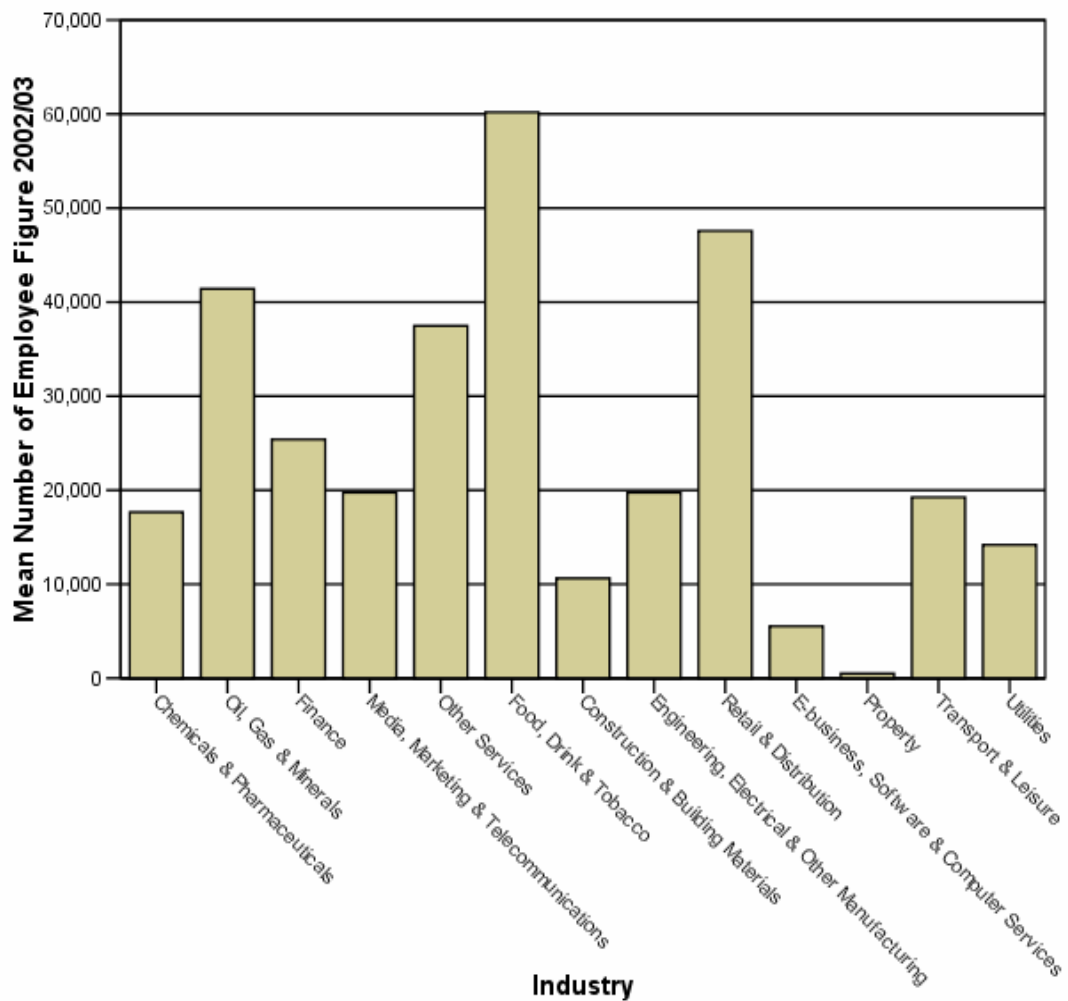


Figure 13. Executive mean number of employees for 2002/03 based on industry.

### 5.2.3. Executive remuneration details

This section focuses on base salary and bonus as executive rewards, excluding other forms of reward such as options, pensions and perquisites. Therefore, descriptive statistics relating specifically to the executive's remuneration details highlight the following:

- The median base salary for 2001/02 is £250,000 and for 2002/03 is £256,000. This amounts to a rise of £6,000 over the two-year period and equal to a 2.5% increase;
- The median bonus figure for 2001/02 is £77,000 and for 2002/03 is £90,000. This amounts to a rise of £13,000 over the two-year period and equal to a 17% increase;

- Based on the median values above, the annual bonus as a percentage of salary amounted to 30.8% in 2001/02 and 35.2% in 2002/03. This amounts to a total rise of 4.4% over the two-year period;
- In 2001/02, 88.5% (n = 1,365) of executives received an annual bonus. This figure increases to 92% (n = 1,419) in 2002/03. As a mirror image of this, 10.8% (n = 167) of executives did not receive an annual bonus in 2001/02. This figure decreases to 8% (n = 123) in 2002/03.

By extension, the sections to follow examine the form of the bonus payment (i.e. cash, shares, deferred shares, etc), the types of performance targets used (i.e. external and/or internal) and how these targets have changed over the two-year period.

#### 5.2.3.1. Executive annual bonus payment types

For 2001/02, the most prominent mode of payment associated with the annual bonus is cash (57.6%). In contrast, all other alternative modes of payment, which are generally more long-term such as shares, deferred shares, and matching shares, amount to 30.5%. Of this group, cash with voluntary deferred share and matching share options (9.1%) and cash with compulsory deferred share options (7.8%) are the second and third most prominent modes of payment. Figure 14 overleaf illustrates the distribution of payment types between instant cash payments versus alternative modes of payment, i.e. not cash, in 2001/02.

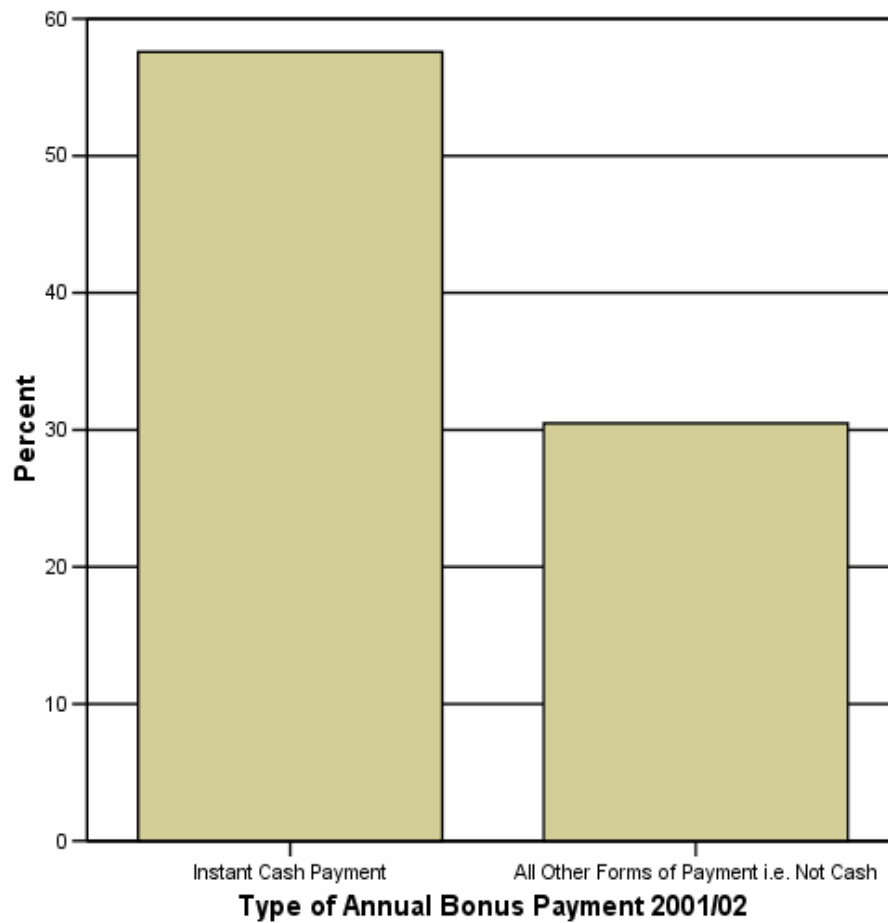


Figure 14. *Executive annual bonus payment type for 2001/02.*

For 2002/03, the most prominent mode of payment associated with the annual bonus is also cash (57.8%). In contrast, all other alternative modes of payment totalled 34%. Of this group, cash with voluntary deferred share and matching share options (10.7%), and cash with compulsory deferred share options (8.5%) are the second and third most prominent modes of payment. Figure 15 overleaf illustrates the distribution of payment types between instant cash payments versus alternative modes of payment, i.e. not cash, in 2002/03.

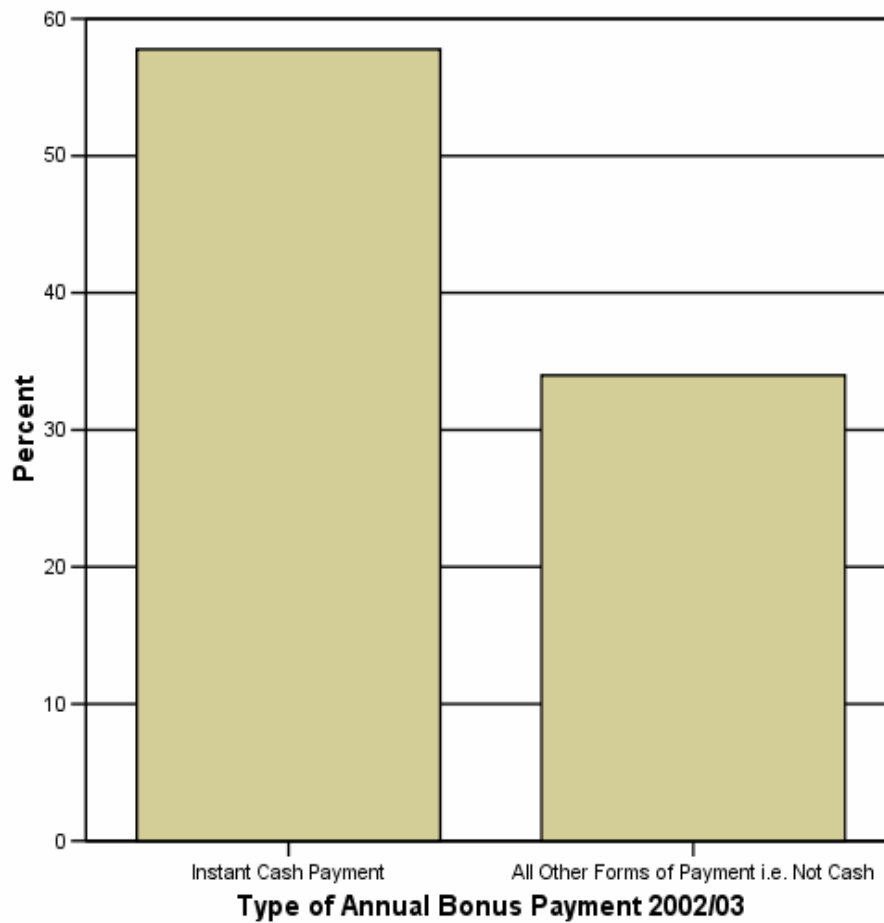


Figure 15. *Executive annual bonus payment type for 2002/03.*

#### 5.2.3.2. Executive annual bonus performance targets

Annual bonus performance targets are categorised in terms of their external/internal orientation. This classification considers whether external targets are transparent for shareholders and, therefore, whether executives recognise the possibility that shareholders may monitor their decisions. In contrast, internal targets may not and are, subsequently, vulnerable to executive abuse. Figures 16 and 17 overleaf illustrate the distribution of performance targets considered along a continuum from external to internal, and even unspecified.

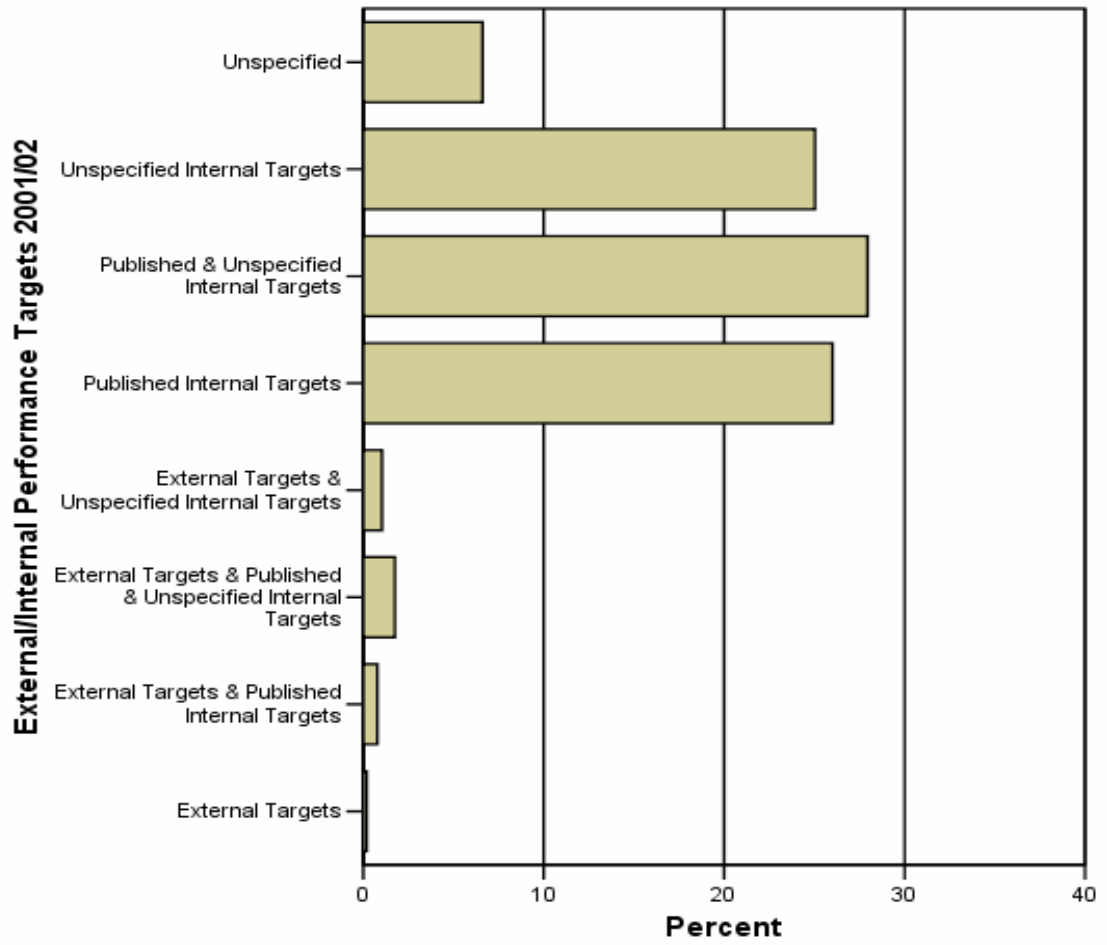


Figure 16. Executive external/internal performance targets for 2001/02.

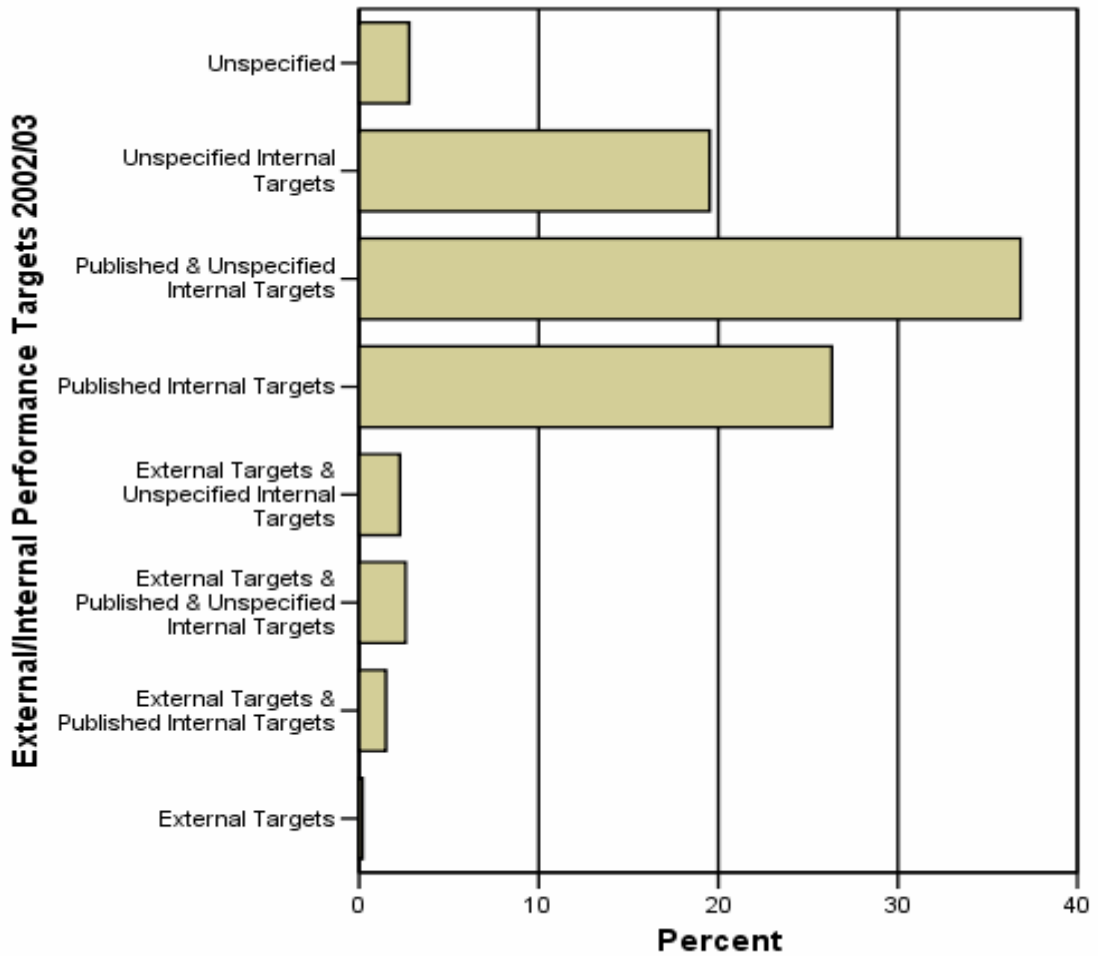


Figure 17. *Executive external/internal performance targets for 2002/03.*

Results indicate that in 2001/02, 88.6% of executives have their annual bonus linked to some form of performance target. Significantly, a small fraction (0.3%) of the companies in the sample use external targets (ETs), which are share-based, as a solitary measure of short-term performance. Furthermore, 26% implement published internal targets (PITs) and a further 0.8% uses a mixture of the two. In addition, 30.8% use a combination of ETs and/or PITs in conjunction with unspecified internal targets (UITs), whereas 25% use UITs only.

In the following year, this figure increases to 91.8%. Again, a small fraction (0.2%) of companies use ETs as a solitary measure of short-term performance. Furthermore,

26.3% utilise PITs and a further 1.5% use a mixture of the two. In addition, 41.7% use a combination of ETs and/or PITs with UITs, whereas 19.5% use UITs only.

In total, 27% of companies in 2001/02 and 28% of companies in 2002/03 use performance targets and contemporaneously disclose them. Although not a significant percentage, approximately one-third of firms actively practice a transparent compensation strategy. As the mirror image of this, 55.8% and 61.2% of firms in 2001/02 and 2002/03 respectively have some unspecified element in their annual bonus schemes.

However, in 2001/02, 6.6% of firms did not disclose the performance conditions that are attached to the annual bonus. This figure decreases to 2.8% in the following year. Significantly, in 2001/02, 25% of firms refer to internal performance targets but fail to provide specific details. This figure decreases to 19.5% in 2002/03. In total, 62.4% of companies in 2001/02 and 64% of companies in 2002/03, use performance targets but fail to fully disclose specific details, if at all. Consequently, a significant number of firms in the sample, approximately two thirds, actively practice an opaque compensation strategy.

Results also indicate that the most frequently occurring performance measures over the two-year period consist of three PITs (based on EPS, group profit, and cash flow), and two UITs (based on individual and group performance targets). For 2001/02 and 2002/03, cumulative frequency scores indicate that individual performance targets are the most common performance measure (2001/02 = 517; 2002/03 = 601), followed by group profit targets (2001/02 = 476; 2002/03 = 549), then by EPS (2001/02 = 368; 2002/03 = 388), then by group performance targets (2001/02 = 309; 2002/03 = 311) and, finally, by cash flow targets (2001/02 = 123; 2002/03 = 213).

The next section extends the analysis above and examines the shifts in performance targets over the two years (i.e. from 2001/02 to 2002/03).



#### 5.2.3.3. Executive performance target migration

In 2001/02, 164 executives were not compensated with an annual bonus. In the following year, 86.6% (n = 142) of this group did receive an annual bonus and the shifts are illustrated in the bottom part of Figure 18 overleaf. In 2002/03, 101 executives had their annual bonus removed from their remuneration package and these changes are illustrated in the top part of Figure 18 overleaf. A total of 123 executives did not receive an annual bonus in 2002/03, a reduction of 25%.

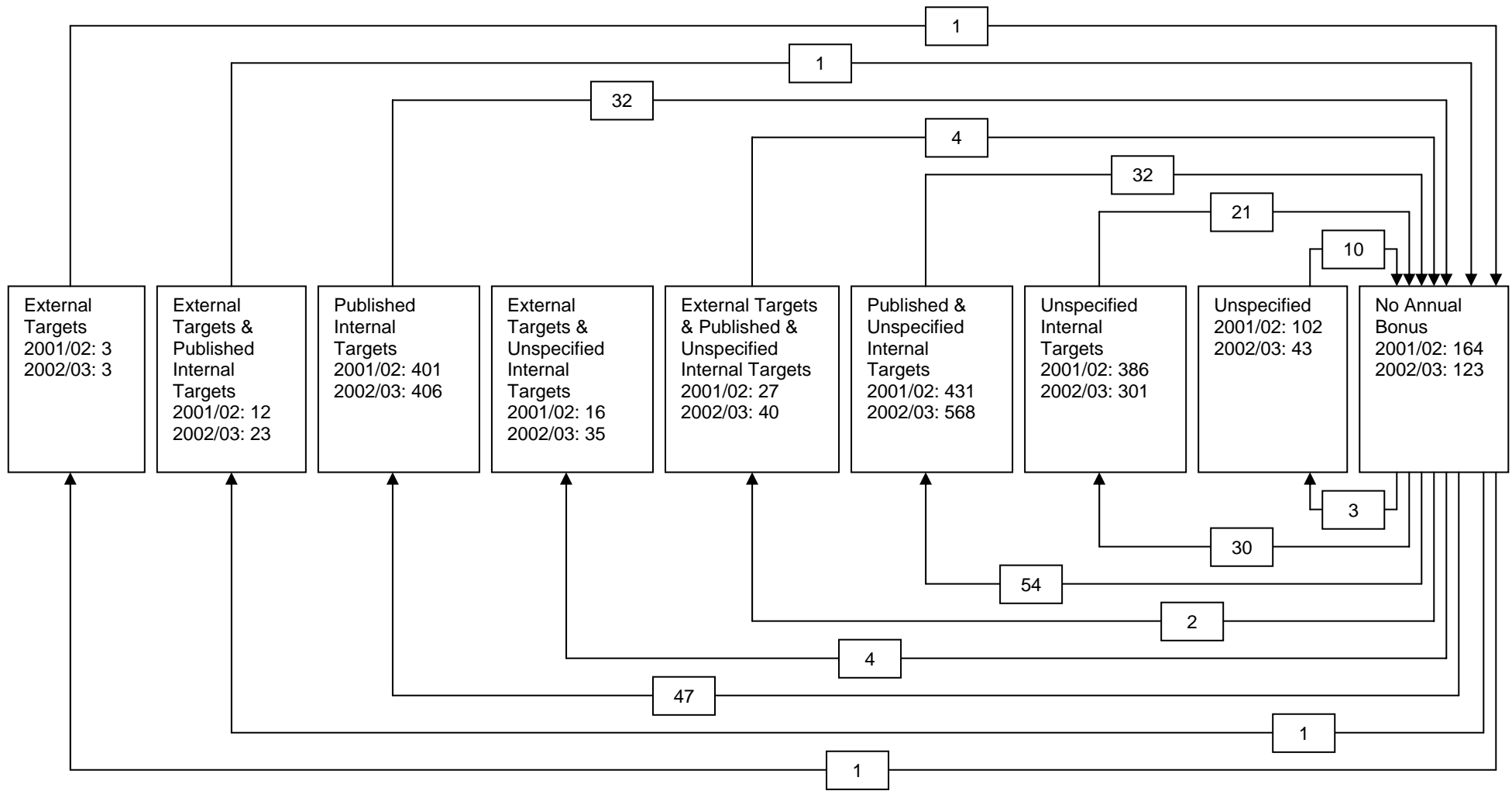


Figure 18. Executive performance target migration to and from 'no annual bonus'.

Further analysis explores these bonus changes from two contrasting perspectives. The first perspective considers the migration of performance targets based on a hard to soft continuum (See Figure 19 overleaf). Again, hard targets are measurable targets open to shareholder monitoring whereas soft targets include any unspecified element.

The second perspective examines the migration of performance targets based on a simple to complex continuum (See Figure 20 overleaf). Simple targets include a single performance target. This may better align the relationship between executive action and firm performance by preventing the misallocation of effort across multiple activities and, therefore, channelling executive effort more effectively. Of course, by the same token, an executive's focus on a single performance target will mean that others may be neglected.

On the other hand, complex targets consist of multiple performance targets and may distort the relationship between executive action and firm performance when executives must allocate effort across multiple activities (Balkin et al., 2000; Bushman & Smith, 2001). At the same time, complex targets make it more difficult for shareholders to monitor whether bonuses are actually earned.

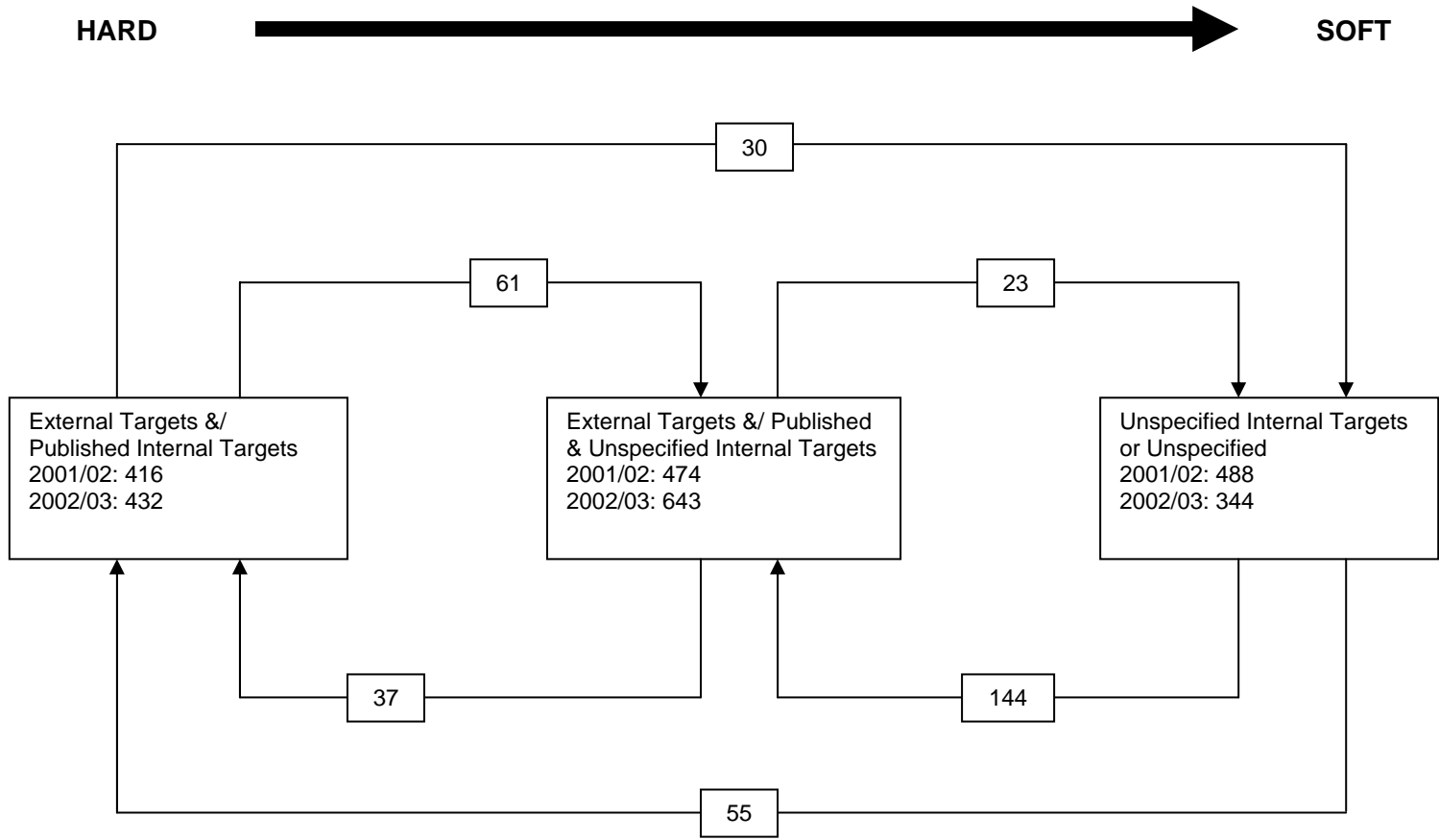


Figure 19. Executive performance target migration in the context of 'hard' to 'soft'.

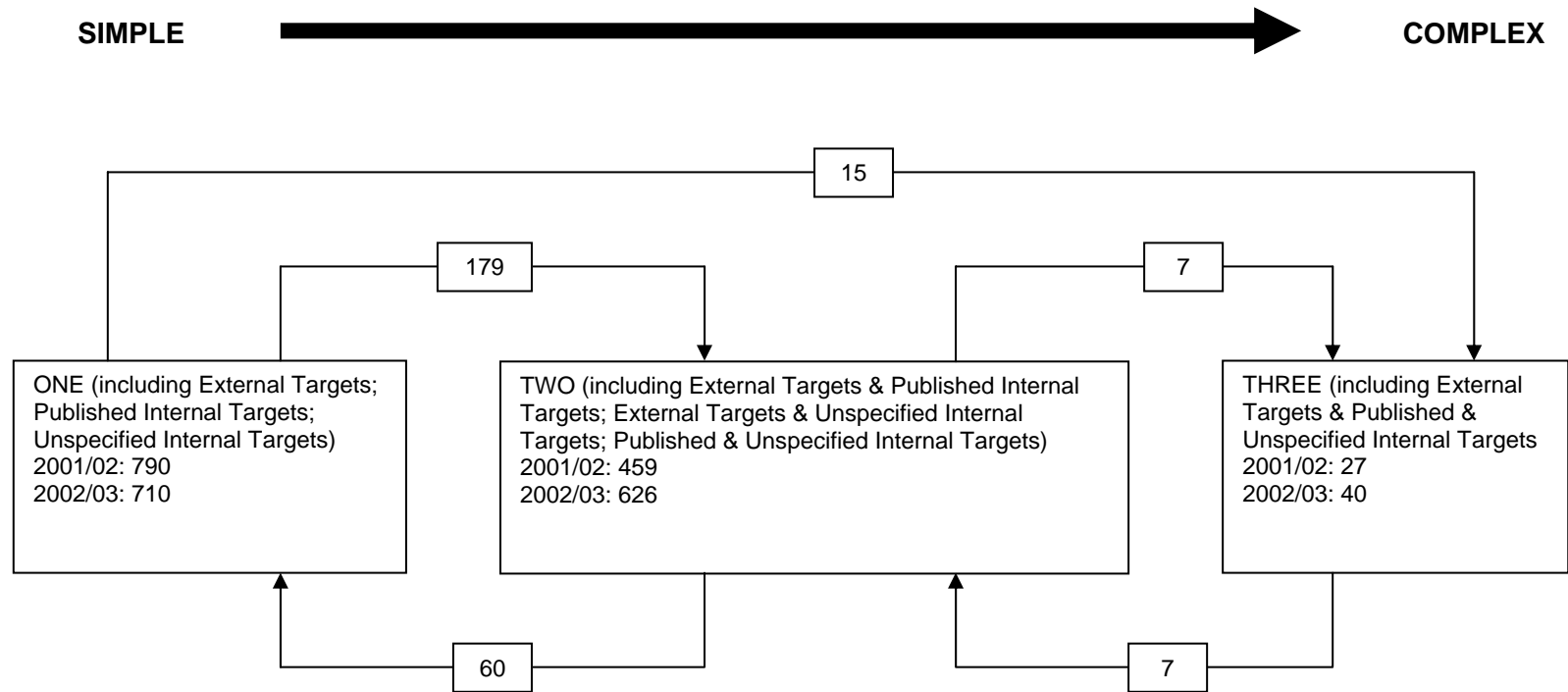


Figure 20. Executive performance target migration in the context of 'simple' to 'complex'.

Figure 19 suggests that companies are utilising more measurable hard performance targets in contrast to softer, unspecified targets. Specifically, 199 executives transferred from soft performance targets to a hard performance target strategy, which incorporated at least one quantifiable performance indicator. In contrast, 53 executives moved in the opposite direction, i.e. from hard to soft. However, the largest shift from soft performance targets was to those performance targets that maintained some unspecified element (n = 144).

Alternatively, Figure 20 suggests that companies are utilising more types of performance targets and, hence, adopting a more complex rather than simple approach when designing executive bonuses. Specifically, 194 executives transferred from one to two or three types of performance target in contrast to 60 executives that moved in the opposite direction. However, the largest shift from a simple performance target approach was to supplement the solitary measure of performance with an additional indicator (n = 179).

Having outlined the remuneration details for the executive director sample and, in particular, highlighted the types of bonus payments and performance targets companies use, it seems appropriate to now explore the association between the value of the annual bonus and firm performance.

#### *5.2.4. Executive annual bonus value and firm performance*

Figure 21 and 22 overleaf illustrate the relationship between the annual bonus for 2001/02 and 2002/03 and the mean log-TSR value for 2001/02 and 2002/03 respectively. In general, results indicate that large bonuses do not guarantee improved firm performance.

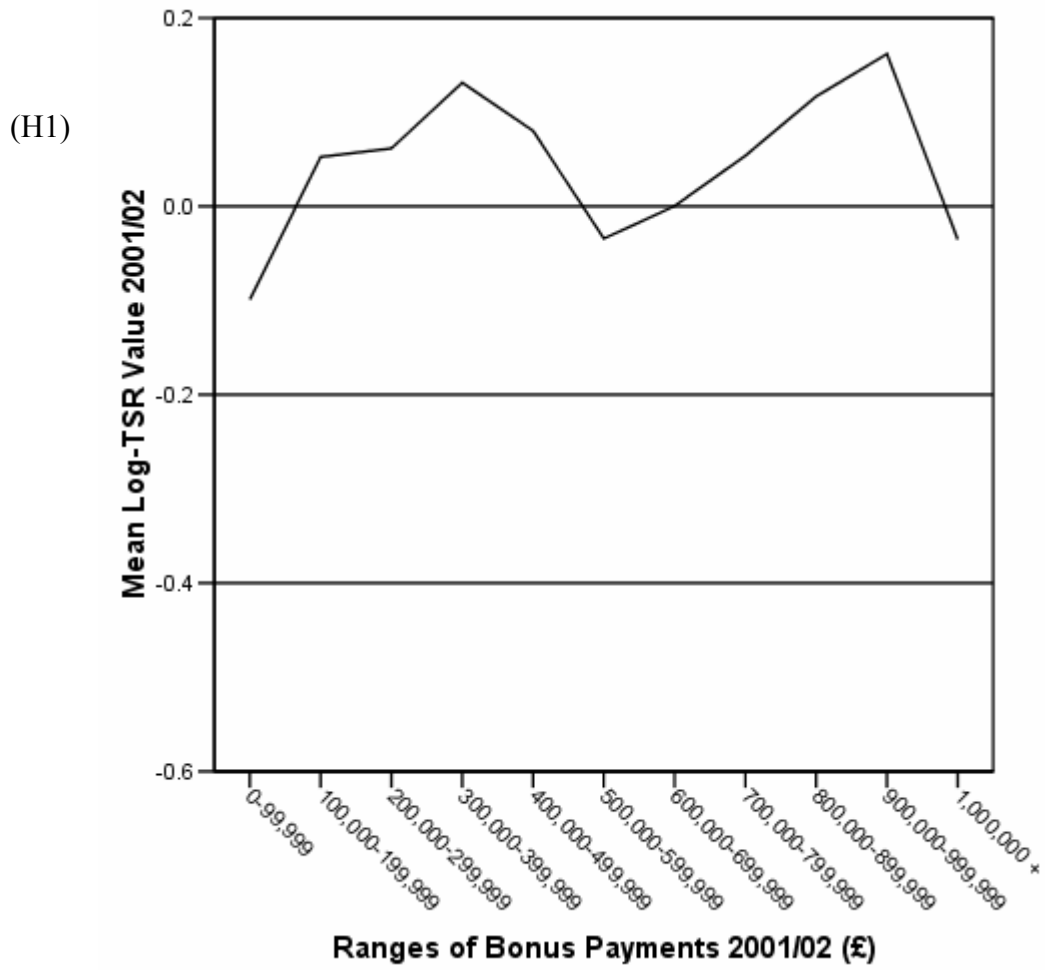


Figure 21. Executive bonus payment ranges for 2001/02 compared with the mean log-TSR value for 2001/02.

(H1)

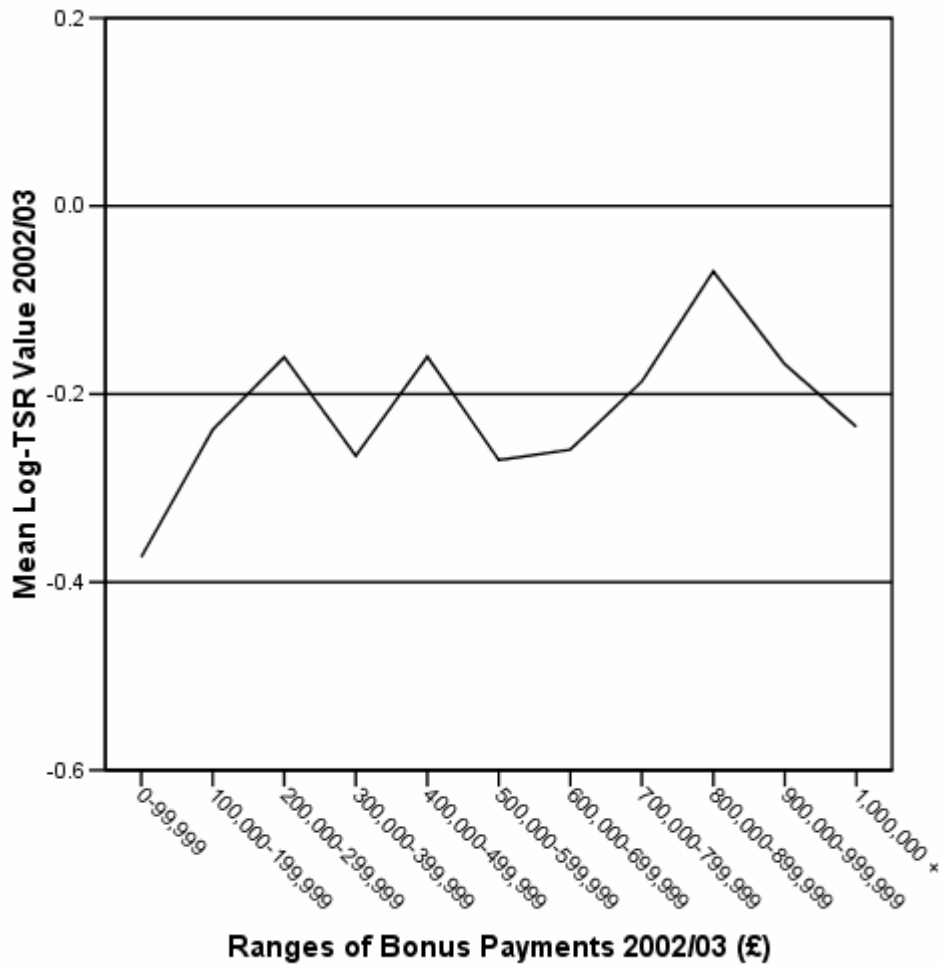


Figure 22. Executive bonus payment ranges for 2002/03 compared with the mean log-TSR value for 2002/03.

Of course, TSR is a controversial short-term performance indicator due to its vulnerability to external shocks unrelated to executives' efforts. Therefore, EPS is used as an alternative measure of performance and represents a measure of profit that is not as vulnerable to external factors as TSR, but one that executives can feasibly influence more easily. Consequently, Figure 23 and 24 overleaf illustrate the relationship between the annual bonus for 2001/02 and 2002/03 and the mean EPS value for 2001/02 and 2002/03 respectively. Results imply a linear relationship, which suggests that firm performance increases with bonus value. Specifically, improvements in a firm's EPS are expected to be associated with larger bonus payments. To some extent, this may be a result of incentive effects, but must also reflect the fact that many bonuses are mechanically



linked through the bonus formula, with some variables (e.g. net profit, sales, etc) feeding directly into EPS.

(H1)

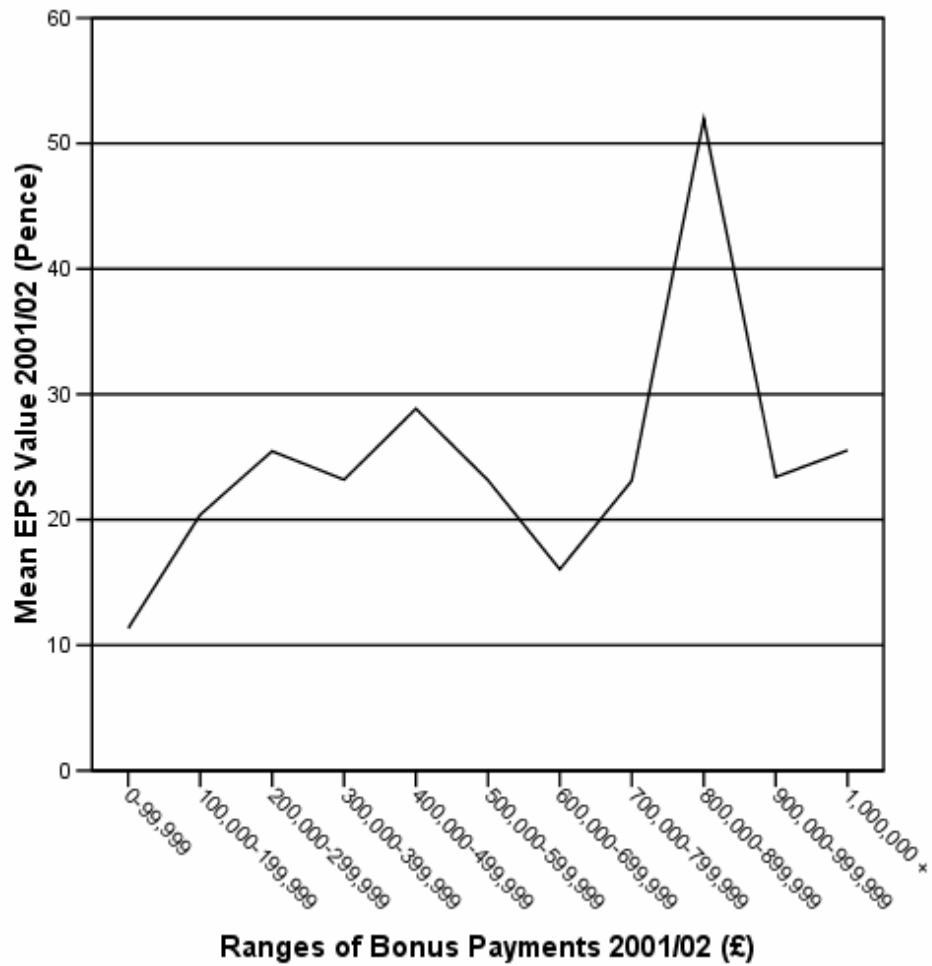


Figure 23. Executive bonus payment ranges for 2001/02 compared with the mean EPS value for 2001/02.

(H1)

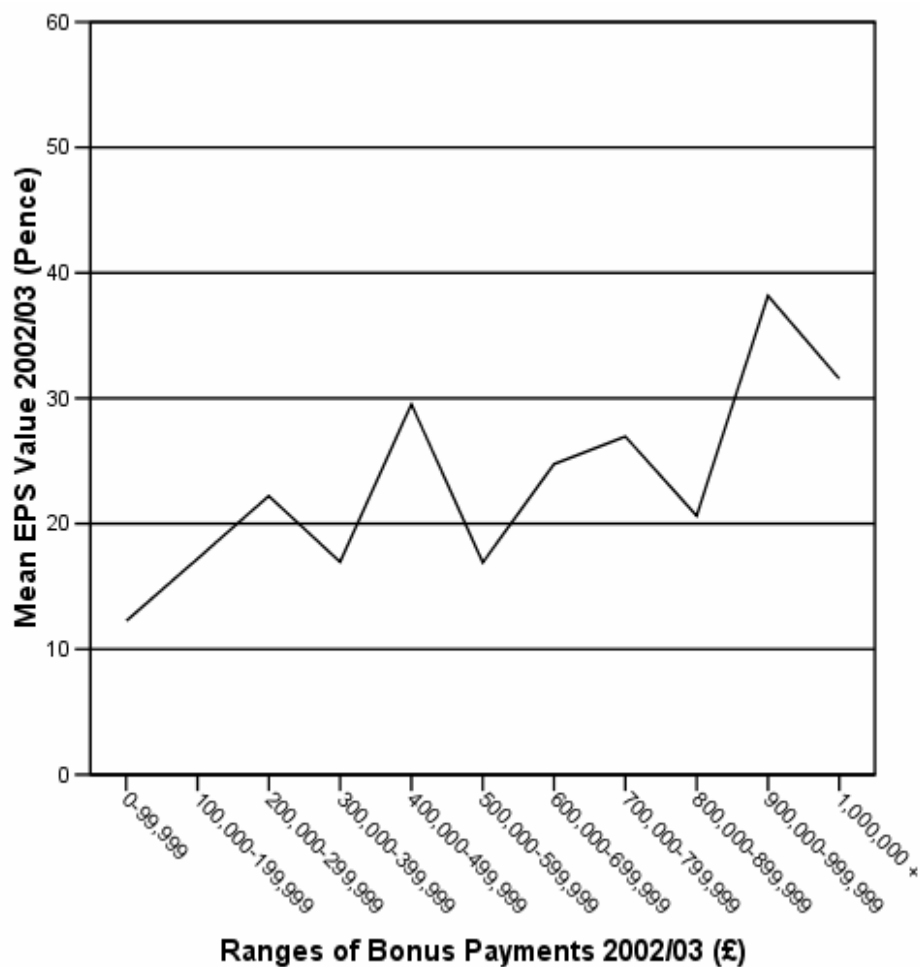


Figure 24. Executive bonus payment ranges for 2002/03 compared with the mean EPS value for 2002/03.

The section to follow explores the association between short-term ‘visible’ annual bonus payments (i.e. cash) and the mean Log (1 + Bonus/Salary) transformation for 2001/02 and 2002/03 respectively.

### 5.2.5. Executive annual bonus value and payment types

Before presenting the results, the choice of this transformation (i.e. Log (1+ Bonus/Salary)) should be explained.

Originally, the value of the annual bonus was to be analysed in its log form: Log (Bonus<sub>i,t</sub>). However, using Log (Bonus<sub>i,t</sub>) resulted in data that was biased since all companies with zero bonuses are excluded from the analysis. Consequently, this leads

to a sample that is misrepresented as 19.1% and 21.5% of executives with bonus schemes, in 2001/02 and 2002/03 respectively, received no annual bonus. As a means to offset this problem  $\text{Log}(1 + \text{Bonus}_{i,t} / \text{Salary}_{i,t})$  is employed. For a full description of this log equation refer to chapter 4, page 85. However, the use of the transformation of this bonus variable has implications for the significance of firm size, which will be explained later.

Furthermore, the annual bonus is predominately a cash payment. However, executives do receive share-based bonuses. Therefore, unless holding conditions are explicitly attached to shares and stated in the company's annual report, shares are classified as an immediate short-term bonus that may be cashed as soon as they are awarded and its value, if disclosed, is included in the total annual bonus amount for that year. In addition, some companies require executives, albeit on a compulsory or voluntary basis, to defer and invest a percentage of their cash bonus in the form of company shares. Consequently, if the amount to be deferred is disclosed in the annual report then this figure is also included in the total annual bonus amount for that year.

As a result, Figure 25 and 26 overleaf examine the relationship between annual bonus payment types (i.e. short-term, instant cash payments versus alternative possibilities such as long-term pay including shares, deferred shares, and matching shares) for 2001/02 and 2002/03 and the mean  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  for 2001/02 and 2002/03 respectively. In general, results reveal that short-term, instant cash payments are associated with low bonus amounts whereas all other forms of payment, which are more long-term such as shares and deferred shares, are associated with large bonuses.

(H3)

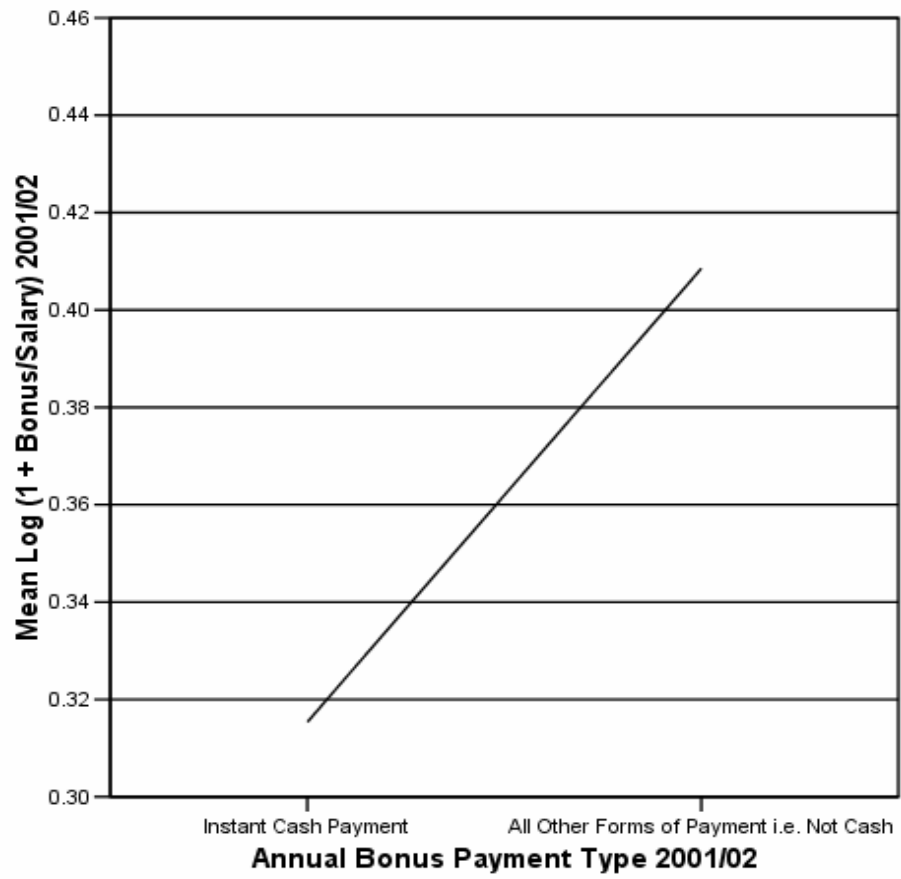


Figure 25. Executive annual bonus payment type for 2001/02 compared with the mean  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  for 2001/02.

(H3)

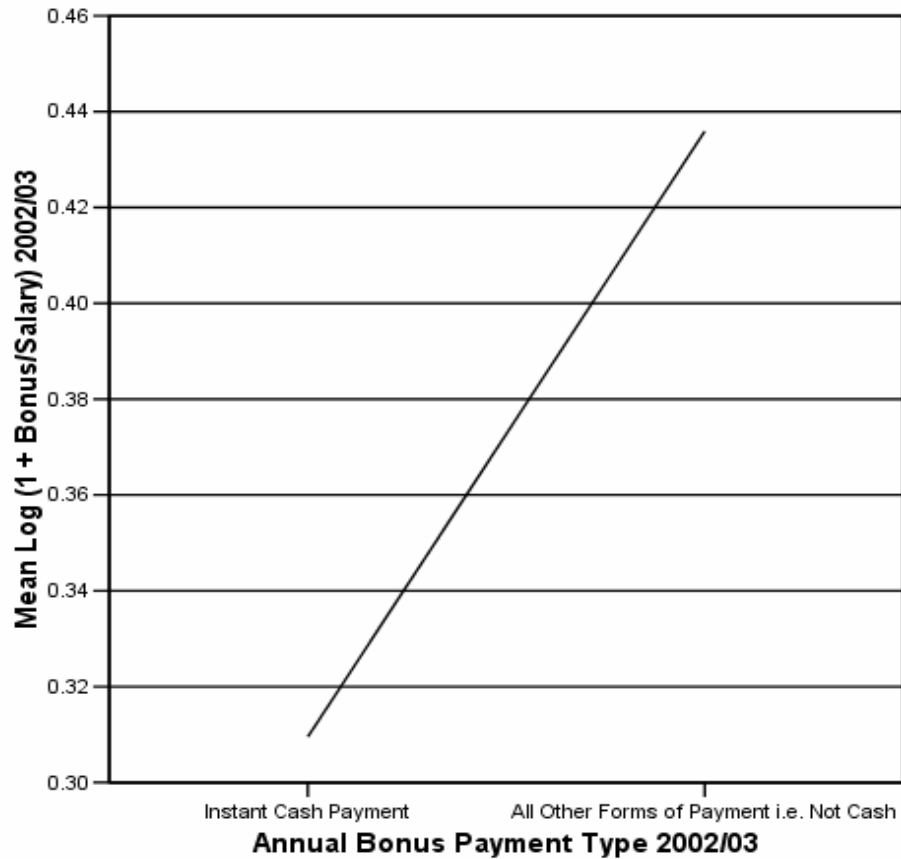


Figure 26. *Executive annual bonus payment type for 2002/03 compared with the mean Log (1 + Bonus/Salary) for 2002/03.*

But, to what extent do these payment types (i.e. instant cash payments versus alternative possibilities e.g. long-term pay) influence firm performance? Consequently, the next section examines the relationship between annual bonus payment types for 2001/02 and 2002/03 and firm performance as measured by TSR for 2001/02 and 2002/03 and EPS for 2001/02 and 2002/03 respectively.

#### *5.2.6. Executive annual bonus payment types and firm performance*

Figure 27 and 28 overleaf illustrate the relationship between annual bonus payment types for 2001/02 and 2002/03 in relation to firm performance as measured by the mean log-TSR value for 2001/02 and 2002/03 respectively. The analysis has produced contrasting results. Figure 27 indicates that compensating executives with short-term, instant cash payments is associated with improved firm performance when compared to alternative, long-term modes of payment. In contrast, Figure 28 suggests that remunerating

executives with short-term, instant cash payments is associated with weaker firm performance when compared to alternative, long-term forms of payment.

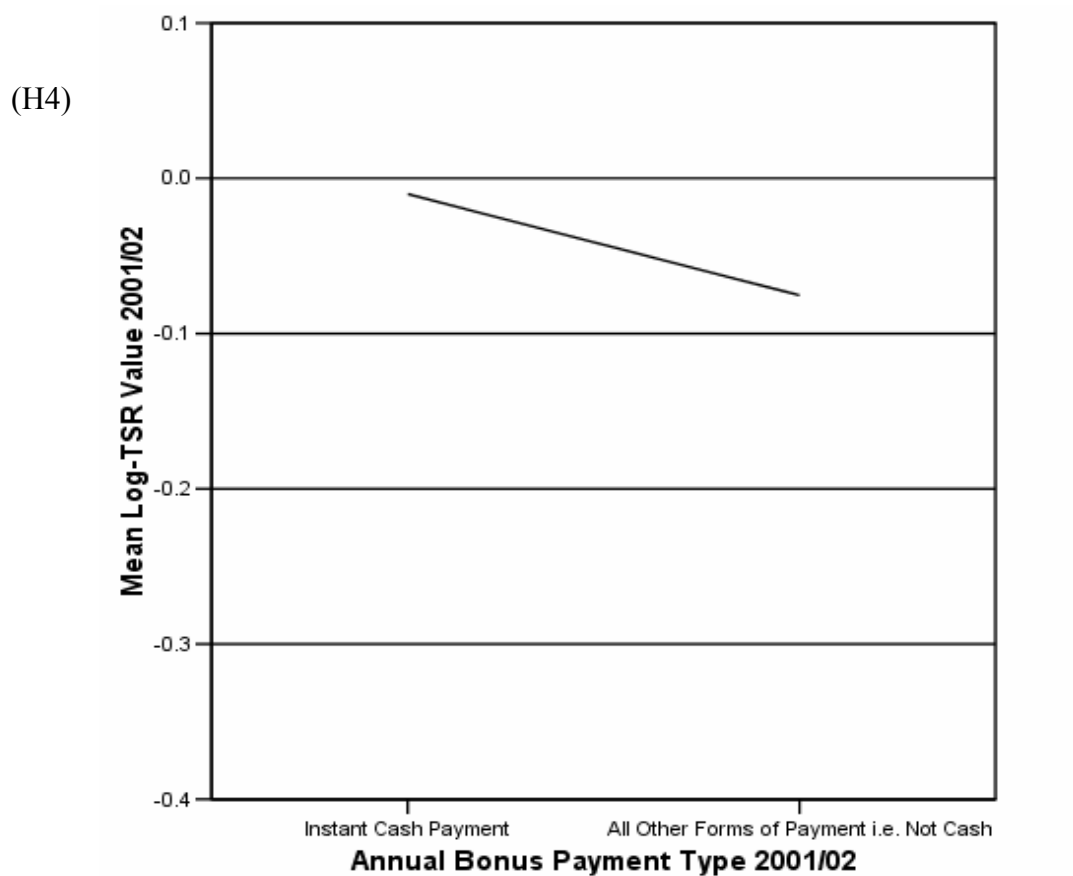
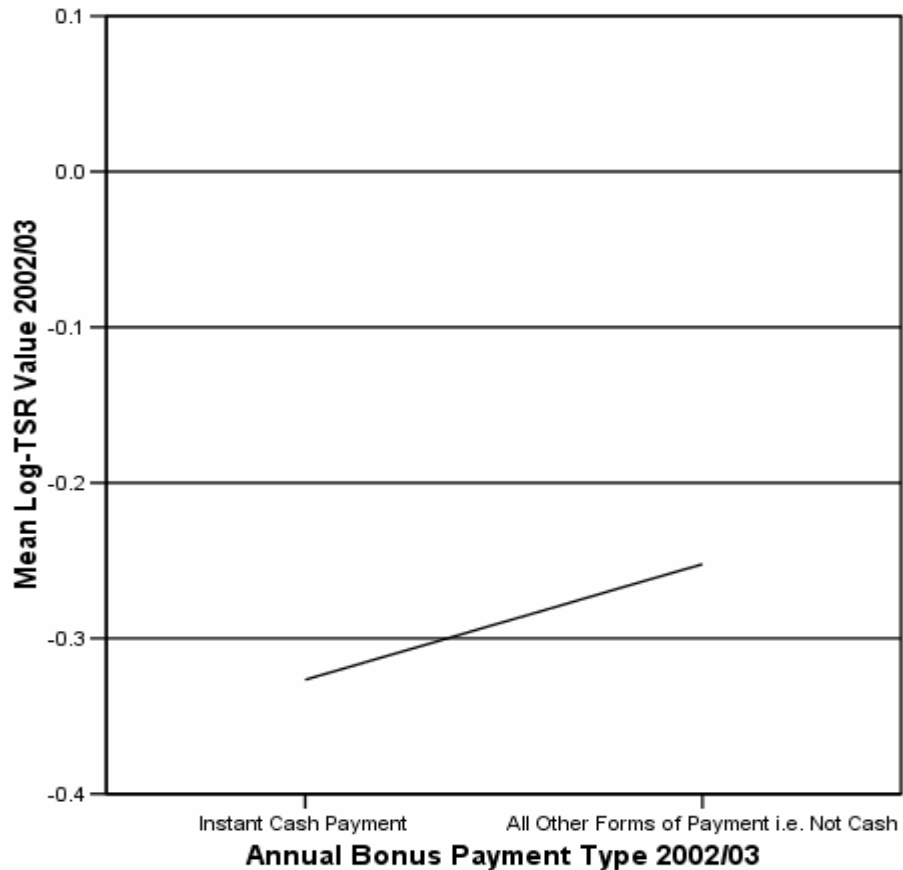


Figure 27. Executive annual bonus payment type for 2001/02 compared with the mean log-TSR value for 2001/02.

(H4)



Figure

28. *Executive annual bonus payment type for 2002/03 compared with the mean log-TSR value for 2002/03.*

Figure 29 and 30 overleaf illustrate the relationship between annual bonus payment types for 2001/02 and 2002/03 and the mean EPS value for 2001/02 and 2002/03 respectively. The results indicate that compensating executives with short-term, instant cash payments is associated with improved company performance. In contrast, alternative, long-term modes of payment are associated with weaker company performance.

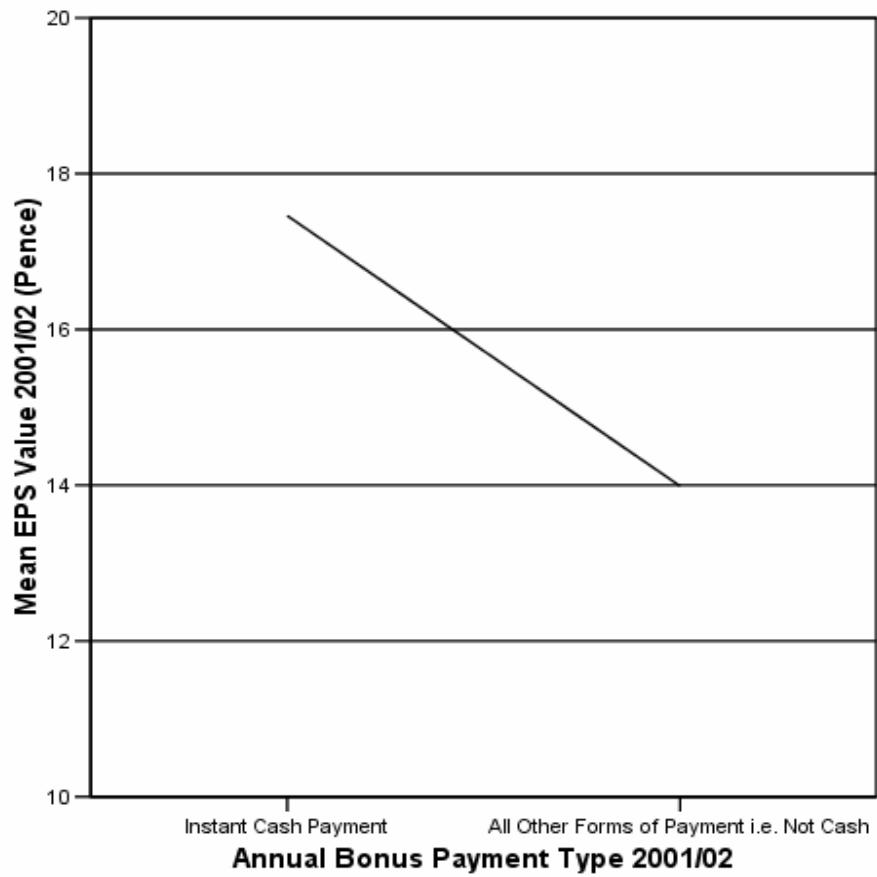


Figure 29. *Executive annual bonus payment type for 2001/02 compared with the mean EPS value for 2001/02.*



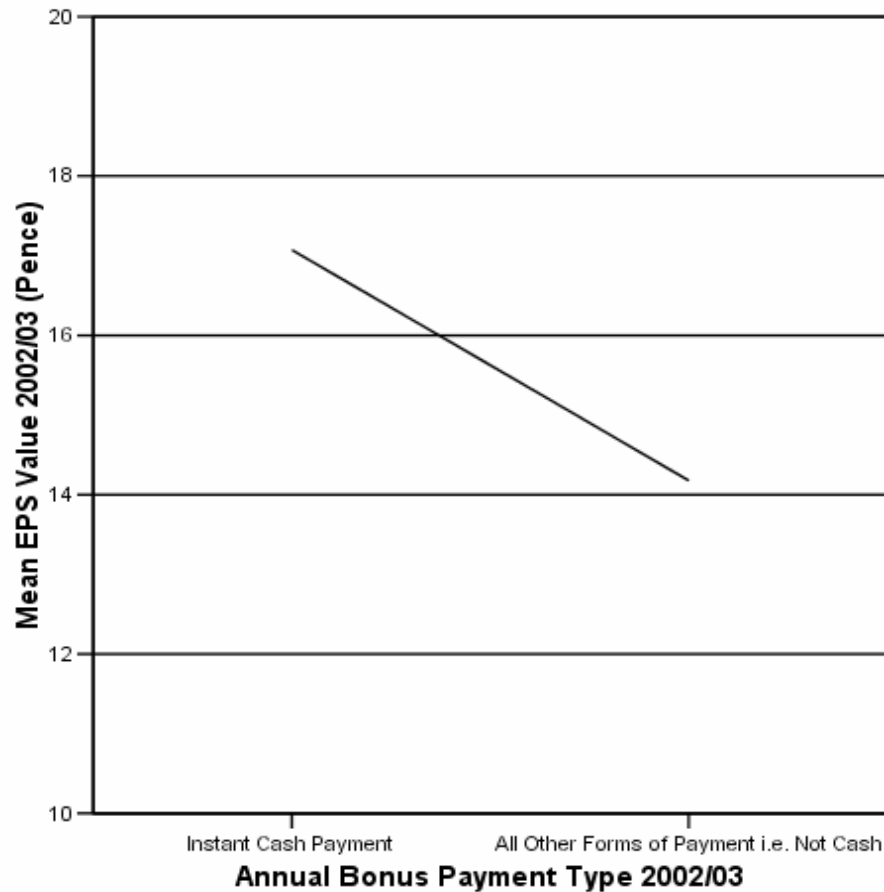


Figure 30. *Executive annual bonus payment type for 2002/03 compared with the mean EPS value for 2002/03.*

The following analysis explores the association between annual bonus performance targets (i.e. hard/soft versus simple/complex) and the value of the annual bonus as measured by  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  and what affect these targets may have on firm performance.

#### *5.2.7. Executive annual bonus value, performance targets, and firm performance*

Specifically, section 5.2.7.1 examines the relationship between hard/soft performance targets for 2001/02 and 2002/03 compared with the mean  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  for 2001/02 and 2002/03 respectively. Section 5.2.7.2 compares hard/soft performance targets for 2001/02 and 2002/03 against the mean log-TSR values for 2001/02 and 2002/03 respectively. Finally, sections 5.2.7.3 and 5.2.7.4 present the same analysis using simple/complex performance targets.

### 5.2.7.1. Executive annual bonus value and hard/soft performance targets

Figure 31 below and 32 overleaf illustrate the relationship between hard/soft performance targets for 2001/02 and 2002/03 and the mean  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  for 2001/02 and 2002/03 respectively. Hard targets constitute ETs and PITs or both and are subject to shareholder monitoring. In contrast, soft targets consist of anything that includes an unspecified element and, subsequently, are not open to shareholder monitoring.

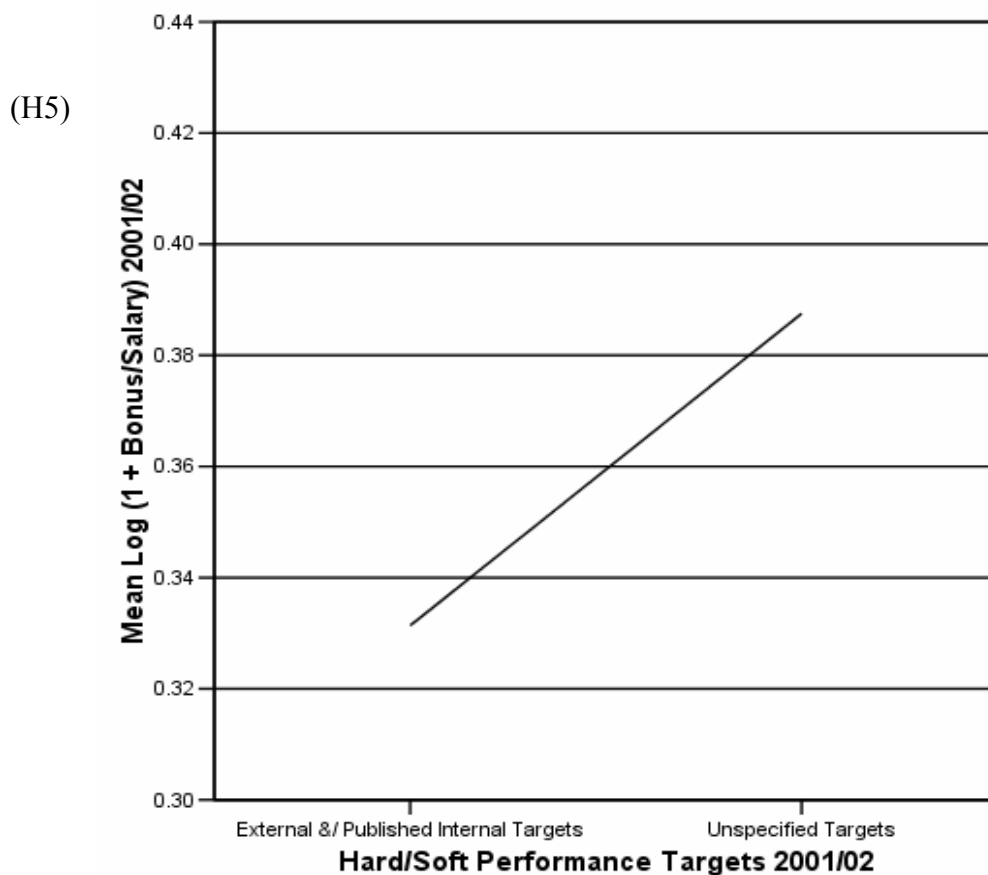


Figure 31. *Executive hard/soft performance targets for 2001/02 compared with the mean  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  for 2001/02.*

(H5)

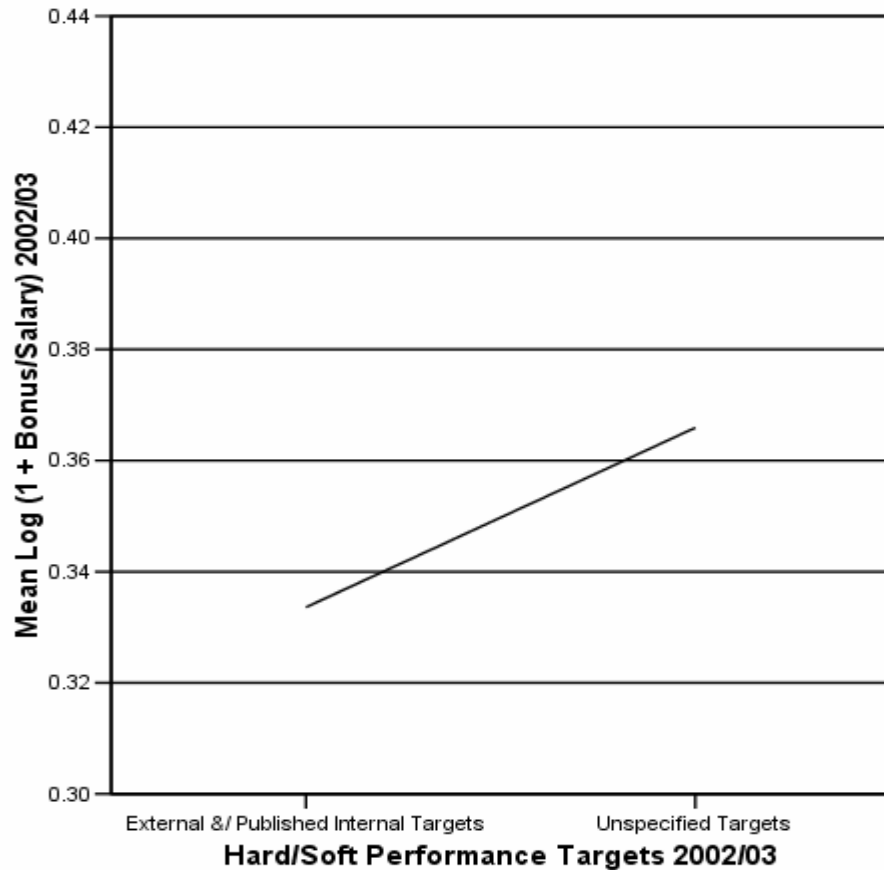


Figure 32. Executive hard/soft performance targets for 2002/03 compared with the mean Log (1 + Bonus/Salary) for 2002/03.

The results, which are consistent over both years, suggest that as performance targets get increasingly softer (i.e. implementing vaguer performance targets) the size of the bonus increases relative to salary. In contrast, as the performance targets get harder (i.e. making the performance targets more transparent) the size of the bonus decreases relative to salary. This is consistent with tougher, externally verifiable targets leading to lower rewards that are harder for executives to earn.

#### 5.2.7.2. Executive hard/soft performance targets and firm performance

Figure 33 and 34 overleaf compare hard/soft performance targets for 2001/02 and 2002/03 against the mean log-TSR values for 2001/02 and 2002/03 respectively. For the purpose of this analysis, hard targets are measurable targets open to shareholder monitoring whereas soft targets include any unspecified element.

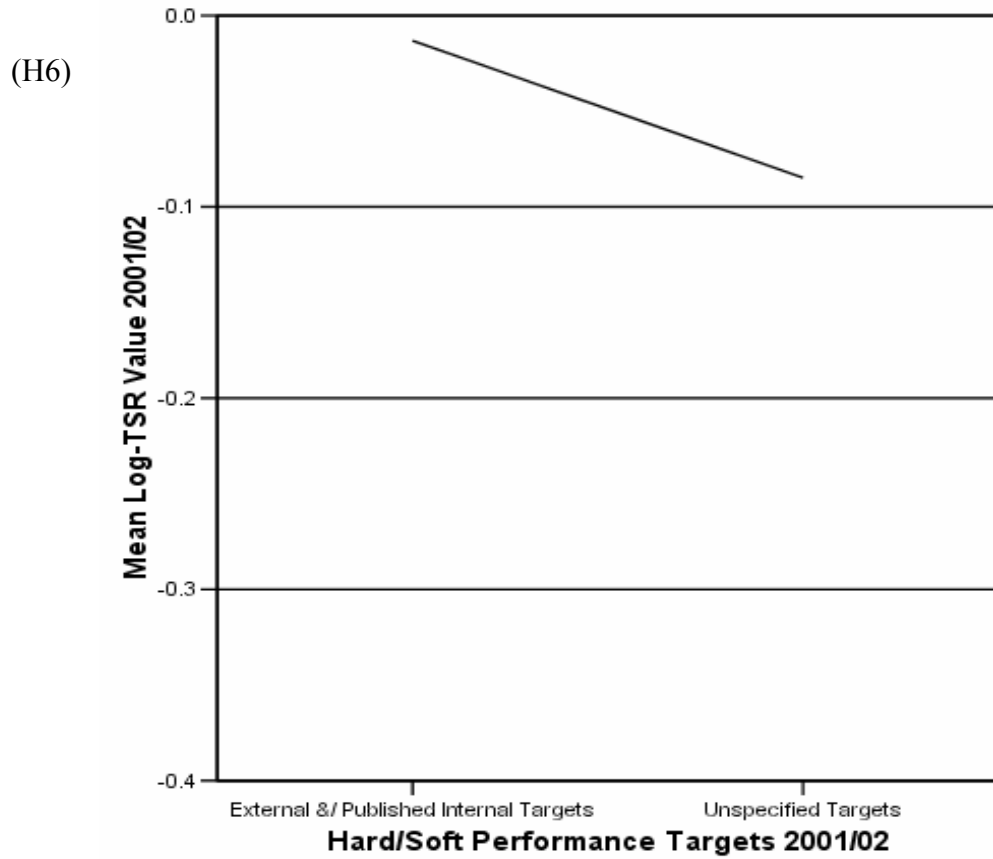


Figure 33. Executive hard/soft performance targets for 2001/02 compared with the mean log-TSR value for 2001/02.

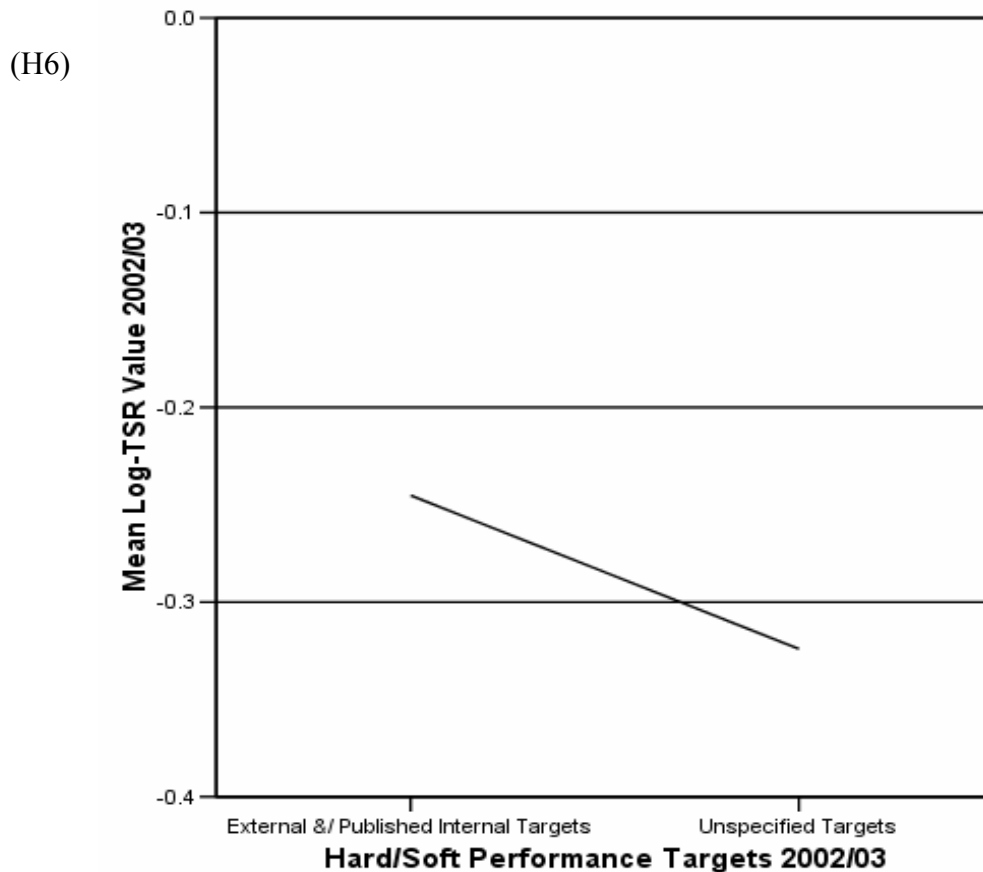


Figure 34. *Executive hard/soft performance targets for 2002/03 compared with the mean log-TSR value for 2002/03.*

The results, which are consistent over both years, are indicative of a negative trend between TSR and soft performance targets. Consequently, as the performance targets become increasingly softer (i.e. implementing vaguer performance targets) TSR decreases. In contrast, hard targets are positively associated with TSR: as performance targets become harder (i.e. making the performance targets more transparent) TSR increases.

Alternatively, Figure 35 and 36 overleaf examine the relationship between hard/soft performance targets for 2001/02 and 2002/03 and the mean EPS values for 2001/02 and 2002/03 respectively.

(H6)

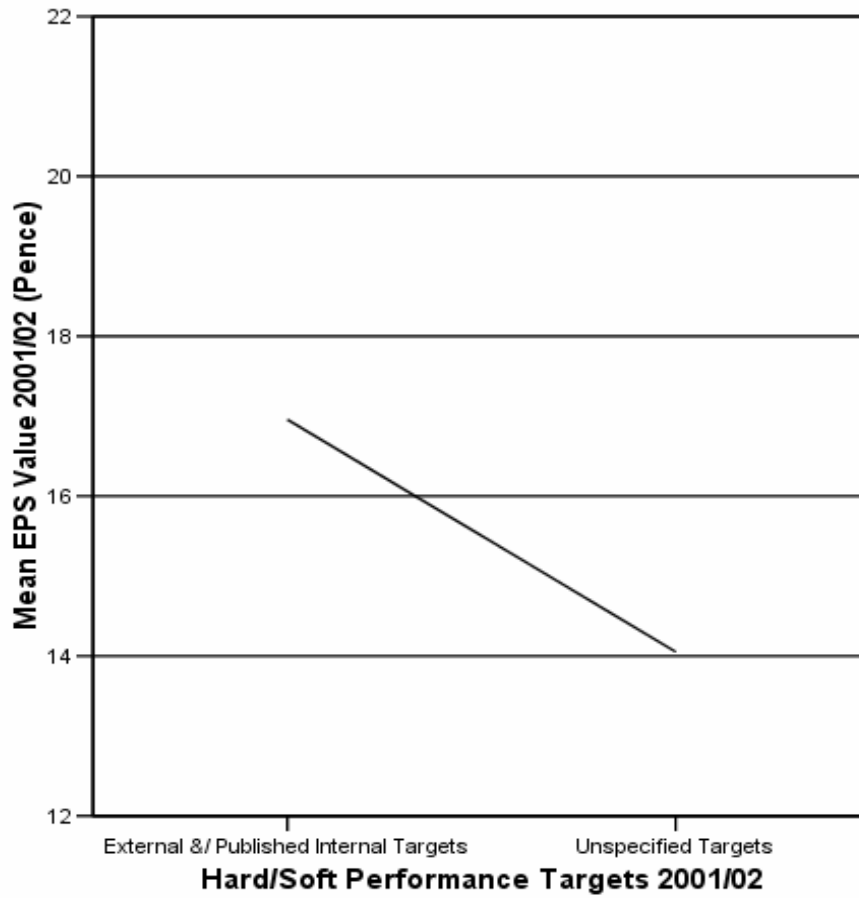


Figure 35. Executive hard/soft performance targets for 2001/02 compared with the mean EPS value for 2001/02.

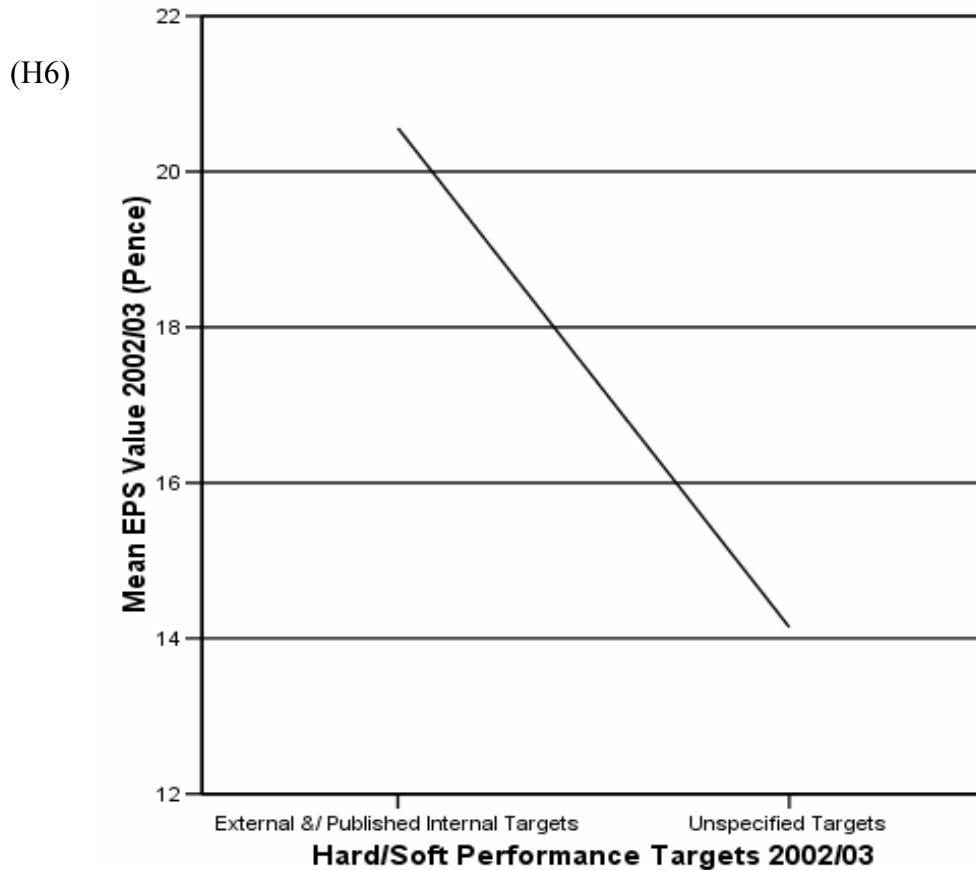


Figure 36. Executive hard/soft performance targets for 2002/03 compared with the mean EPS value for 2002/03.

The results, which are again consistent over both years, are indicative of a negative association between EPS and soft performance targets. Therefore, as the performance targets become increasingly softer (i.e. implementing vaguer performance targets) EPS decreases. In contrast, hard targets are positively associated with EPS: as performance targets become harder (i.e. making the performance targets more transparent) EPS increases.

To summarise, descriptive results indicate that soft performance targets are negatively associated with firm performance whereas hard targets are positively associated with better firm performance, as measured by TSR and EPS.

### 5.2.7.3. Executive annual bonus value and simple/complex performance targets

As an alternative to the hard/soft classification, the complexity of performance targets and its association with firm performance is examined using two separate but not mutually exclusive variables. The distinction to be made is that one variable examines the type of performance target adopted, for example, ETs, PITs, UITs, whereas the later considers the actual performance measure employed, for example, TSR, EPS, sales, capital, etc. As a result, Figure 37 and 38 overleaf compare simple/complex performance targets for 2001/02 and 2002/03 based on performance target type against the mean  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  for 2001/02 and 2002/03. To supplement this, Figures 39 and 40 overleaf illustrate the relationship between simple/complex performance targets for 2001/02 and 2002/03 based on the number of performance measures and the mean  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  for 2001/02 and 2002/03. In this context, simple targets include a single performance target/measure. Conversely, complex targets consist of multiple performance targets/measures.



(H7)

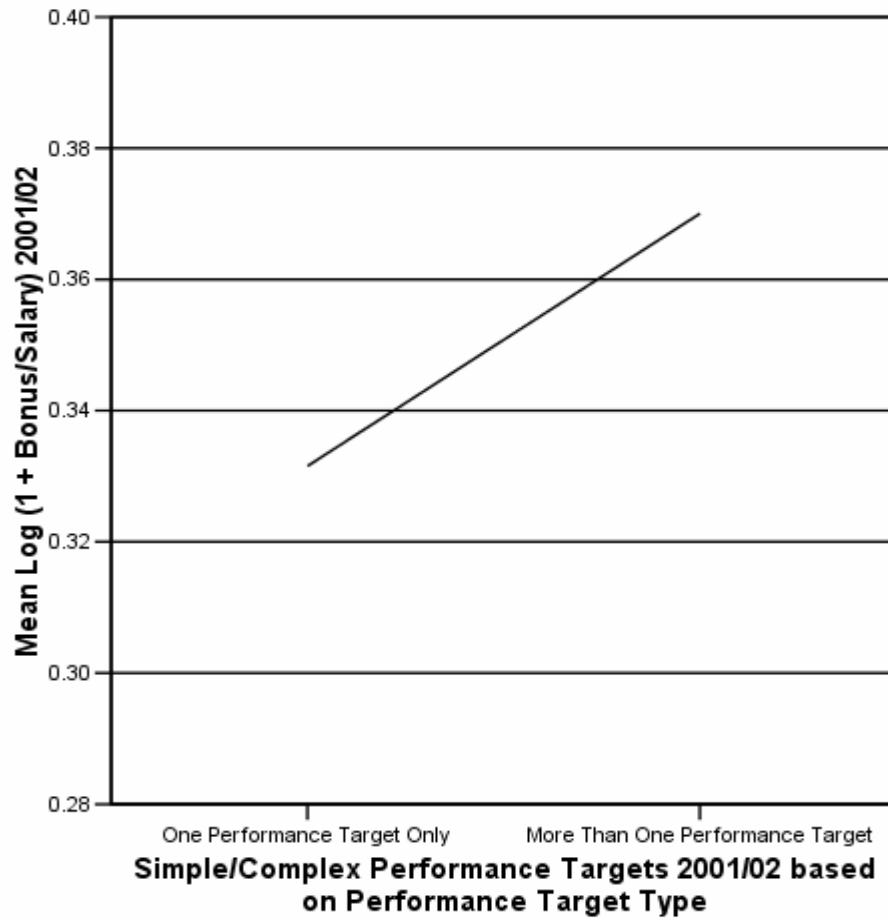


Figure 37. Executive simple/complex performance targets for 2001/02 based on performance target type compared with the mean Log (1 + Bonus/Salary) for 2001/02.

(H7)

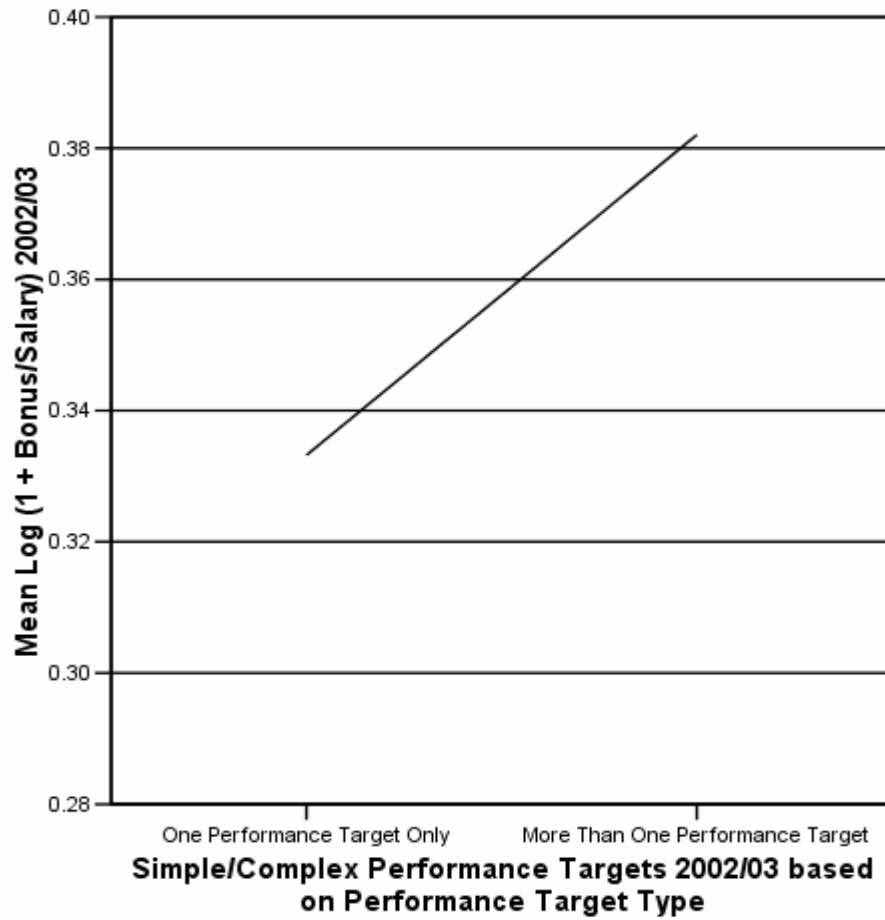


Figure 38. *Executive simple/complex performance targets for 2002/03 based on performance target type compared with the mean Log (1 + Bonus/Salary) for 2002/03.*

(H7)

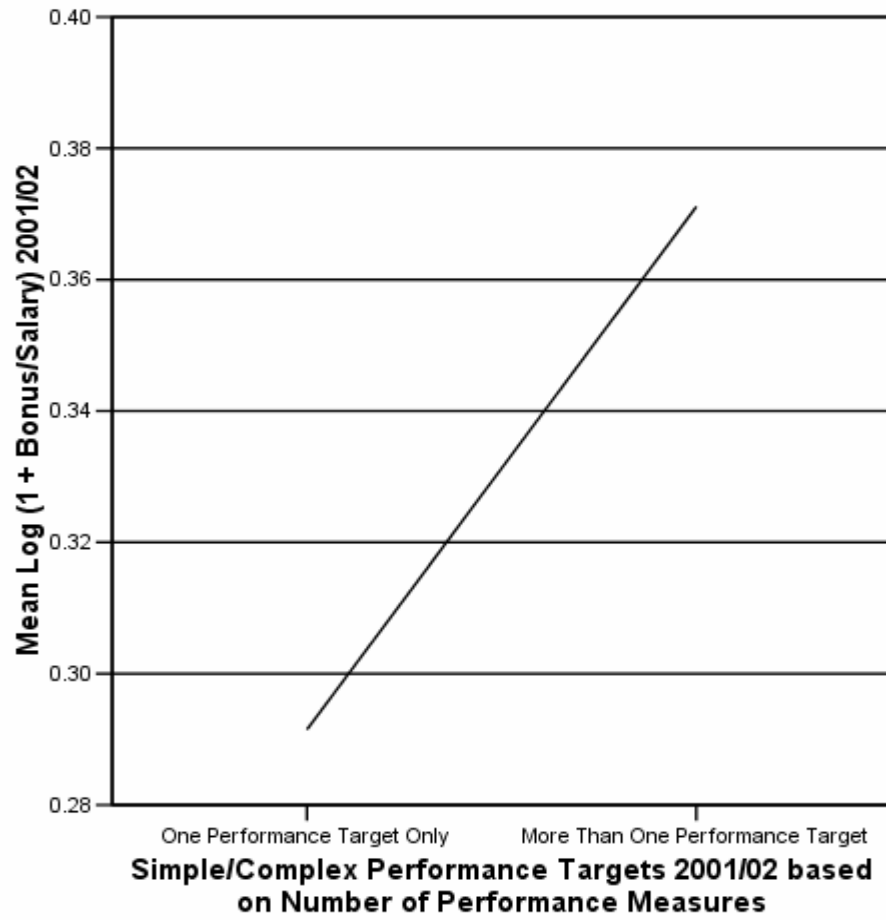


Figure 39. Executive simple/complex performance targets for 2001/02 based on number of performance measures compared with the mean  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  for 2001/02.

(H7)

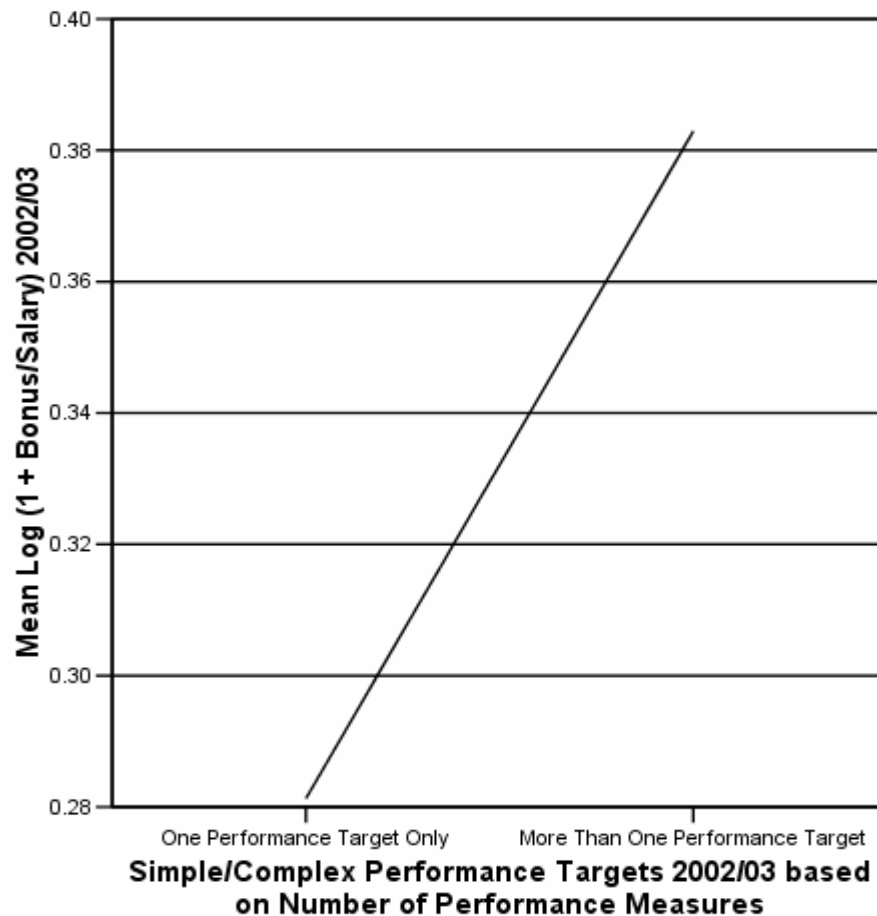


Figure 40. *Executive simple/complex performance targets for 2002/03 based on number of performance measures compared with the mean Log (1 + Bonus/Salary) for 2002/03.*

The results, which are again consistent over both years, are indicative of a positive trend between the complexity of performance targets (i.e. increasing the number of performance target types and/or number of measures) and the value of the bonus. Subsequently, executives that operate under complex performance target schemes can expect greater increments in bonus relative to salary. In contrast, results suggest that as performance targets become increasingly simpler (i.e. reducing the number of performance target types and/or number of measures) the bonus decreases. Therefore, executives that operate under simple performance target schemes can expect to receive smaller increments in bonus relative to salary. Significantly, simple targets do not compensate the executive as highly as those executives who are set complex targets, and executives may be acting self-interestedly, using complexity to mask softness in targets.

#### 5.3.7.4. Executive simple/complex performance targets and firm performance

As already defined in section 5.3.7.3, the complexity of performance targets and its association with firm performance is examined using two separate but not mutually exclusive variables. Consequently, Figure 41 overleaf examines the relationship between simple/complex performance targets for 2001/02 based on performance target type and the mean log-TSR value for 2001/02. To supplement this, Figure 42 overleaf compares simple/complex performance targets for 2001/02 based on number of performance measures against the mean log-TSR value for 2001/02.

(H8)

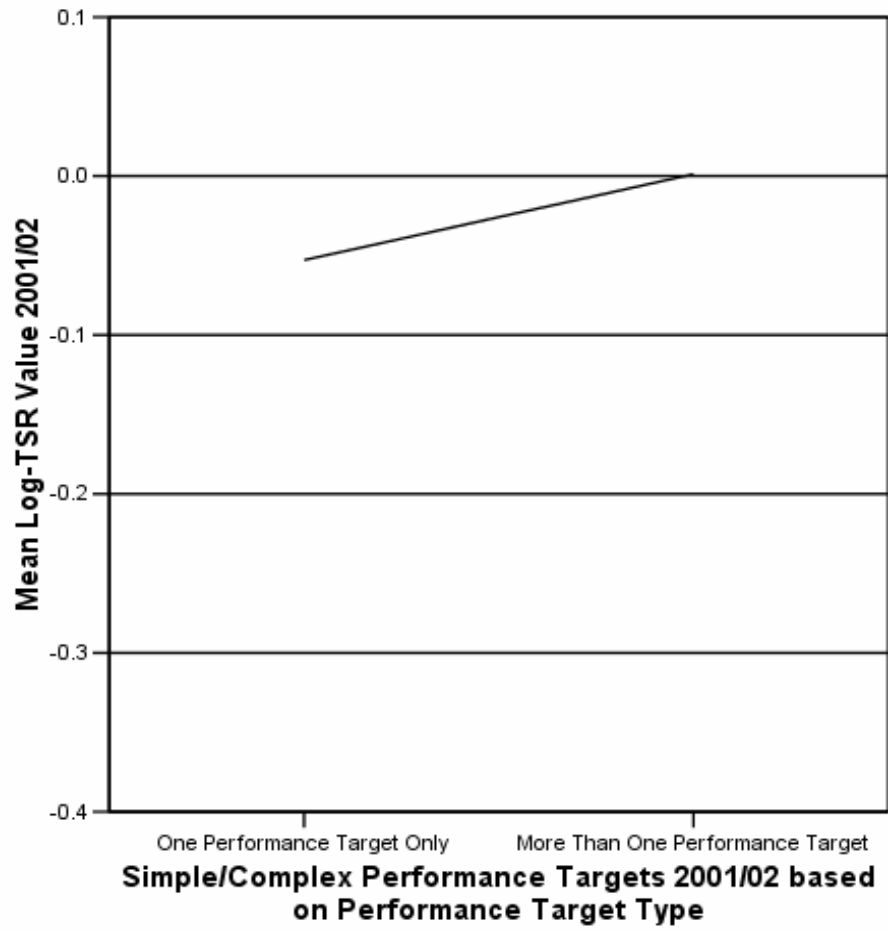


Figure 41. *Executive simple/complex performance targets for 2001/02 compared with the mean log-TSR value for 2001/02 based on performance target type.*

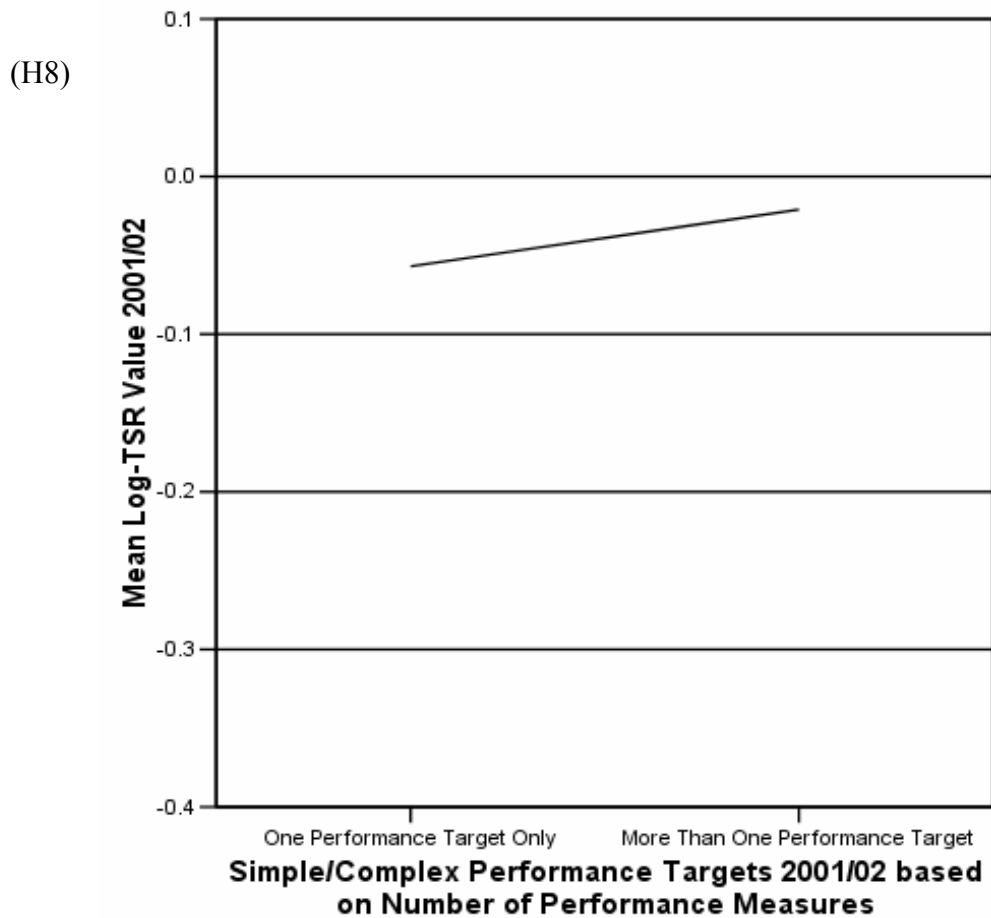


Figure 42. *Executive simple/complex performance targets for 2001/02 compared with the mean log-TSR value for 2001/02 based on number of performance measures.*

The results suggest that there is a positive association between TSR and complex performance targets. Subsequently, as performance targets become more complex (i.e. increasing the number of performance target types and/or measures) TSR increases. In contrast, simple targets are negatively associated with TSR: as performance targets become increasingly simpler (i.e. reducing the number of performance target types and/or measures) TSR decreases.

In addition, Figure 43 overleaf illustrates the relationship between simple/complex performance targets for 2002/03 based on performance target type and the mean log-TSR value for 2002/03. To supplement this, Figure 44 overleaf compares simple/complex

performance targets for 2002/03 based on number of performance measures against the mean log-TSR value for 2002/03.

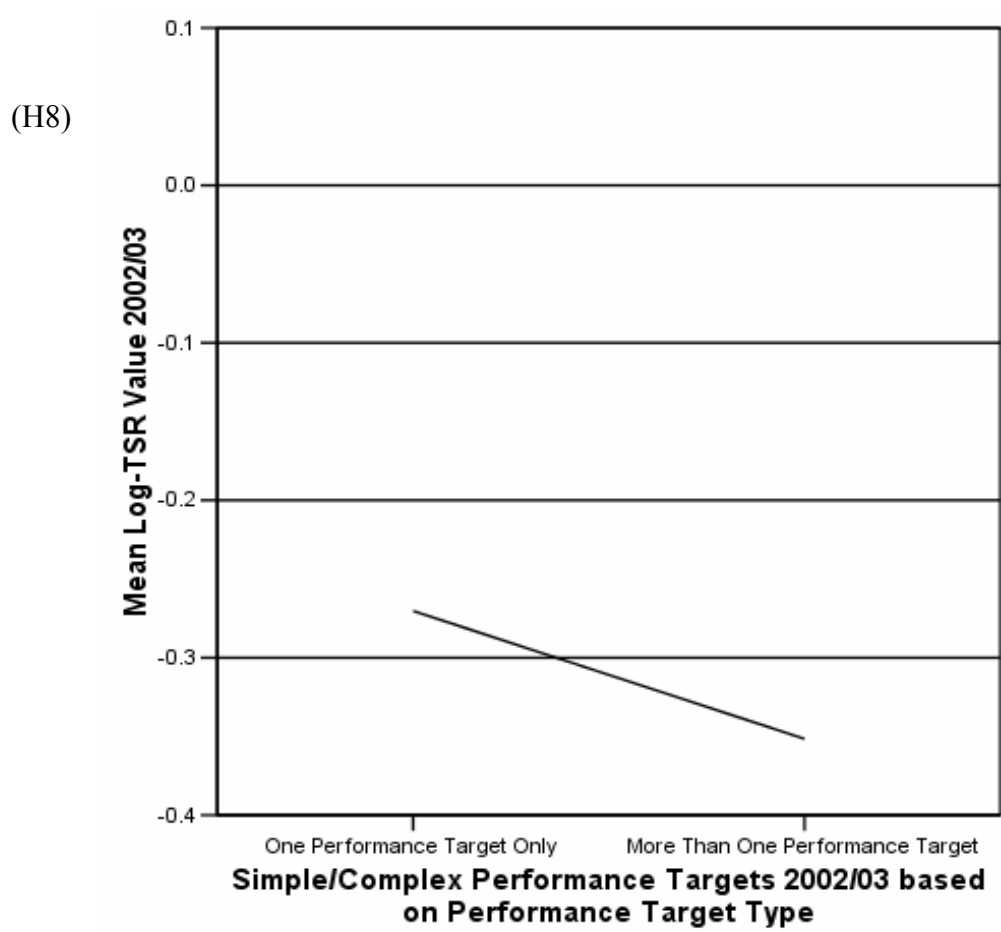


Figure 43. Executive simple/complex performance targets for 2002/03 compared with the mean log-TSR value for 2002/03 based on performance target type.



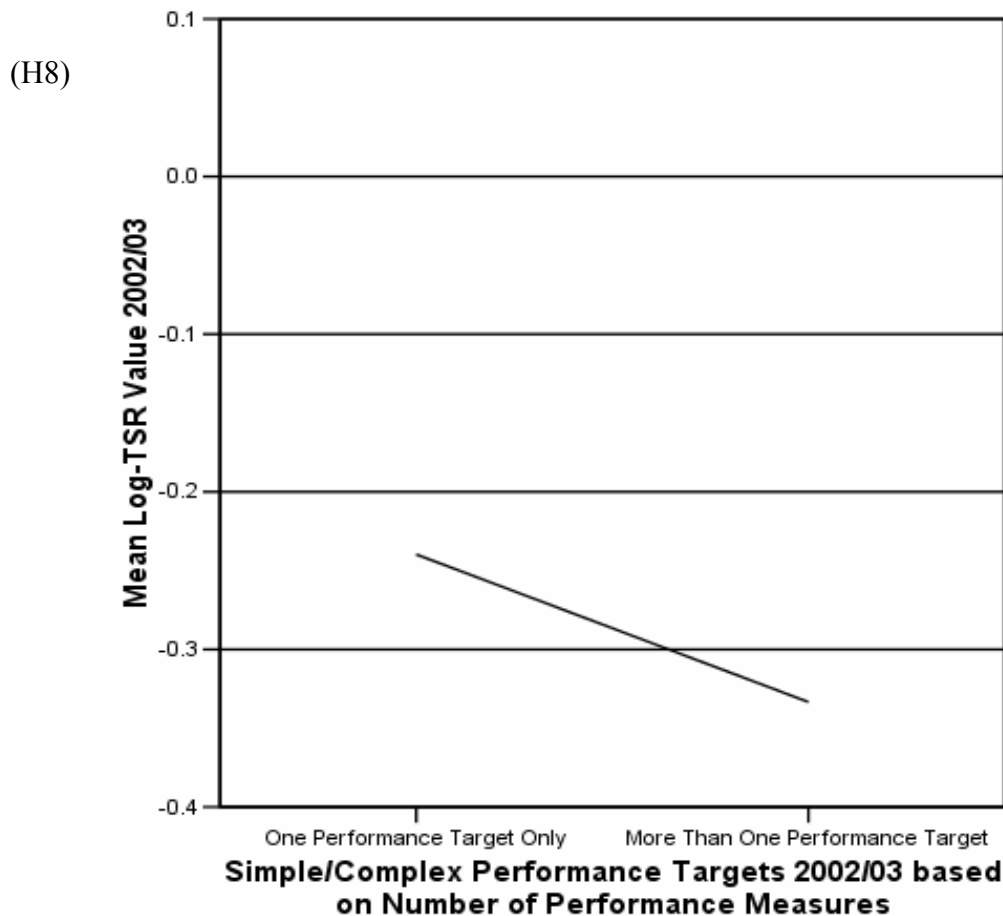


Figure 44. *Executive simple/complex performance targets for 2002/03 compared with the mean log-TSR value for 2002/03 based on number of performance measures.*

The results suggest that there is a negative association between TSR and complex performance targets. Therefore, as performance targets become more complex (i.e. increasing the number of performance target types and/or measures) TSR decreases. In contrast, simple targets are positively associated with TSR: as performance targets become increasingly simpler (i.e. reducing the number of performance target types and/or measures) TSR increases.

To summarise, first year results suggest that there is a positive association between complex performance targets and firm performance and a negative association between simple targets and firm performance. In contrast, second year results indicate that there is a negative association between complex performance targets and firm performance and a positive association between simple targets and firm performance.

As an alternative, Figure 45 below examines the relationship between simple/complex performance targets for 2001/02 based on performance target type and the mean EPS value for 2001/02. To supplement this, Figure 46 overleaf compares simple/complex performance targets for 2001/02 based on number of performance measures against the mean EPS value for 2001/02.

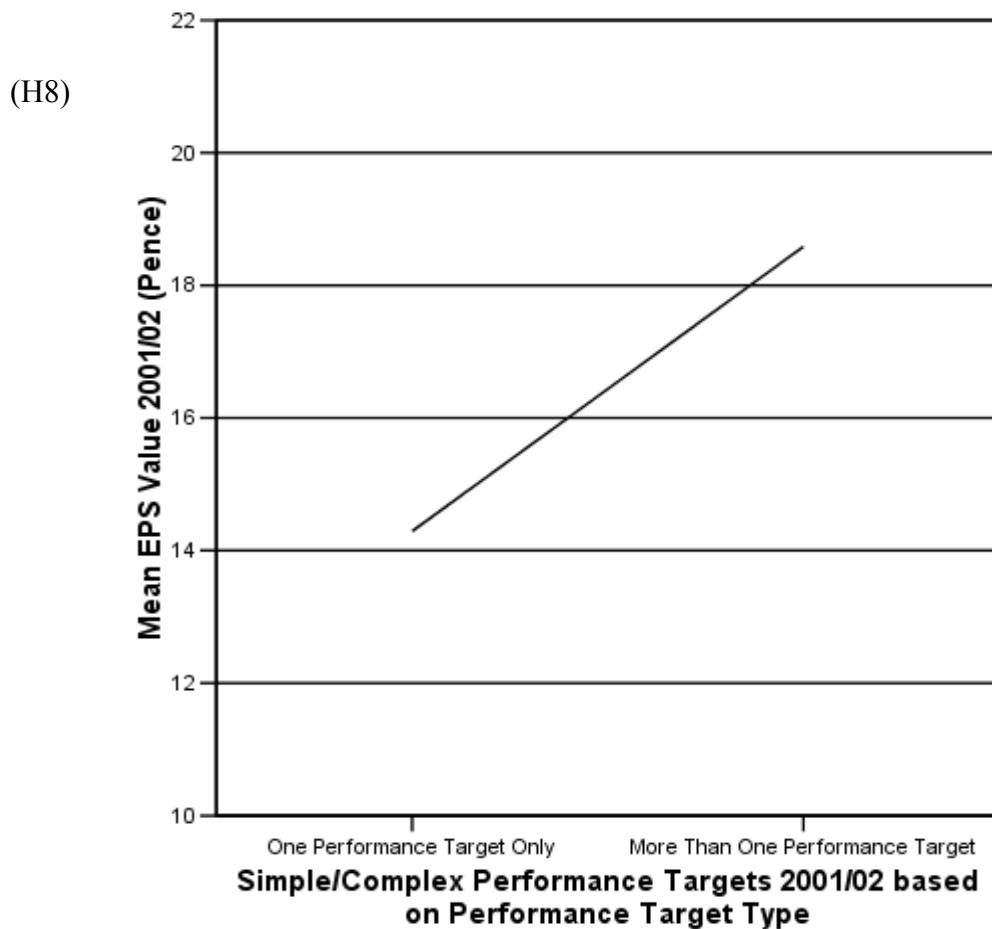


Figure 45. Executive simple/complex performance targets for 2001/02 compared with the mean EPS value for 2001/02 based on performance target type.

(H8)

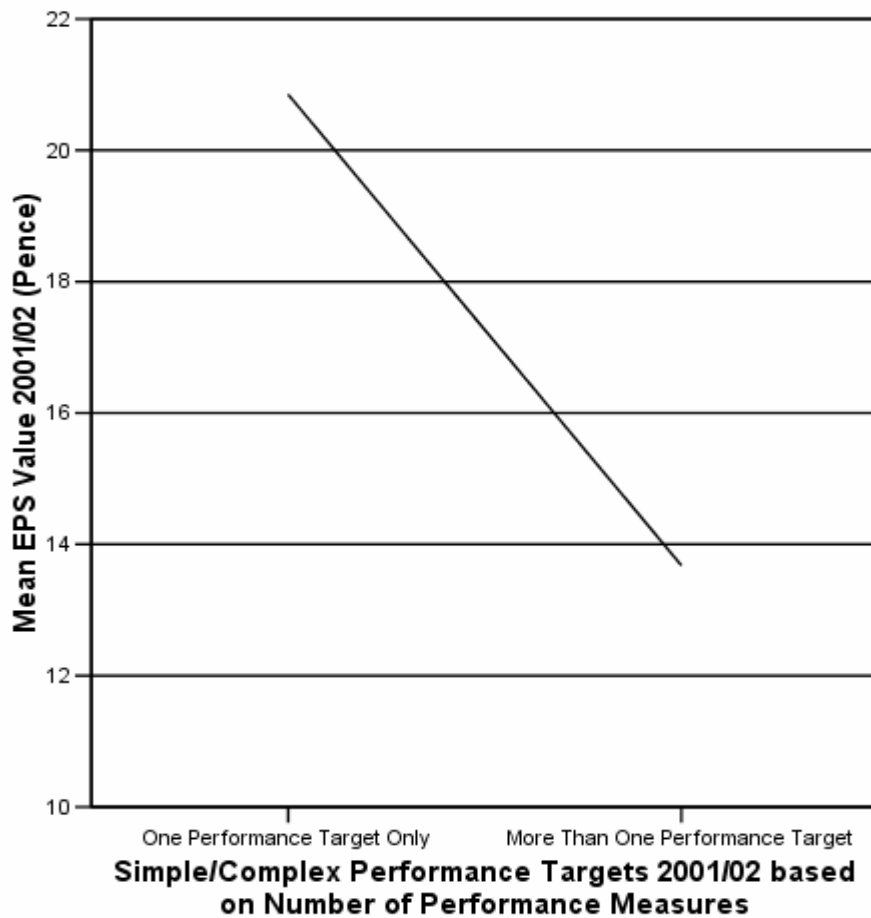


Figure 46. Executive simple/complex performance targets for 2001/02 compared with the mean EPS value for 2001/02 based on number of performance measures.

The results are conflicting. Figure 45 suggests that a positive association exists between EPS and complex performance targets. Subsequently, as performance targets become more complex (i.e. increasing the number of performance target types) EPS increases. In contrast, there is a negative association between EPS and simple performance targets. Therefore, as performance targets become increasingly simpler (i.e. reducing the number of performance target types) EPS decreases.

In contrast, Figure 46 is indicative of a negative trend between EPS and complex performance targets. Subsequently, as performance targets become more complex (i.e. increasing the number of performance measures) EPS decreases. Conversely, there is a positive trend between EPS and simple performance targets: as performance targets

become increasingly simpler (i.e. reducing the number of performance measures) EPS increases.

In addition, Figure 47 below compares simple/complex performance targets for 2002/03 based on performance target type against the mean EPS value for 2002/03. To supplement this, Figure 48 overleaf illustrates the relationship between simple/complex performance targets for 2002/03 based on number of performance measures and the mean EPS value in 2002/03.

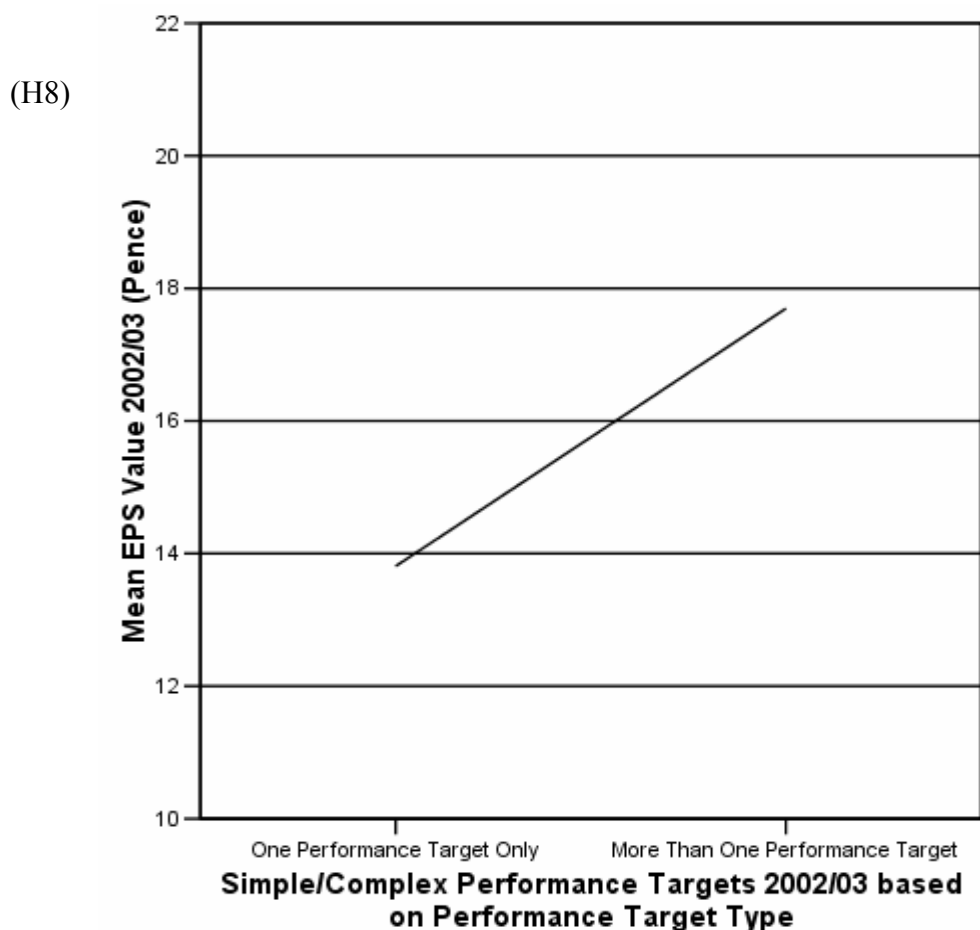


Figure 47. Executive simple/complex performance targets for 2002/03 compared with the mean EPS value for 2002/03 based on performance target type.

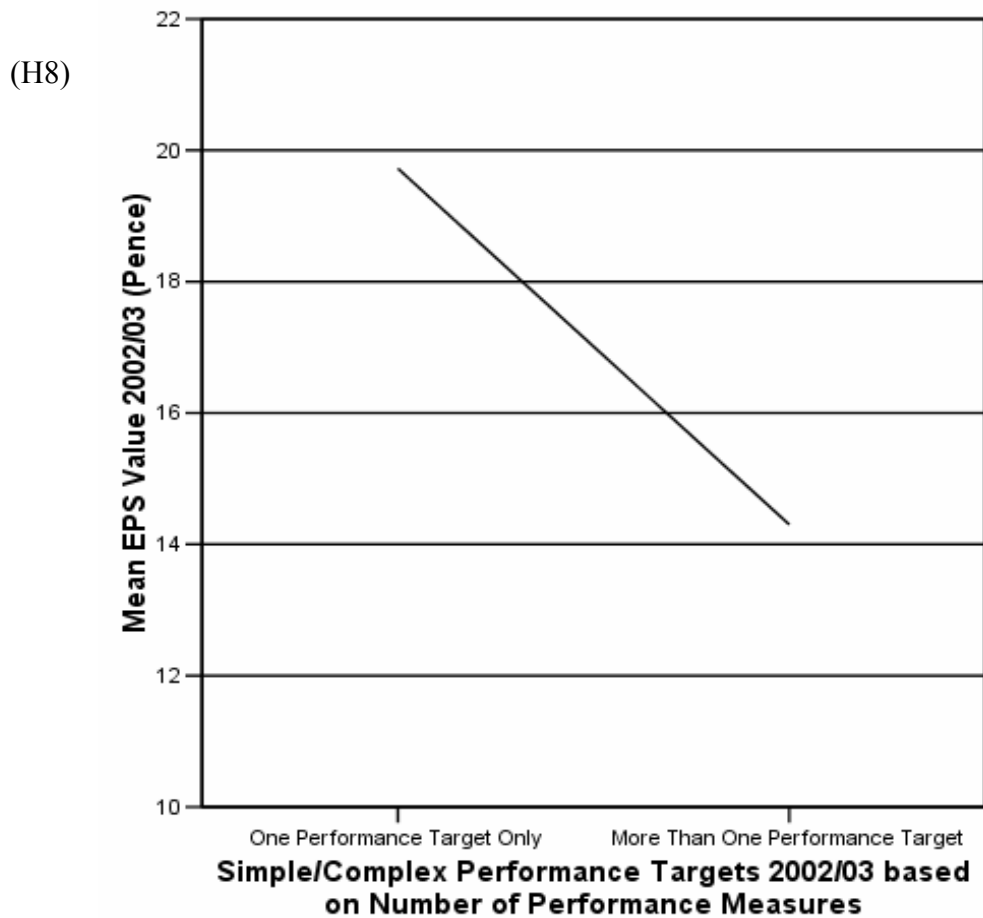


Figure 48. *Executive simple/complex performance targets for 2002/03 compared with the mean EPS value for 2002/03 based on number of performance measures.*

The results, as with the previous two figures (45 and 46), are also conflicting. Figure 47 is indicative of a positive trend between EPS and complex performance targets. Therefore, as performance targets become more complex (i.e. increasing the number of performance target types) EPS increases. Conversely, simple targets are negatively associated with EPS: as performance targets become increasingly simpler (i.e. reducing the number of performance target types) EPS decreases.

In contrast, Figure 48 suggests that a negative association exists between EPS and complex performance targets. Therefore, as performance targets become more complex (i.e. increasing the number of performance measures) EPS decreases. Conversely,

simple targets are positively associated with EPS: as performance targets become increasingly simpler (i.e. reducing the number of performance measures) EPS increases. To summarise, the complexity variables when examined together provide mixed results. However, when the variables are analysed separately the results indicate the following. There is a positive association between EPS and complex performance targets, and a negative association between EPS and simple performance targets, when based on performance target type. In contrast, when based on performance measures, complex performance targets are negatively associated with EPS whereas simple performance targets are positively associated with EPS. These findings are consistent over both years.

### 5.3. CEO DESCRIPTIVE ANALYSIS

#### 5.3.1. *CEO demographics*

In the 299 publicly traded companies, details of 300 CEOs are recorded. In a very small number of cases (n = 6) the chairman, executive chairman or managing director was used as an appropriate substitute for an absent CEO. Averages, using the median as the preferred measure of central tendency due to its resistance to extreme values, indicate that:

- The median age of a CEO is 53;
- Males dominate the sample and constitute 98.3% (n = 295) of the total;
- Despite being unable to confirm nationality details for 14% (n = 42) of the total sample, the results do indicate that UK nationals dominate the sample and represent 76% (n = 228);
- The median number of years a CEO will spend on the board of directors is 8;
- Of the 300 individual CEOs the results indicate that 94.7% (n = 284) remained in full-time employment with the same company over the two-year period under analysis. Conversely, 5.4% (n = 16) did not and Figure 49 overleaf provides some explanation for departure.

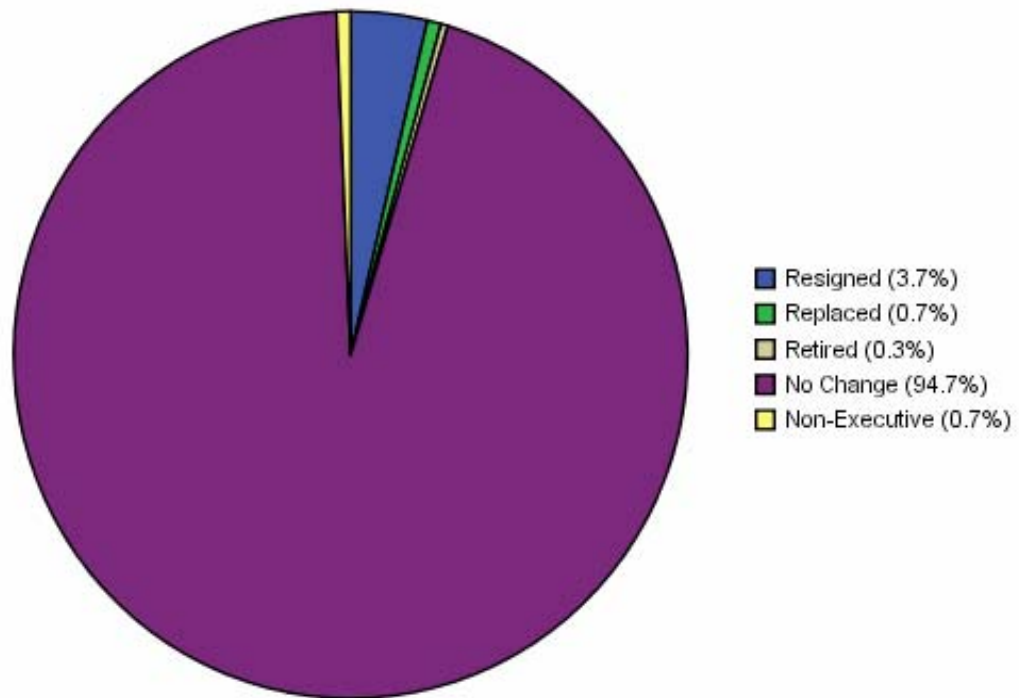


Figure 49. *CEO employment status at the end of 2002/03.*

### 5.3.2. *CEO industry differences*

Industry type, as highlighted in section 5.3.2, influences executive pay (Conyon & Murphy, 1998). As a result, the following section attempts to identify some of the differing characteristics between industries, within the CEO population, by examining variation in annual bonus pay, TSR, EPS and number of employees.

### 5.3.2.1. CEO annual bonus pay

Figure 50 below and 51 overleaf indicate that the variance between the smallest and the largest average bonus for 2001/02 and 2002/03 was £419,851 and £487,187 respectively. This resulted in a 16% increase and a total range of variation of £67,336 from year one to year two. In addition, the industries that pay the largest average bonus for both years include finance (2001/02 = £484,200; 2002/03 = £581,035), chemical and pharmaceuticals (2001/02 = £448,146; 2002/03 = £383,364), oil, gas and minerals (2001/02 = £396,455; 2002/03 = £475,615), and food, drink and tobacco (2001/02 = £381,115; 2002/03 = £477,707).

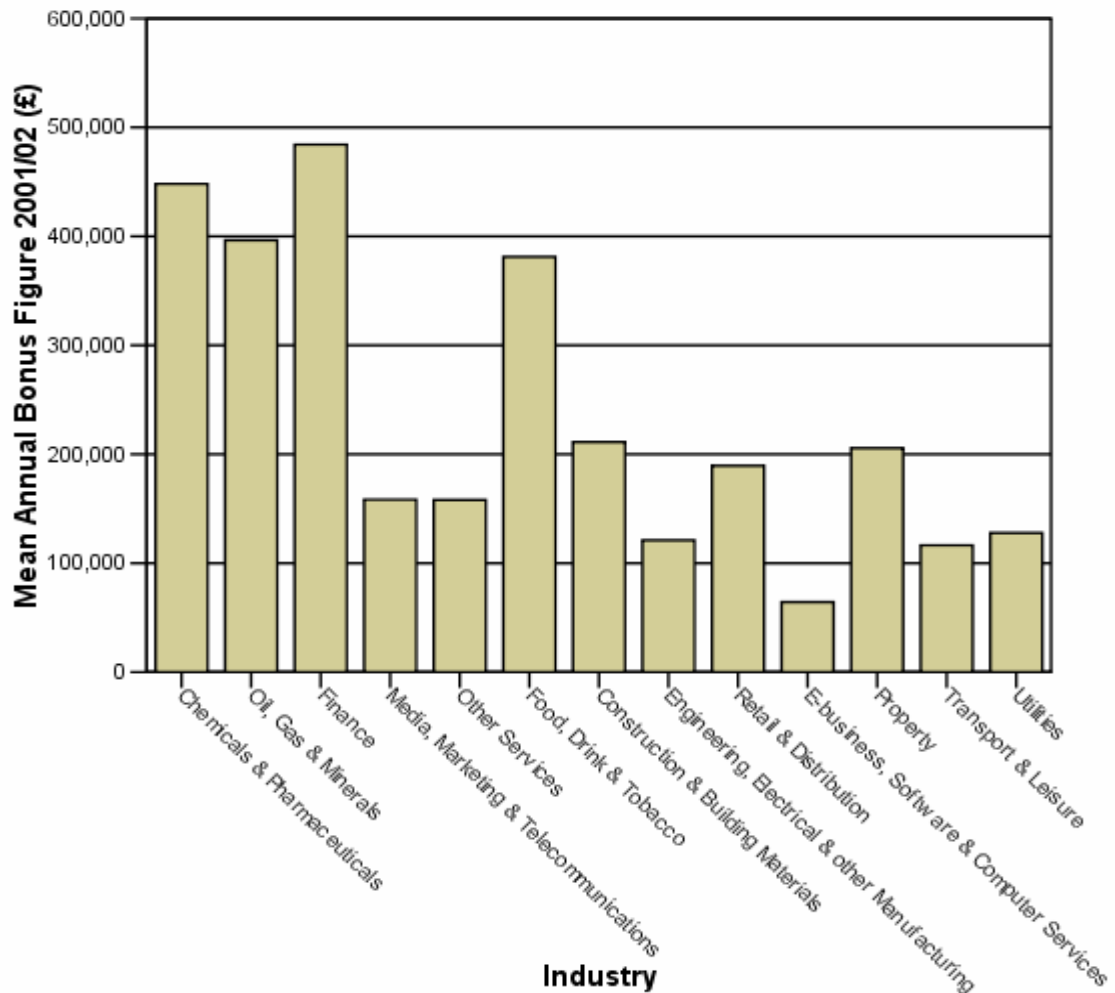


Figure 50. CEO mean annual bonus for 2001/02 based on industry.



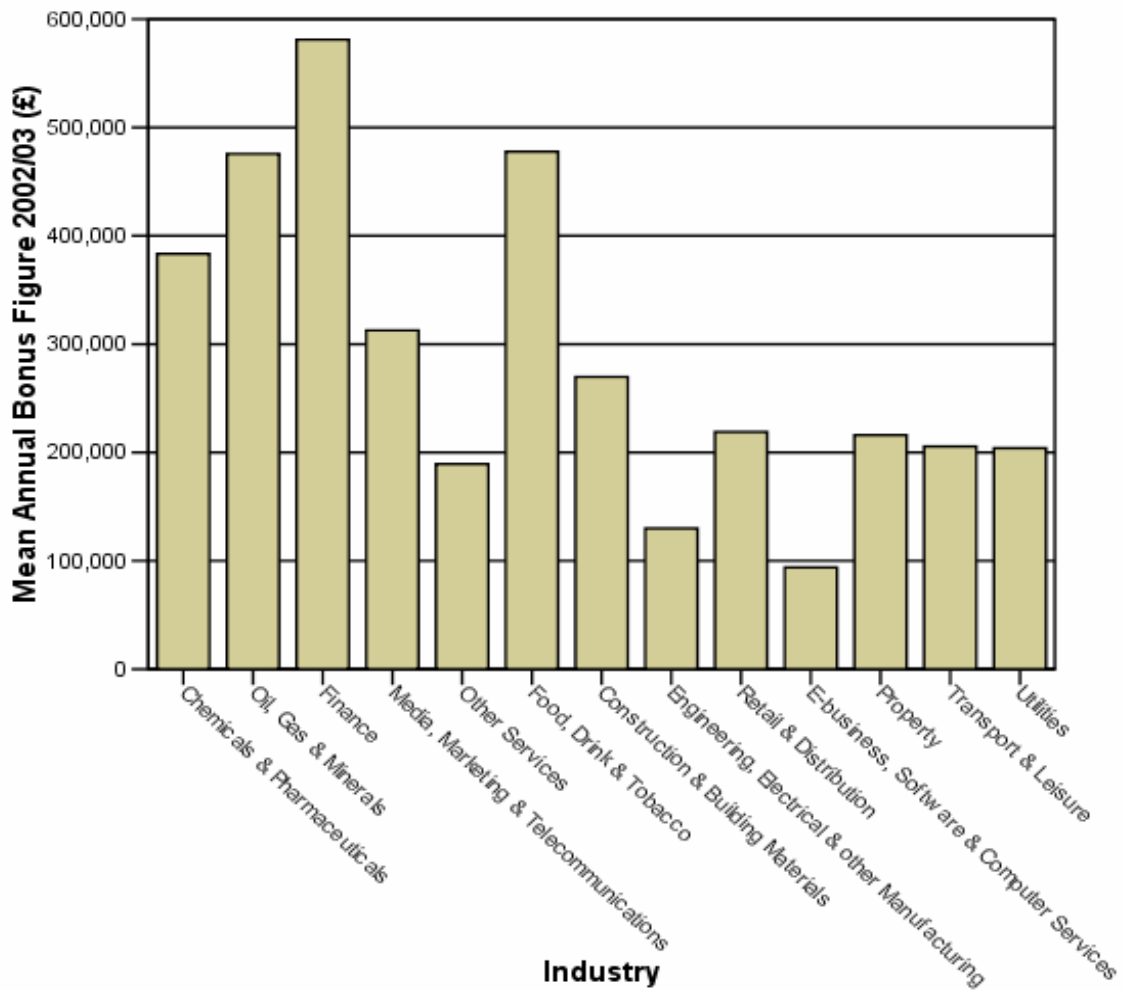


Figure 51. CEO mean annual bonus for 2002/03 based on industry.

### 5.3.2.2. CEO total shareholder return (TSR)

Figure 52 overleaf illustrates a range differential of 1.4 and, with the exception of the e-business/software and computer services (-1.1) and media, marketing and telecommunications industries (-0.5), on the whole, average TSR values in 2001/02 did not fluctuate dramatically but remained relatively stable.

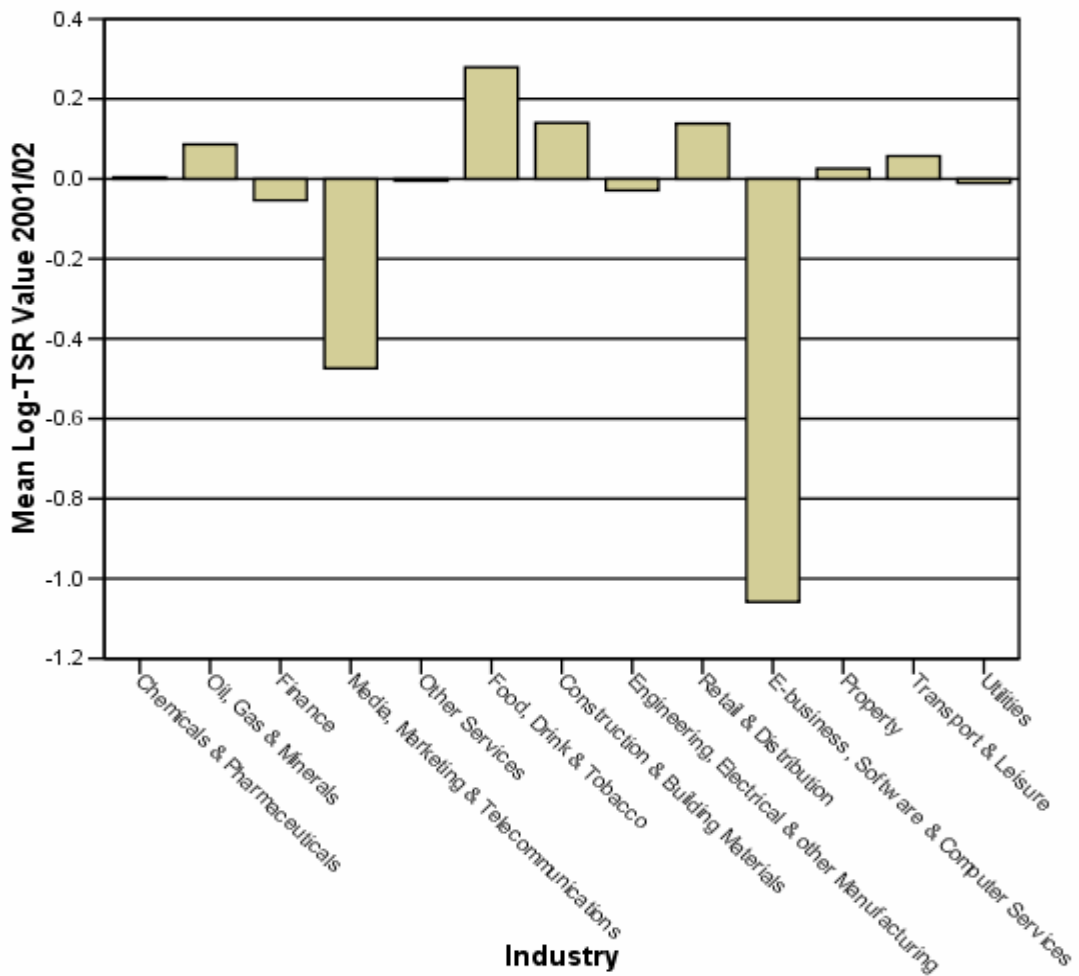


Figure 52. CEO mean log-TSR for 2001/02 based on industry.

In contrast, Figure 53 overleaf reveals a range differential of approximately 0.7 and, with the exception of the oil, gas and minerals industry, all other industries experienced a negative average TSR value in 2002/03. In particular, the e-business/software and computer services (-0.7), other services (-0.5), and engineering, electrical and other manufacturing (-0.5) industries have the lowest average TSR value.

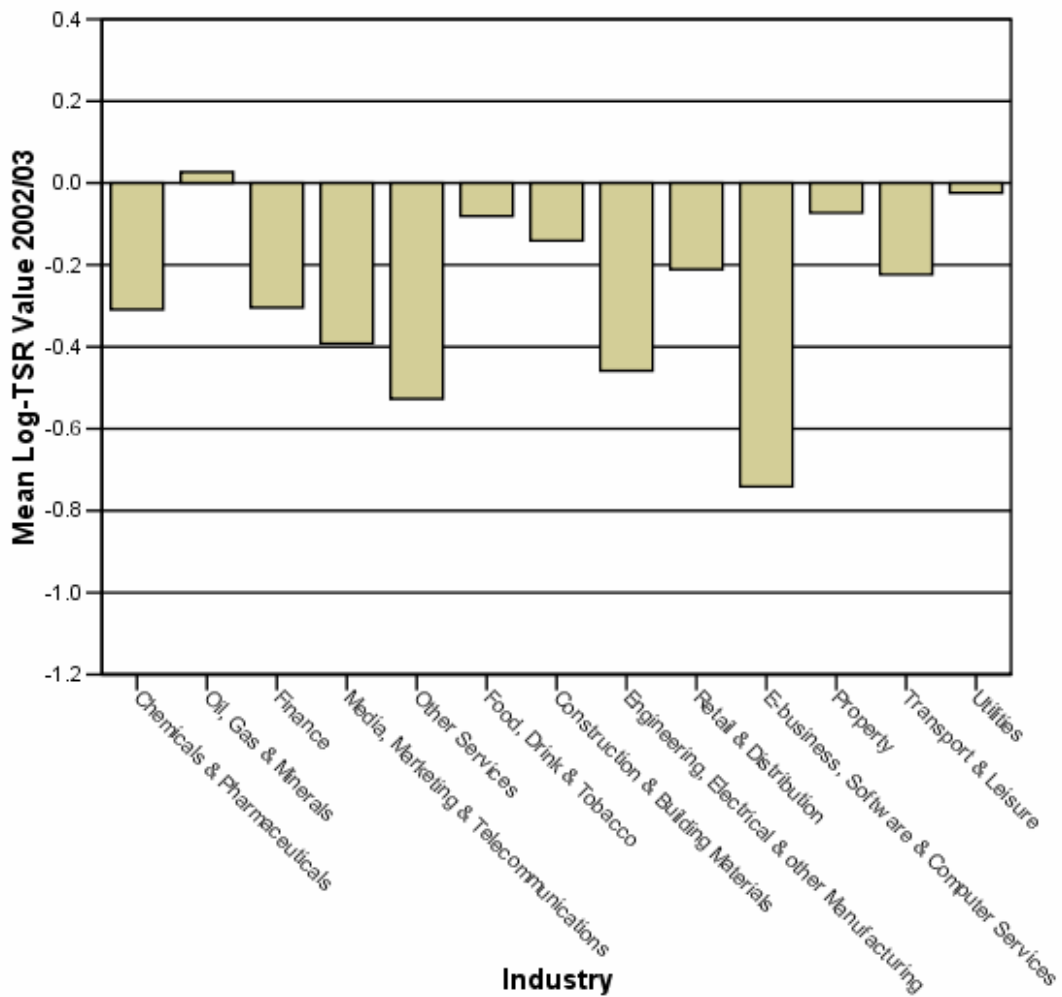


Figure 53. CEO mean log-TSR for 2002/03 based on industry.

### 5.3.2.3. CEO earnings per share (EPS)

Figure 54 and 55 overleaf illustrate an average variation of 50 pence in EPS during 2001/02 and 54 pence during 2002/03. Furthermore, with the exception of the media, marketing and telecommunications industry (2001/02 = -18; 2002/03 = -17) and e-business/software and computer services industries (2001/02 = -18; 2002/03 = -0.2), the remaining 11 industries have a positive EPS value throughout 2001/02 and 2002/03. In particular, the construction and building material (2001/02 = 32; 2002/03 = 37) and the food, drink and tobacco industries (2001/02 = 29; 2002/03 = 34) have the largest average EPS values for both years.

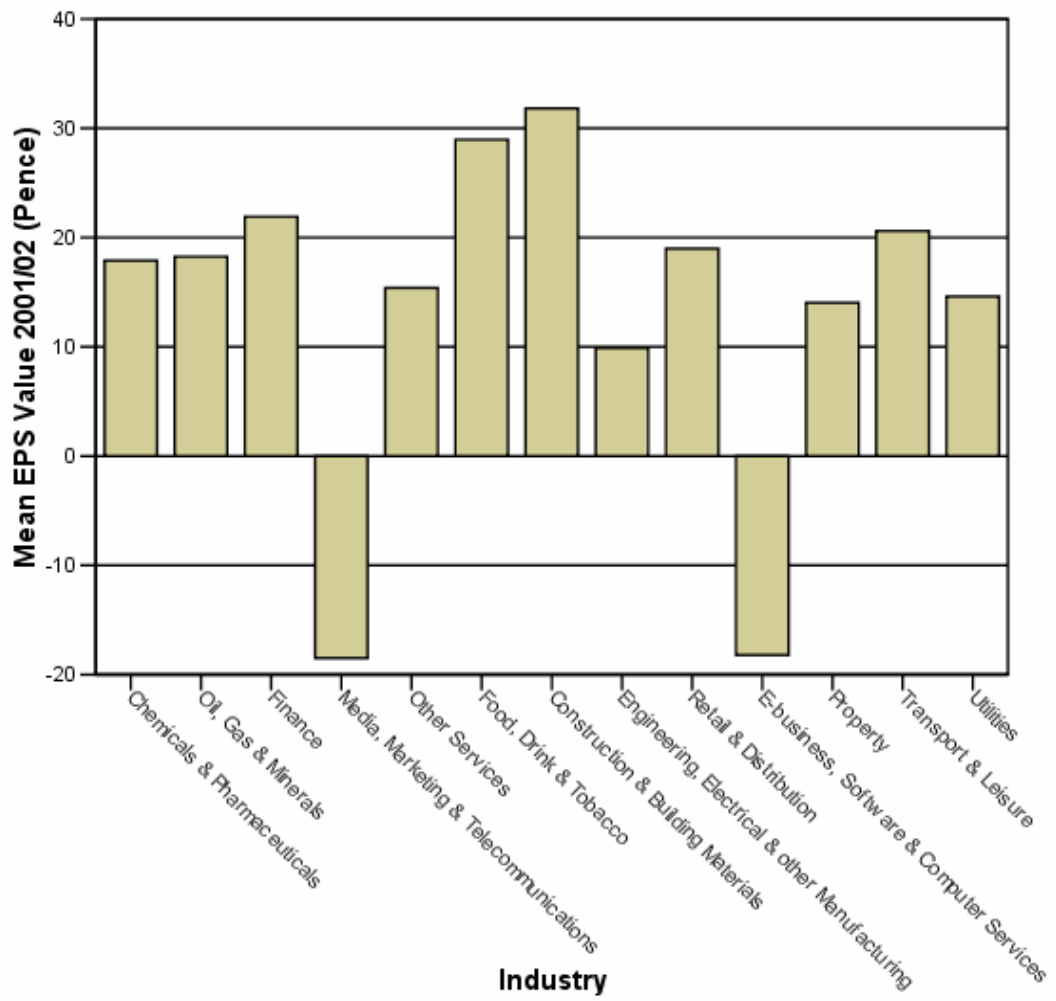


Figure 54. CEO mean EPS value for 2001/02 based on industry.

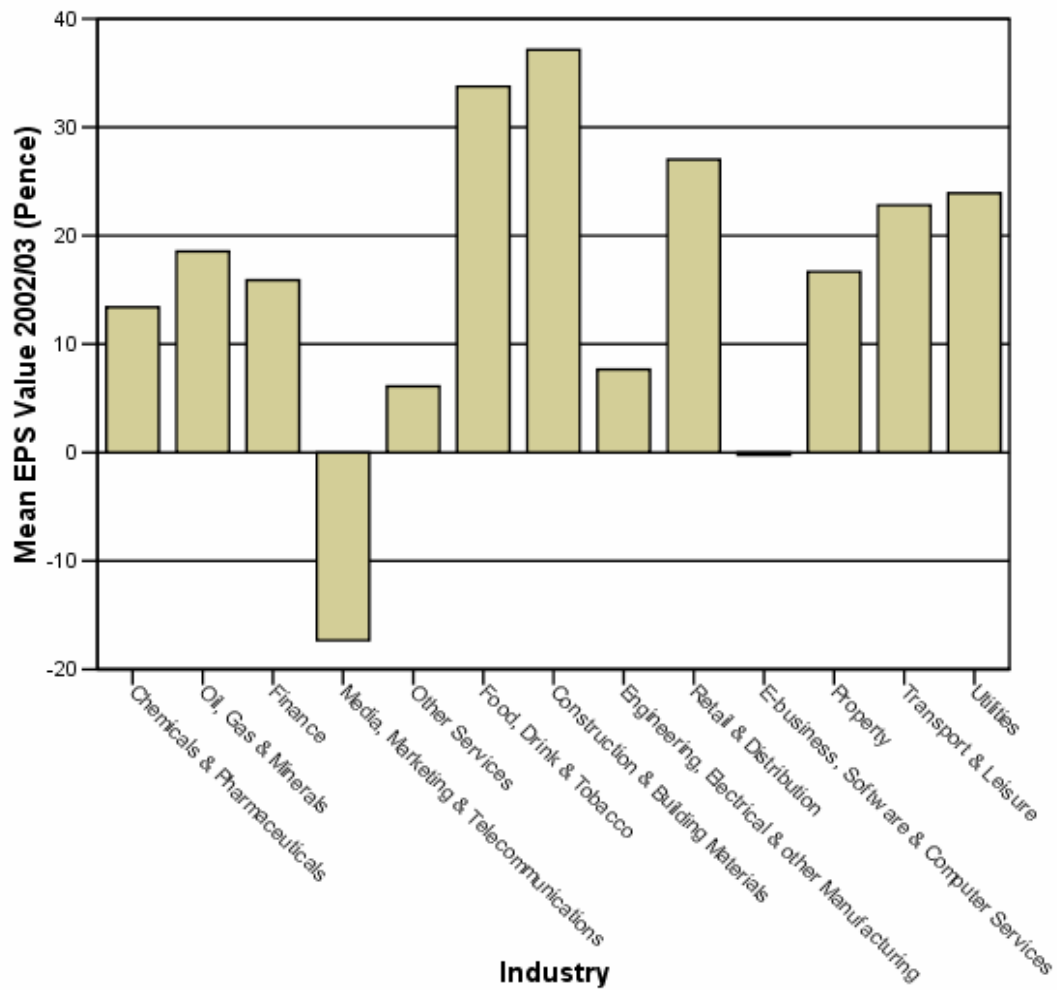


Figure 55. CEO mean EPS value for 2002/03 based on industry.

#### 5.3.2.4. CEO number of employees

Figure 56 and 57 overleaf indicate that the firms with the largest average number of employees for both years include food, drink and tobacco (2001/02 = 49,748; 2002/03 = 49,505), oil, gas and minerals (2001/02 = 39,123; 2002/03 = 39,033), retail and distribution (2001/02 = 37,670; 2002/03 = 38,516), and other services (2001/02 = 35,134; 2002/03 = 38,211). In contrast, the property (2001/02 = 1000; 2002/03 = 1000) and e-business/software and computer services (2001/02 = 4,890; 2002/03 = 4,756) industries have the lowest average number of employees for both years.

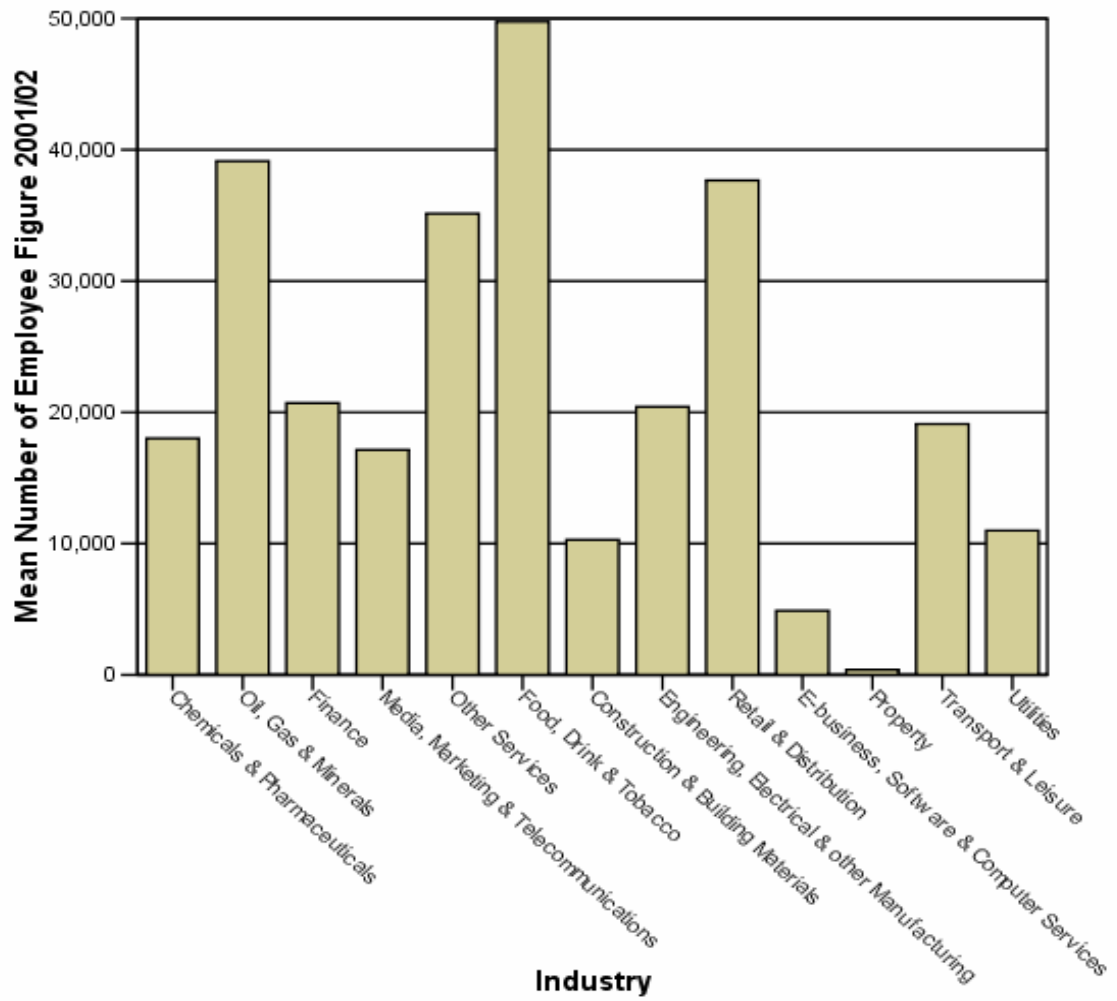


Figure 56. CEO mean number of employees for 2001/02 based on industry.

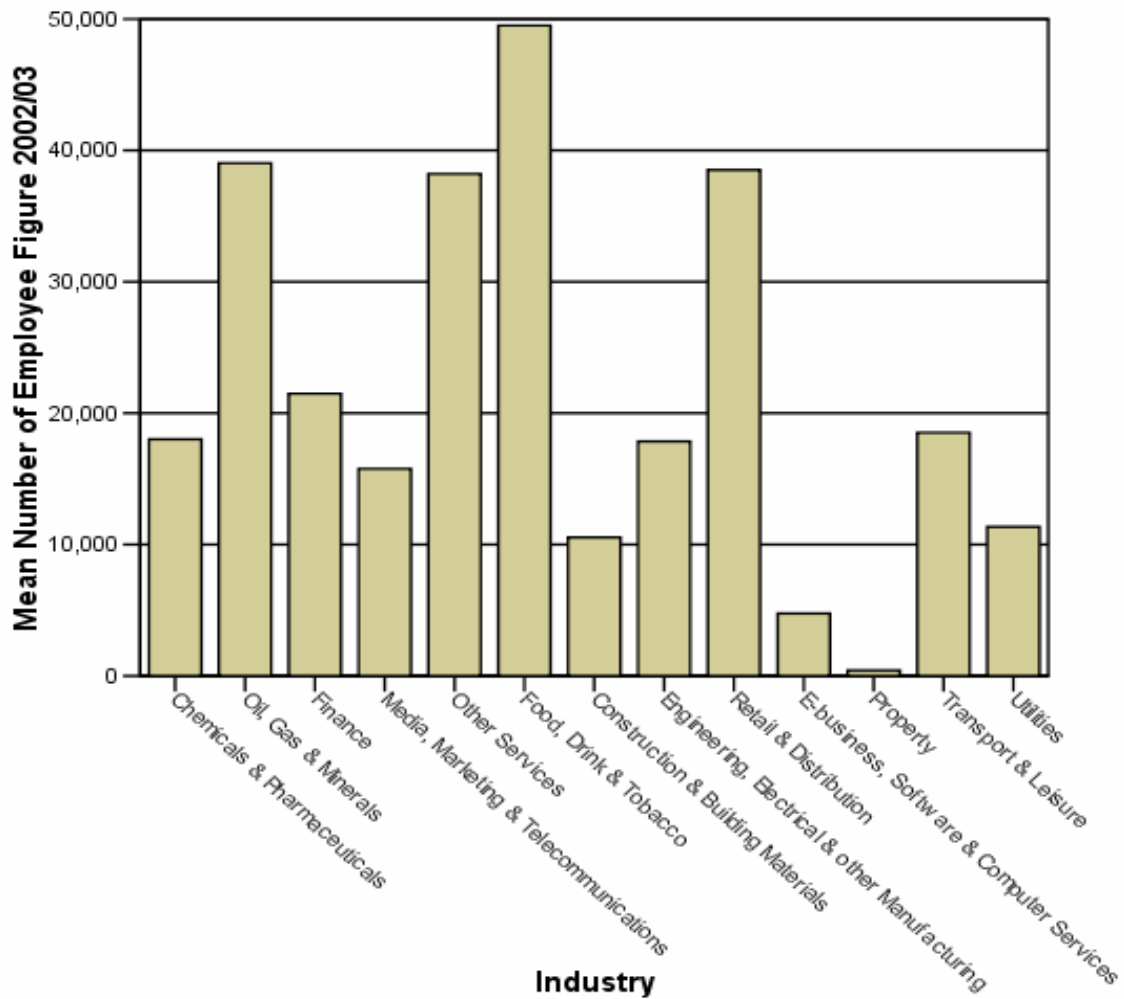


Figure 57. CEO mean number of employees for 2002/03 based on industry.

### 5.3.3. CEO remuneration details

This section focuses on base salary and bonuses as executive rewards, excluding other forms of reward such as options, pensions and perquisites. Therefore, descriptive statistics relating specifically to the CEO remuneration details highlight the following:

- The median base salary for 2001/02 is £350,000 and for 2002/03 is £393,000. A rise of £43,000 over the two-year period and equal to a 12.25% increase;
- The median bonus figure for 2001/02 is £125,000 and for 2002/03 is £162,000. A rise of £37,000 over the two-year period and equal to a 29.5% increase;
- Based on the median values above, the annual bonus as a percentage of salary amounted to 35.7% in 2001/02 and 41.2% in 2002/03. This amounts to a total rise of 5.5% over the two-year period;

- In 2001/02, 90% (n = 270) of CEOs received an annual bonus. This figure increases to 98% (n = 294) in 2002/03. By implication, 9% (n = 27) of CEOs did not receive an annual bonus in 2001/02. This figure decreases to 2% (n = 6) in 2002/03.

#### 5.3.3.1. CEO annual bonus payment types

For 2001/02, the most prominent mode of payment associated with the annual bonus is cash (58%). In contrast, all other alternative forms of payment, which are generally more long-term such as shares, deferred shares, and matching shares, amount to 31.3%. Of this group, cash with voluntary deferred share and matching share option (9%) and cash with compulsory deferred share option (8.7%) are the second and third most prominent payment types. Figure 58 overleaf illustrates the distribution of payment types between instant cash payments versus alternative forms of payment, i.e. not cash, in 2001/02.



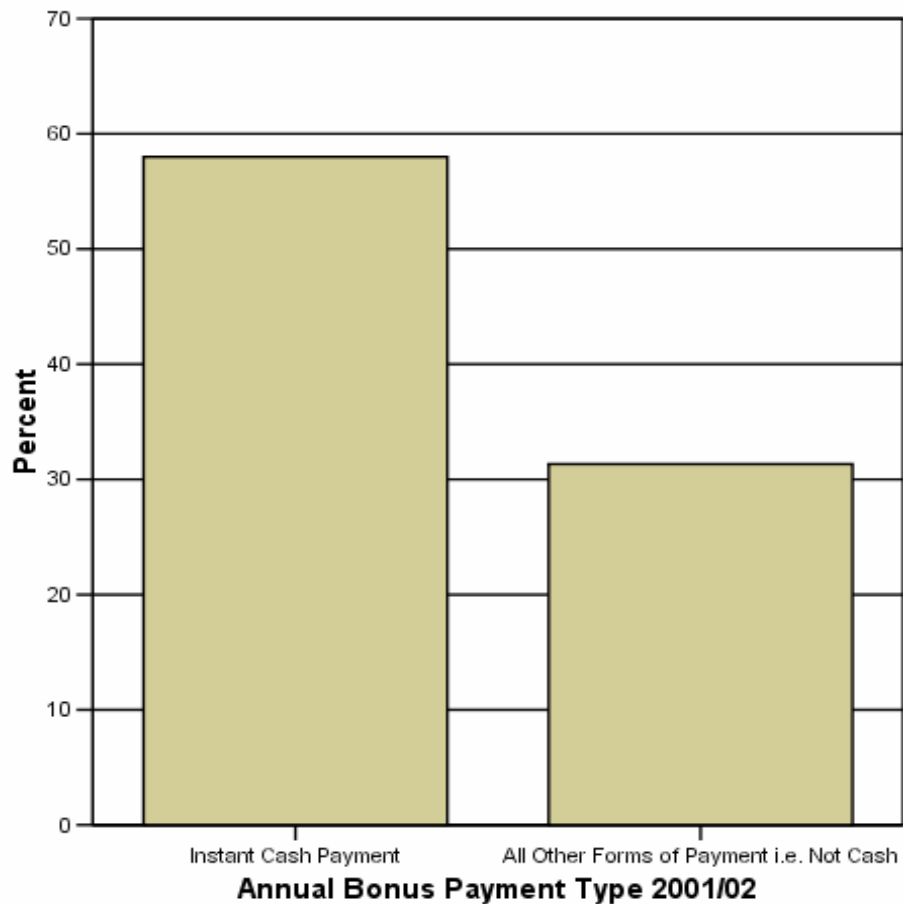


Figure 58. *CEO annual bonus payment type for 2001/02.*

For 2002/03, the most prominent mode of payment associated with the annual bonus is also cash (62%). In contrast, all other alternative modes of payment totalled 35.7%. Of this group, with voluntary deferred share and matching share option (10.7%) and cash with compulsory deferred share option (10.3%) are the second and third most prominent forms of payment. Figure 59 overleaf illustrates the distribution of payment types between instant cash payments versus alternative forms of payment, i.e. not cash, in 2002/03.

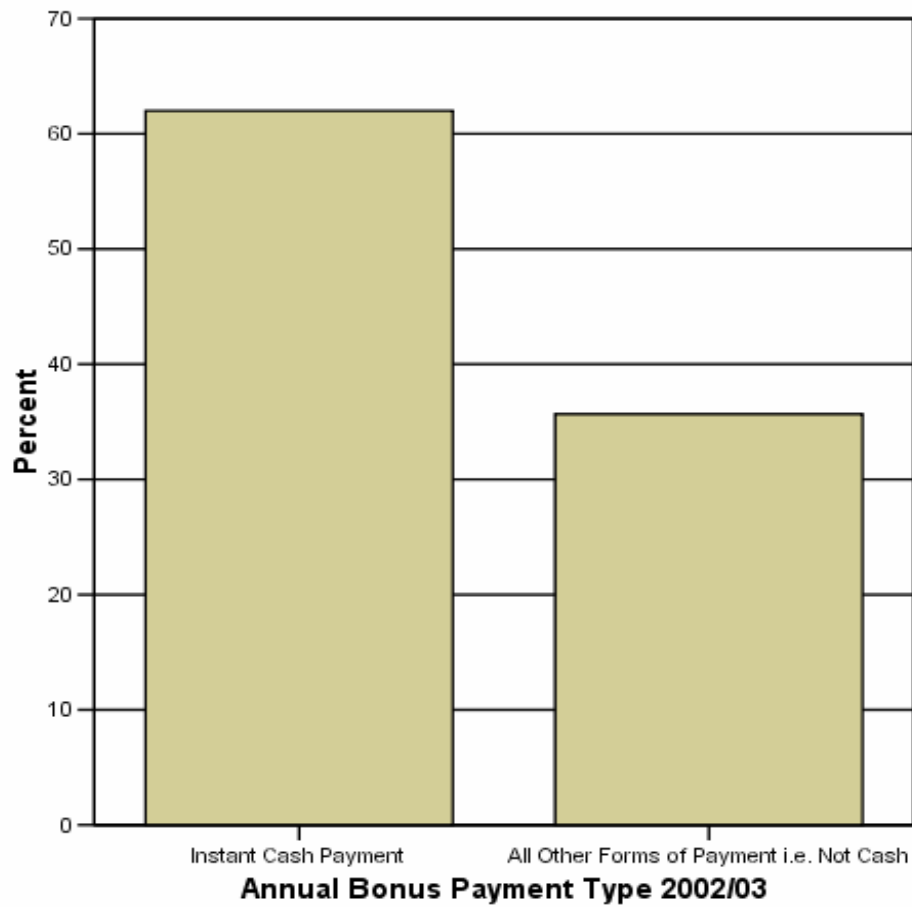


Figure 59. *CEO annual bonus payment type for 2002/03.*

### 5.3.3.2. CEO annual bonus performance targets

As in section 5.2.3.2, annual bonus performance targets are categorised in terms of their external/internal orientation. External and internal classification will remain the same. Consequently, Figures 60 and 61 overleaf illustrate the distribution of performance targets considered along a continuum from external to internal, and even unspecified.

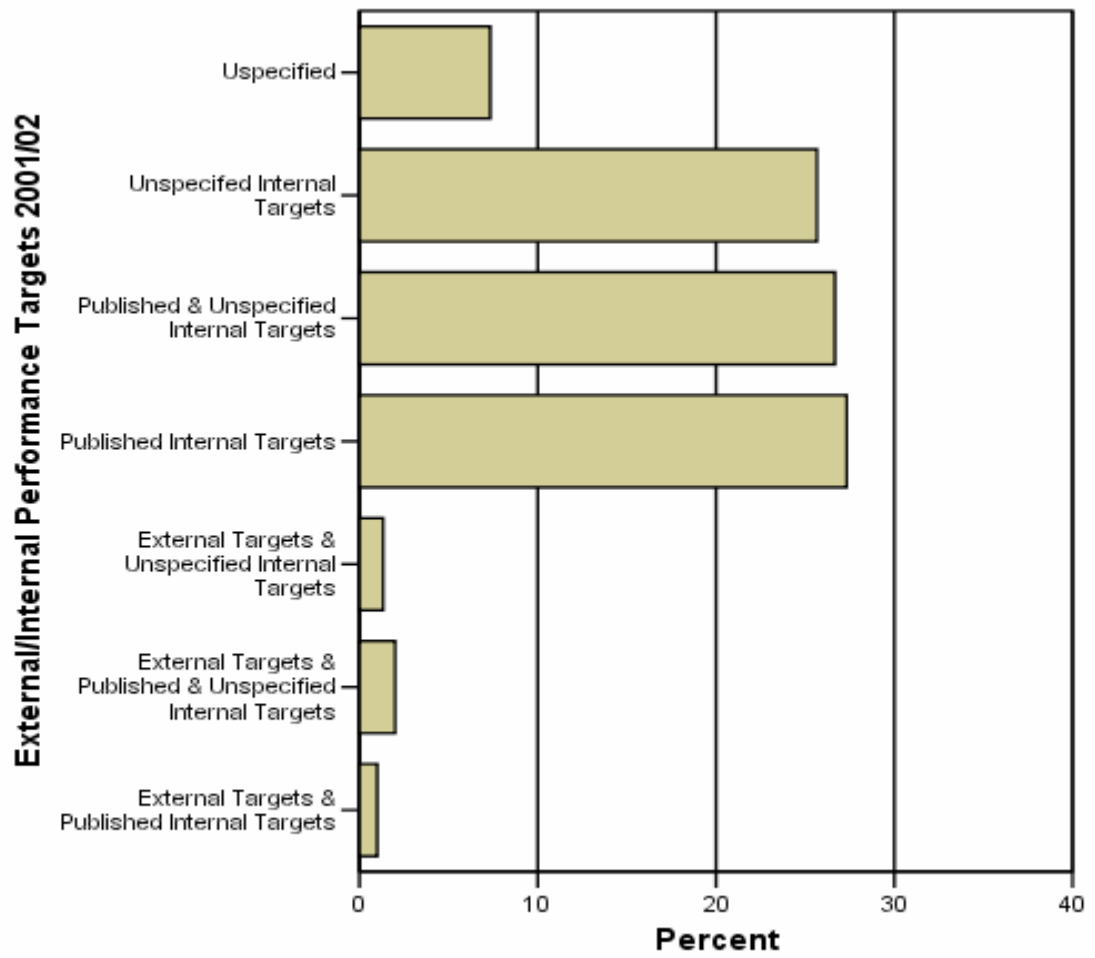


Figure 60. CEO external/Internal performance targets for 2001/02.

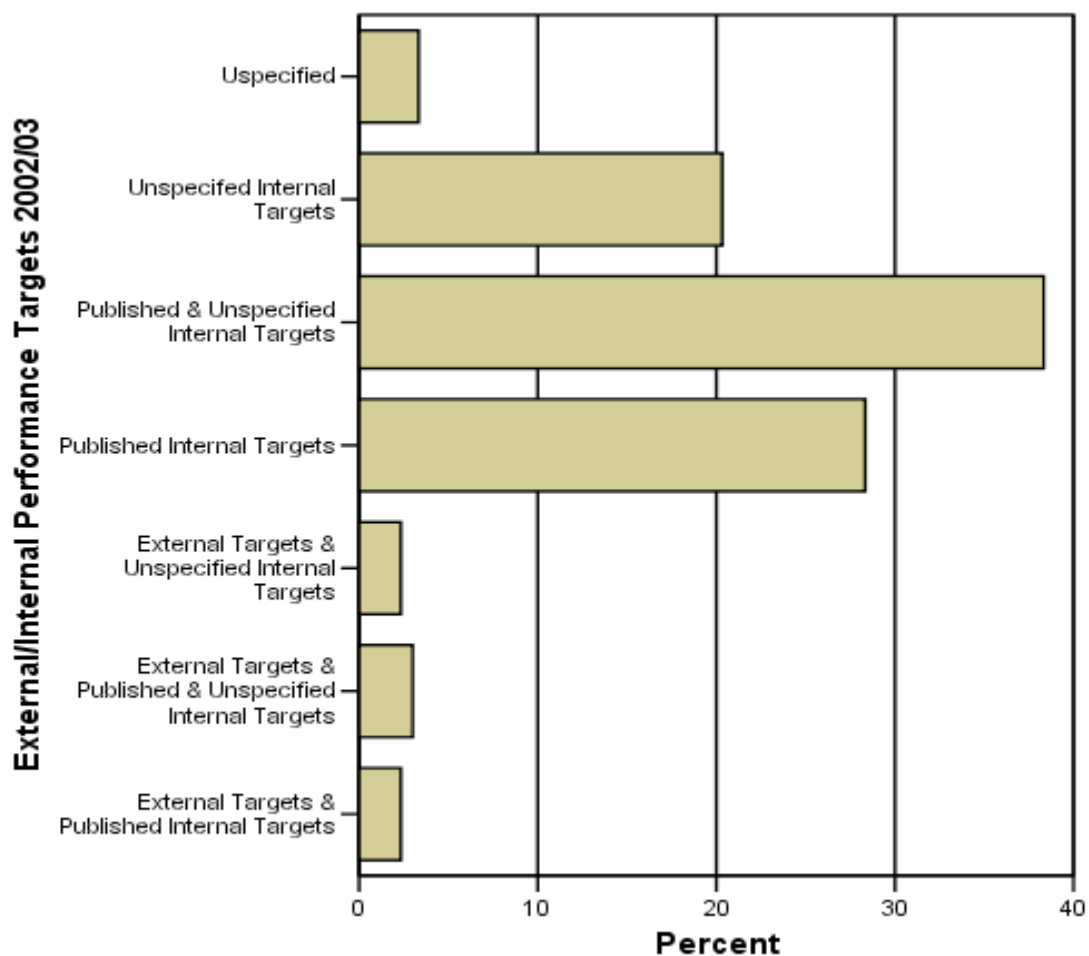


Figure 61. CEO external/Internal performance targets for 2002/03.

Results indicate that in 2001/02, 90% of CEOs have their annual bonus linked to some form of performance target. Significantly, ETs, which are share-based, are never used as a solitary measure of short-term performance. However, 27.3% implement PITs and a further 1% uses a mixture of the two. In addition, 30% use a combination of ETs and/or PITs in conjunction with UITs, whereas 25.7% use UITs only.

In the following year, this figure increases to 97.7%. Again, ETs are not used as a solitary measure of short-term performance. However, 28.3% utilise PITs and a further 2.3% use a mixture of the two. In addition, 43.6% use a combination of ETs and/or PITs with UITs, whereas 20.3% use UITs only.

In total, 28.3% of companies in 2001/02 and 30.6% of companies in 2002/03 use performance targets and contemporaneously disclose them. Although not a significant percentage, approximately one-third of firms actively practice a transparent compensation strategy. As the mirror image of this, 55.7% and 63.9% of firms in 2001/02 and 2002/03 respectively have some unspecified element in their bonus schemes.

However, in 2001/02, 7.3% of firms did not disclose the performance conditions that are attached to the bonus. This figure decreases to 3.3% in the following year. Significantly, in 2001/02, 25.7% of firms refer to internal performance targets but fail to provide specific details. This figure decreases to 20.3% in 2002/03. In total, 63% of companies in 2001/02 and 67.2% of companies in 2002/03, use performance targets but fail to fully disclose specific details, if at all. Consequently, a significant number of firms in the sample, approximately two thirds, actively practice an opaque compensation strategy.

Results also indicate that the most frequently occurring performance measures over the two-year period consist of three PITs (based on EPS, group profit, and cash flow), and two UITs (based on individual and group performance targets). For 2001/02 and 2002/03, cumulative frequency scores indicate that individual performance targets are the most common performance measure (2001/02 = 106; 2002/03 = 123), followed by group profit targets (2001/02 = 90; 2002/03 = 116), then by EPS (2001/02 = 75; 2002/03 = 80), then by group performance targets (2001/02 = 62; 2002/03 = 64) and, finally, by cash flow targets (2001/02 = 23; 2002/03 = 41).

As in section 5.2.3.3, this next section extends the analysis above and examines the shifts in performance targets over the two-years (i.e. from 2001/02 to 2002/03) but for the CEO sample only.

#### 5.3.3.3. CEO performance target migration

In 2001/02, 26 CEOs were not compensated with an annual bonus. In the following year, 84.6% (n = 22) of this group did receive an annual bonus and the shifts are illustrated in the bottom part of Figure 62, overleaf. In 2002/03, 2 CEOs had their annual bonus

removed from their remuneration package and these changes are illustrated in the top part of Figure 62, overleaf. A total of 6 CEOs did not receive an annual bonus in 2002/03, a reduction of 77%.

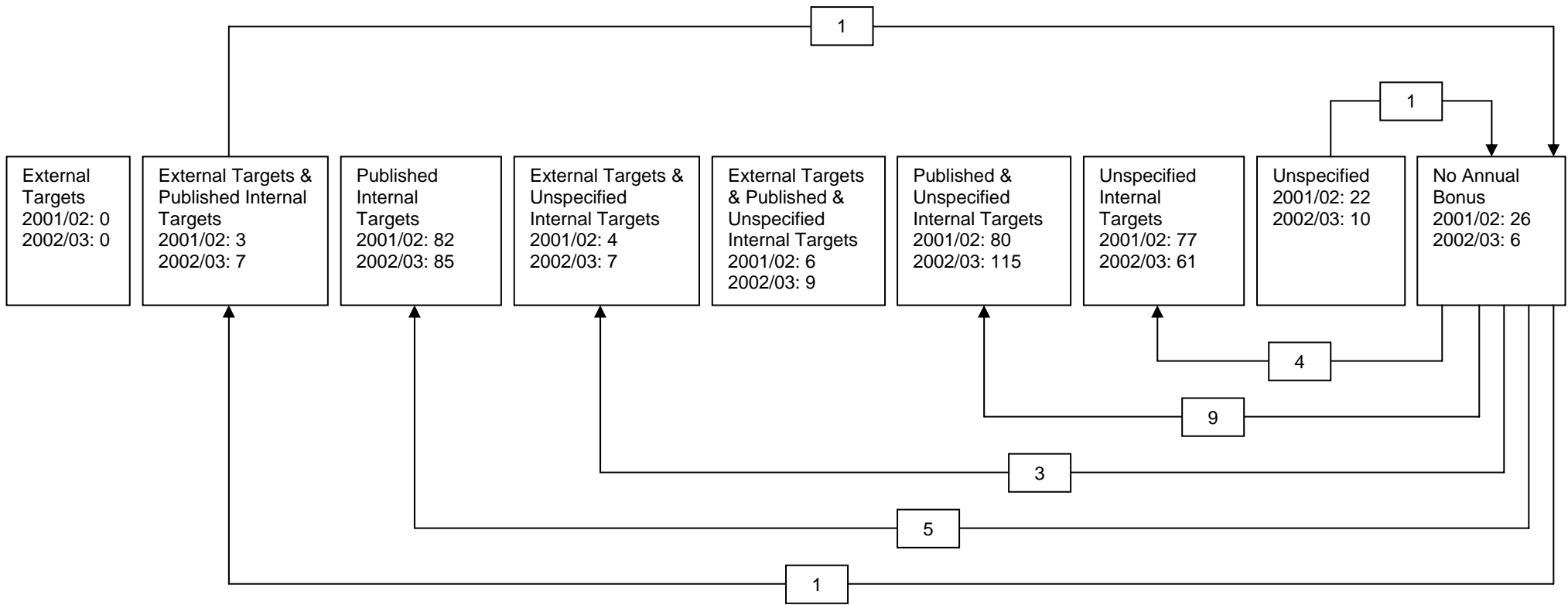


Figure 62. CEO performance target migration to and from 'no annual bonus'.

As with Figures 19 and 20, further analysis explores these bonus changes from two contrasting perspectives. The first perspective considers the migration of performance targets based on a hard to soft continuum (See Figure 63 overleaf). The second perspective examines the migration of performance targets based on a simple to complex continuum (See Figure 64 overleaf). All details relating to hard/soft and simple/complex performance targets will remain the same.



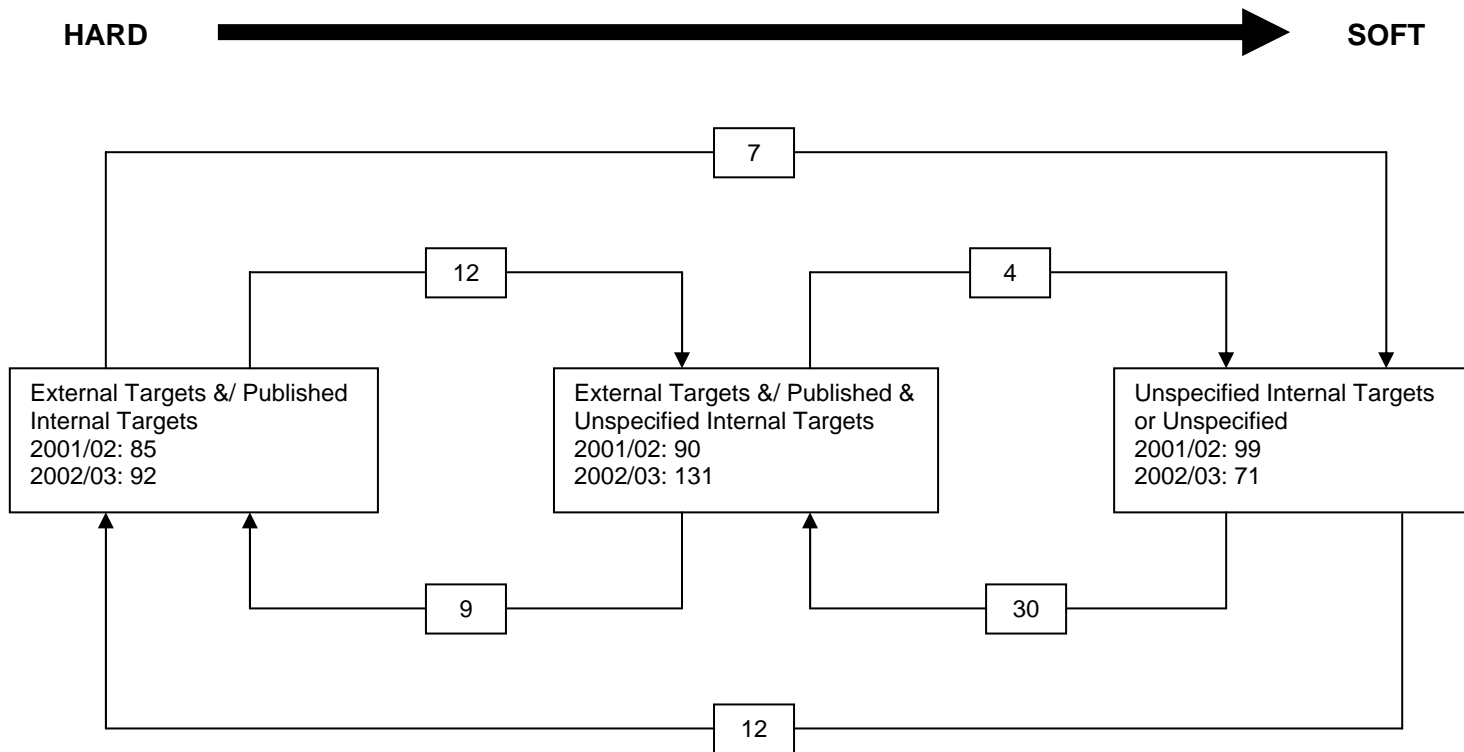


Figure 63. CEO performance target migration in the context of 'hard' to 'soft'.

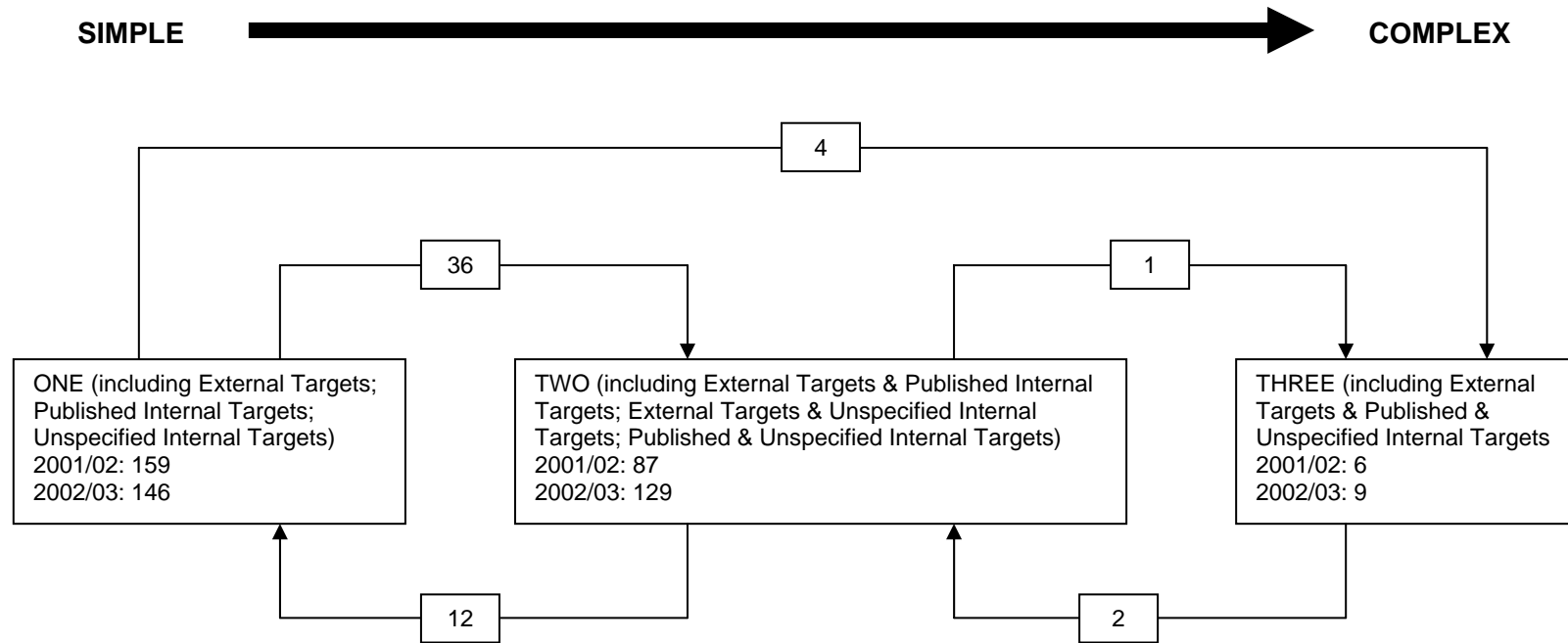


Figure 64. CEO performance target migration in the context of 'simple' to 'complex'.

Figure 63 suggests that companies are utilising more measurable hard performance targets in contrast to softer unspecified targets. Specifically, 42 CEOs transferred from soft performance targets to a hard performance target strategy, which incorporated at least one quantifiable performance indicator. In contrast, 11 CEOs moved in the opposite direction, i.e. from hard to soft. However, the largest shift from soft performance targets was to those performance targets that maintained some unspecified element (n = 30).

Alternatively, Figure 64 suggests that companies are utilising more types of performance targets and, hence, adopting a more complex rather than simple approach when designing CEO bonuses. Specifically, 40 CEOs transferred from one to two or three types of performance target in contrast to the 12 CEOs that moved in the opposite direction. However, the largest shift from a simple performance target approach was to supplement the solitary measure of performance with an additional indicator (n = 36).

As in section 5.2.4, the association between firm performance and the annual bonus is now examined.

#### *5.3.4. CEO annual bonus value and firm performance*

Figure 65 and 66 overleaf illustrate the relationship between annual bonus for 2001/02 and 2002/03 and mean log-TSR value for 2001/02 and 2002/03 respectively. In general, results indicate that large bonuses do not guarantee improved firm performance.

(H1)

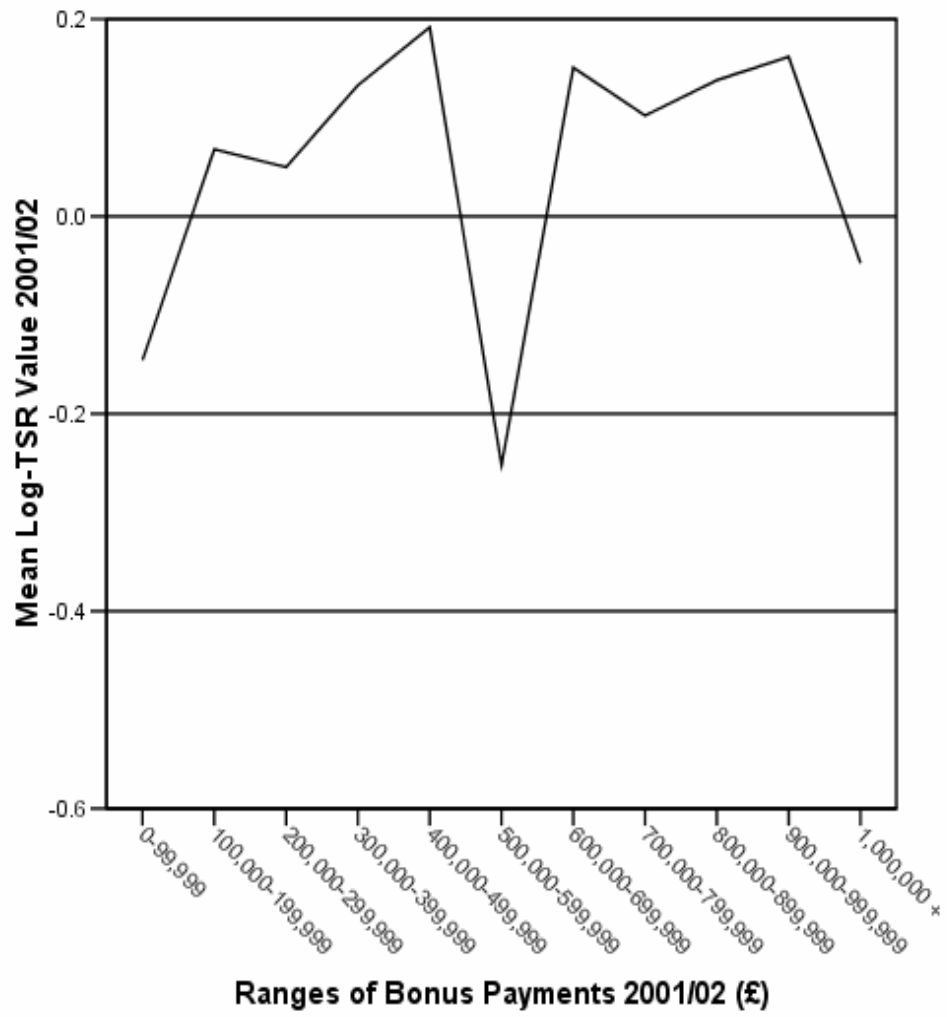


Figure 65. CEO bonus payment ranges for 2001/02 compared with the mean log-TSR value for 2001/02.

(H1)

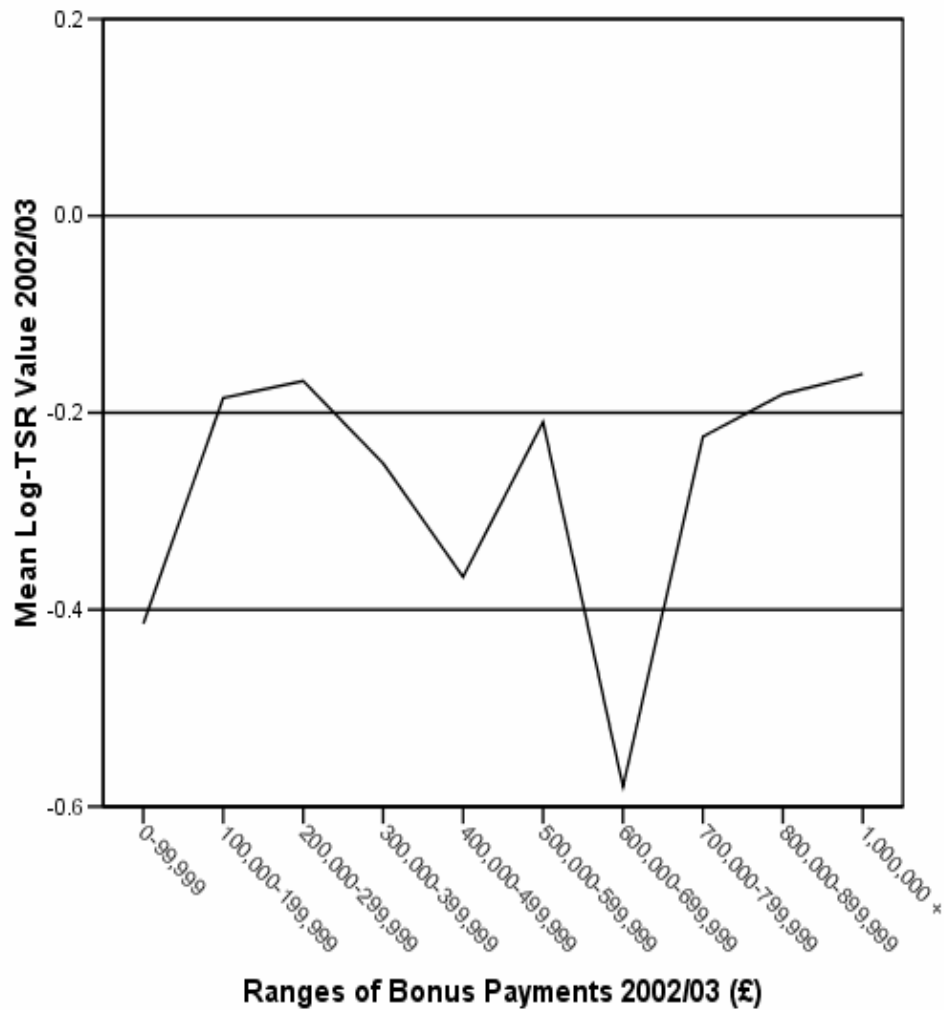


Figure 66. CEO bonus payment ranges for 2002/03 compared with the mean log-TSR value for 2002/03.

As discussed earlier in section 5.2.4, TSR is a controversial short-term performance indicator and, consequently, EPS is used as an alternative measure of performance. Therefore, Figure 67 and 68 overleaf illustrate the relationship between the annual bonus for 2001/02 and 2002/03 and the mean EPS value for 2001/02 and 2002/03 respectively. Results imply a linear relationship, which suggests that firm performance increases with bonus value. Specifically, improvements in a firm's EPS are expected to be associated with larger bonus payments. However, to reiterate, this may be a result of incentive effects, but must also reflect the fact that many bonuses are mechanically linked with variables (net profit, sales, etc) that feed directly into the EPS figure.

(H1)

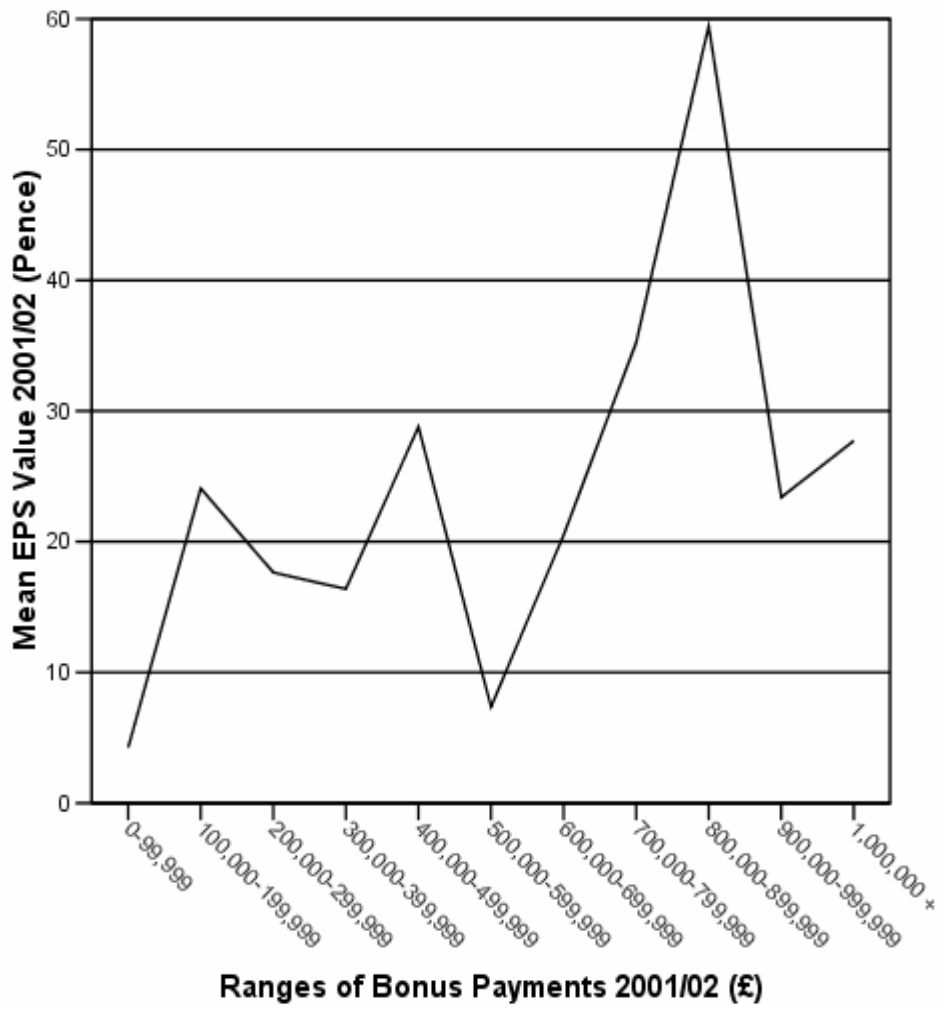


Figure 67. CEO bonus payment ranges for 2001/02 compared with the mean EPS value for 2001/02.

(H1)

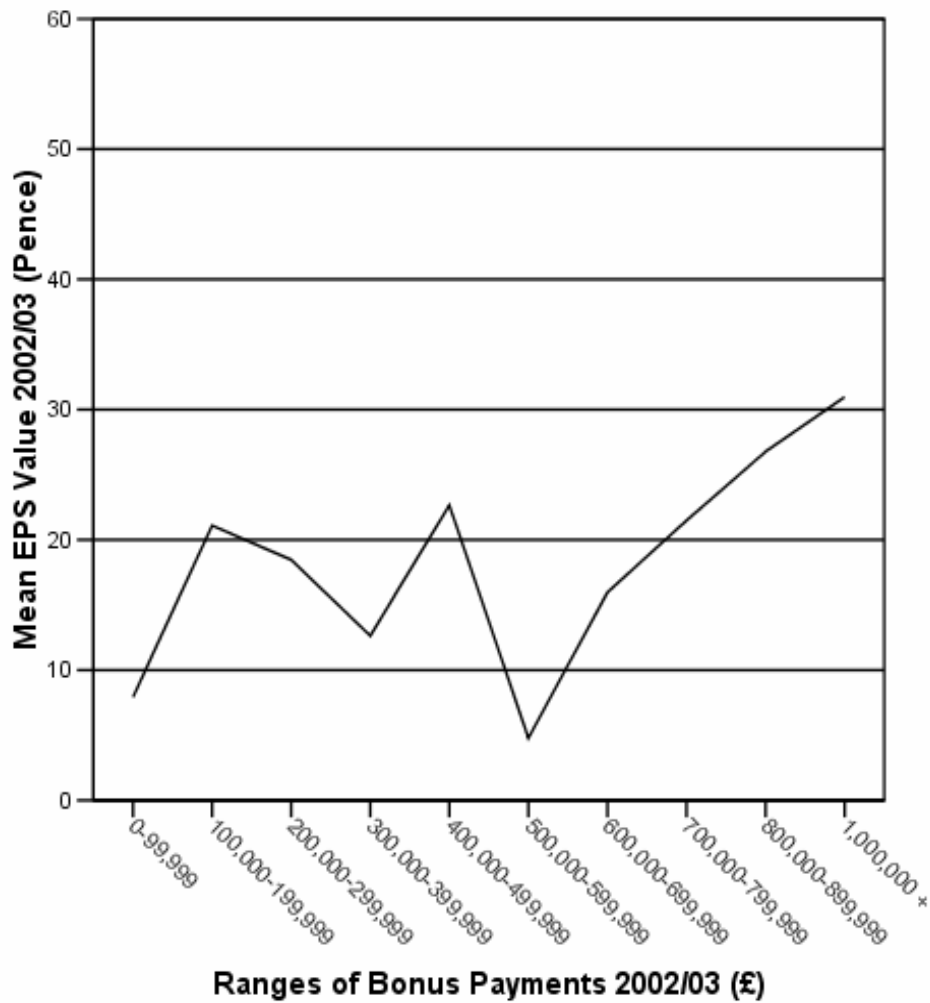


Figure 68. CEO bonus payment ranges for 2002/03 compared with the mean EPS value for 2002/03.

The section to follow, as in 5.2.5, explores the association between short-term ‘visible’ annual bonus payments and the mean  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  for 2001/02 and 2002/03 respectively.

### 5.3.5. CEO annual bonus value and payment types

Again, the value of the annual bonus was to be analysed in its log form:  $\text{Log}(\text{Bonus}_{i,t})$ . However, using  $\text{Log}(\text{Bonus}_{i,t})$  would result in biased data since all companies with zero bonuses would be excluded from the analysis. This would lead to a sample that is misrepresented as 19% and 17.3% of CEOs with bonus schemes, in 2001/02 and 2002/03 respectively, received no annual bonus. As a means to offset this problem  $\text{Log}(1 +$

$Bonus_{i,t} / Salary_{i,t}$ ) is employed. Furthermore, all details relating to short-term bonuses remain the same.

Consequently, Figure 69 below and 70 overleaf examine the different types of bonus payments for 2001/02 and 2002/03 and the mean  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  for 2001/02 and 2002/03 respectively. In general, the results reveal that short-term, instant cash payments are associated with low bonus amounts whereas all other forms of payment, which are more long-term such as shares and deferred shares are associated with large bonuses.

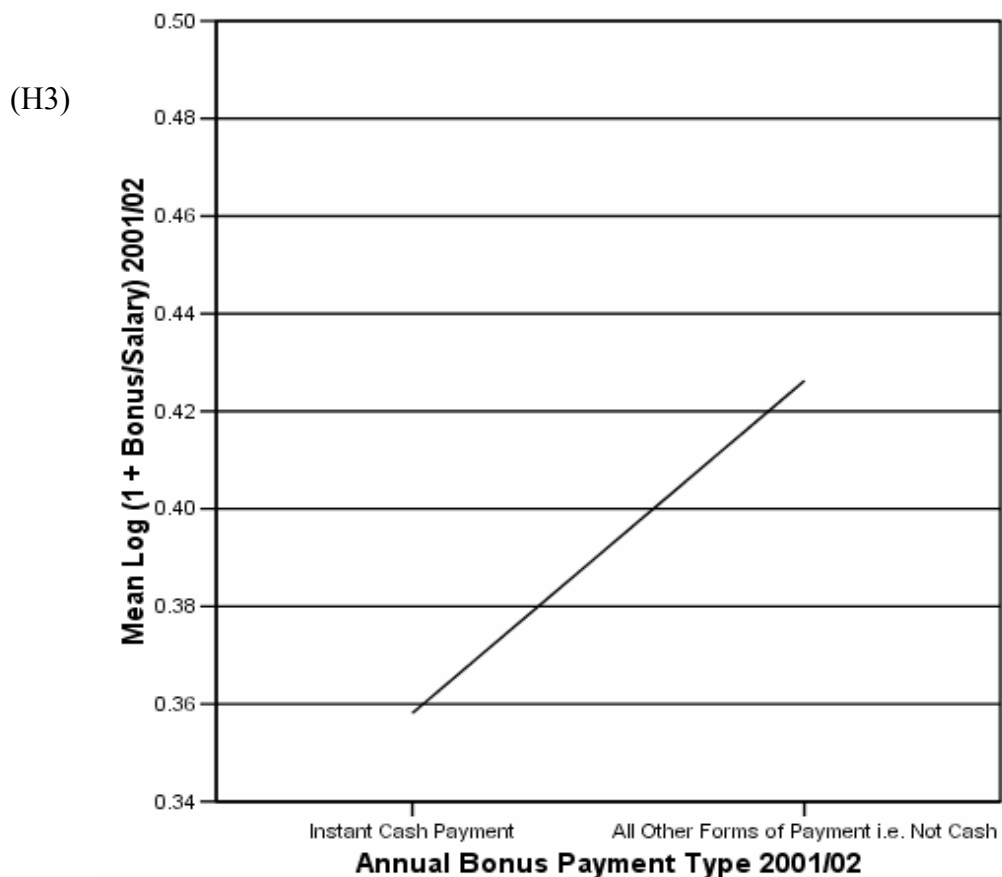


Figure 69. CEO annual bonus payment type for 2001/02 compared with the mean  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  for 2001/02.



(H3)

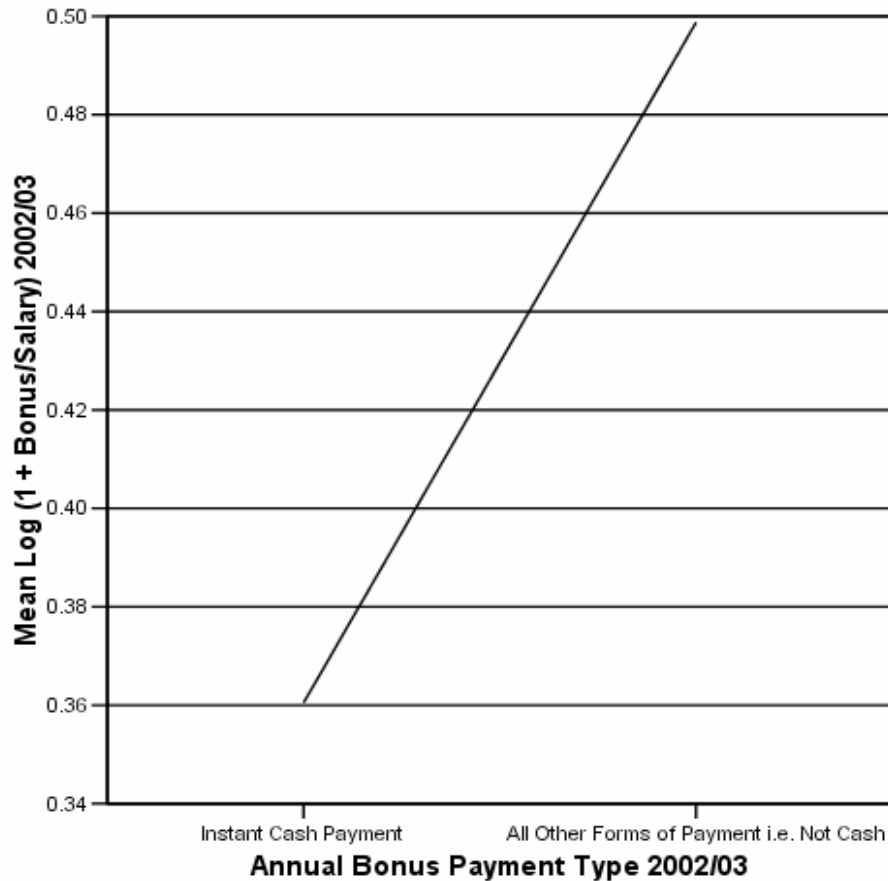


Figure 70. CEO annual bonus payment type for 2002/03 compared with the mean Log (1 + Bonus/Salary) for 2002/03.

As in section 5.2.6, the relationship between short-term ‘visible’ annual bonus payments and firm performance is now examined. As a result, the next section examines the relationship between annual bonus payment types (i.e. short-term, instant cash payments versus alternative possibilities such as long-term pay including shares, deferred shares, and matching shares) for 2001/02 and 2002/03 and firm performance as measured by TSR for 2001/02 and 2002/03 and EPS for 2001/02 and 2002/03 respectively.

### 5.3.6. CEO annual bonus payment types and firm performance

Figure 71 and 72 overleaf illustrate the relationship between annual bonus payment types for 2001/02 and 2002/03 in relation to firm performance as measured by the mean log-TSR value for 2001/02 and 2002/03 respectively. The analysis has produced contrasting results. Figure 71 indicates that compensating CEOs with short-term, instant cash

payments is associated with improved firm performance when compared to alternative, long-term modes of payment. In contrast, Figure 72 is indicative of the exact opposite whereby remunerating CEOs with short-term, instant cash payments is associated with weaker firm performance when compared to alternative, long-term forms of payment.

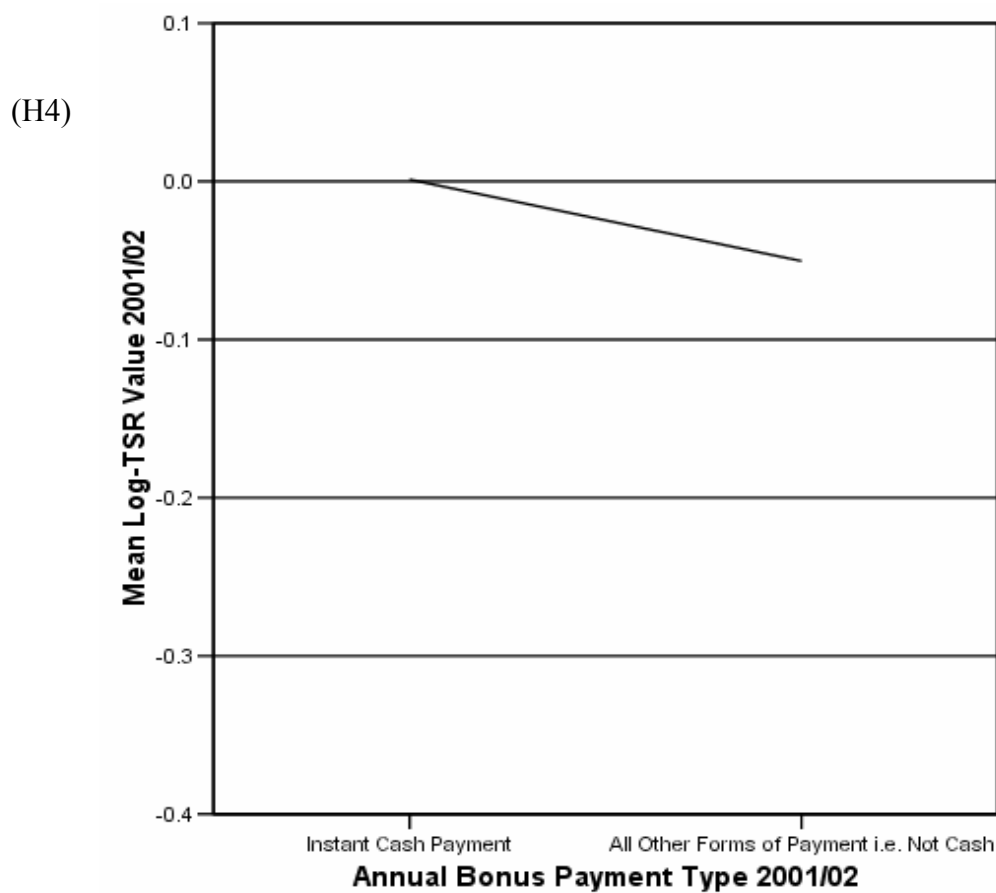


Figure 71. CEO annual bonus payment type for 2001/02 compared with the mean log-TSR value for 2001/02.

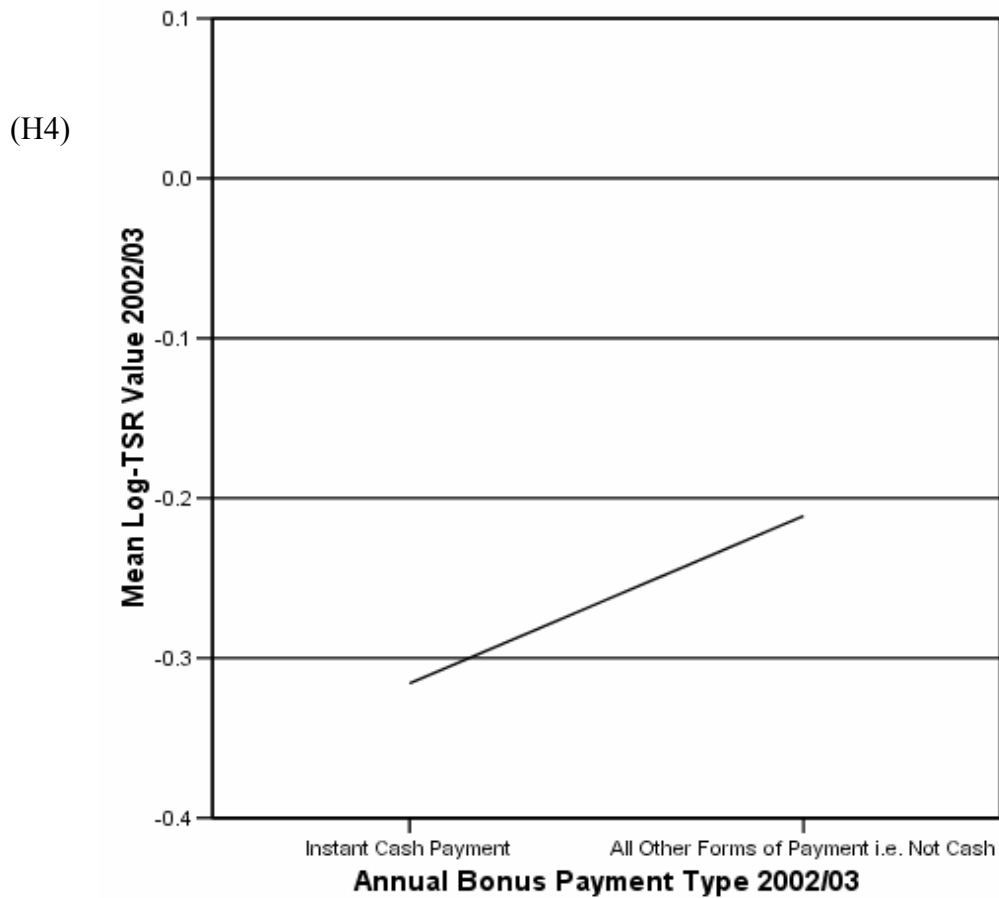


Figure 72. *CEO annual bonus payment type for 2002/03 compared with the mean log-TSR value for 2002/03.*

Figure 73 and 74 overleaf illustrate the relationship between annual bonus payment types for 2001/02 and 2002/03 and the mean EPS value for 2001/02 and 2002/03 respectively. Despite results in Figure 74 being marginal, it may be suggested that compensating CEOs with short-term, instant cash payments are associated with improved firm performance. In contrast, alternative, long-term forms of payment are associated with weaker firm performance.

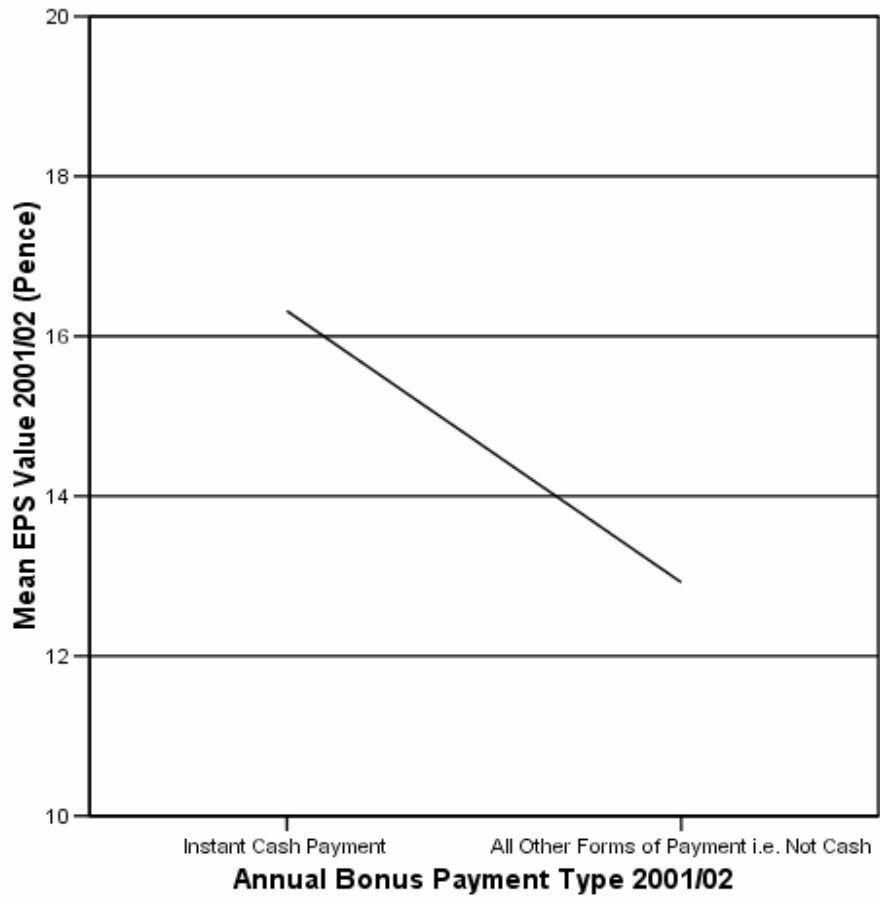


Figure 73. CEO annual bonus payment type for 2001/02 compared with the mean EPS value for 2001/02.

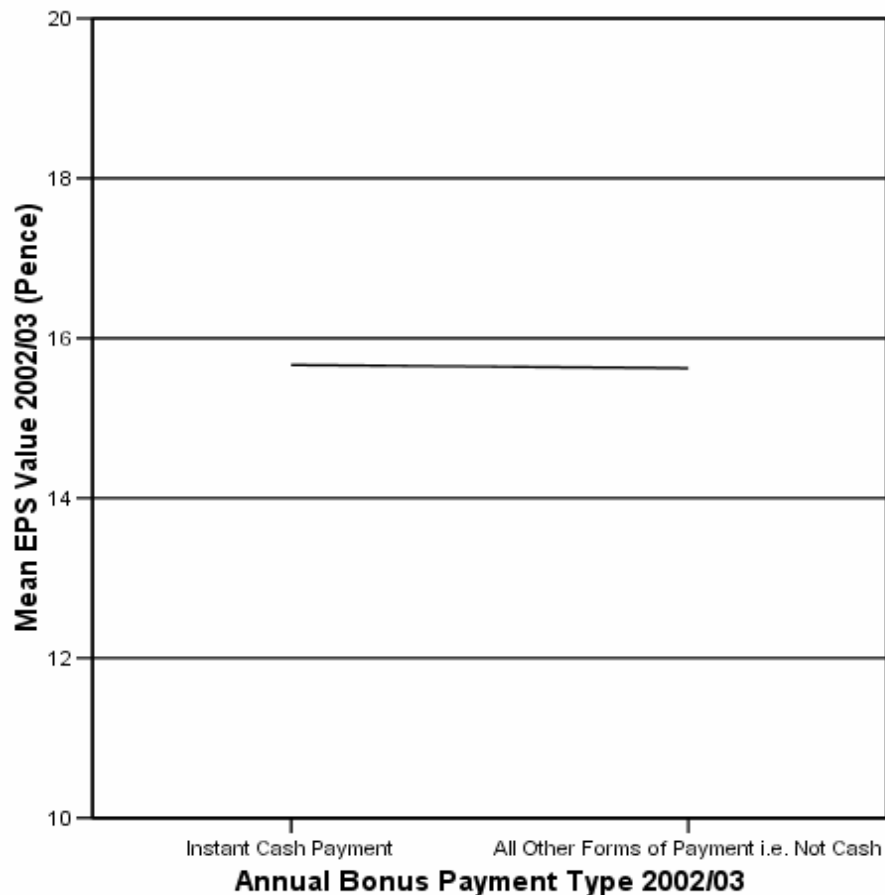


Figure 74. CEO annual bonus payment type for 2002/03 compared with the mean EPS value for 2002/03.

### 5.3.7. CEO annual bonus value, performance targets, and firm performance

As in section 5.2.7, the following section explores the association between annual bonus performance targets and the value of the annual bonus as measured by  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . Specifically, section 5.3.7.1 examines the relationship between hard/soft performance targets for 2001/02 and 2002/03 compared with the mean  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  for 2001/02 and 2002/03 respectively. Section 5.3.7.2 compares hard/soft performance targets for 2001/02 and 2002/03 against the mean log-TSR values for 2001/02 and 2002/03 respectively. Finally, sections 5.3.7.3 and 5.3.7.4 present the same analysis using simple/complex performance targets.

### 5.3.7.1. CEO annual bonus value and hard/soft performance targets

Figure 75 below and 76 overleaf illustrate the relationship between hard/soft performance targets implemented for 2001/02 and 2002/03 against the mean Log (1 + Bonus/Salary) for 2001/02 and 2002/03 respectively. Once more, hard targets constitute ETs and PITs or both and are subject to shareholder monitoring. In contrast, soft targets consist of anything that includes an unspecified element and, subsequently, are not open to shareholder monitoring.

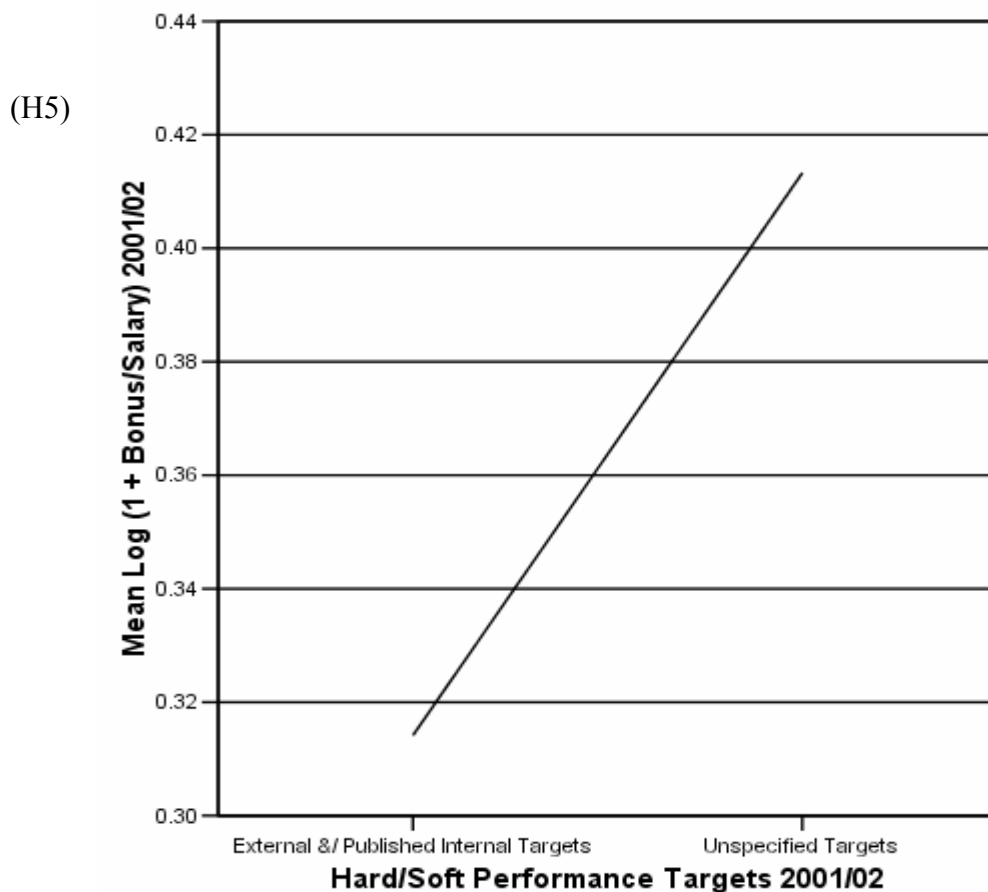


Figure 75. CEO hard/soft performance targets for 2001/02 compared with the mean Log (1 + Bonus/Salary) for 2001/02.

(H5)

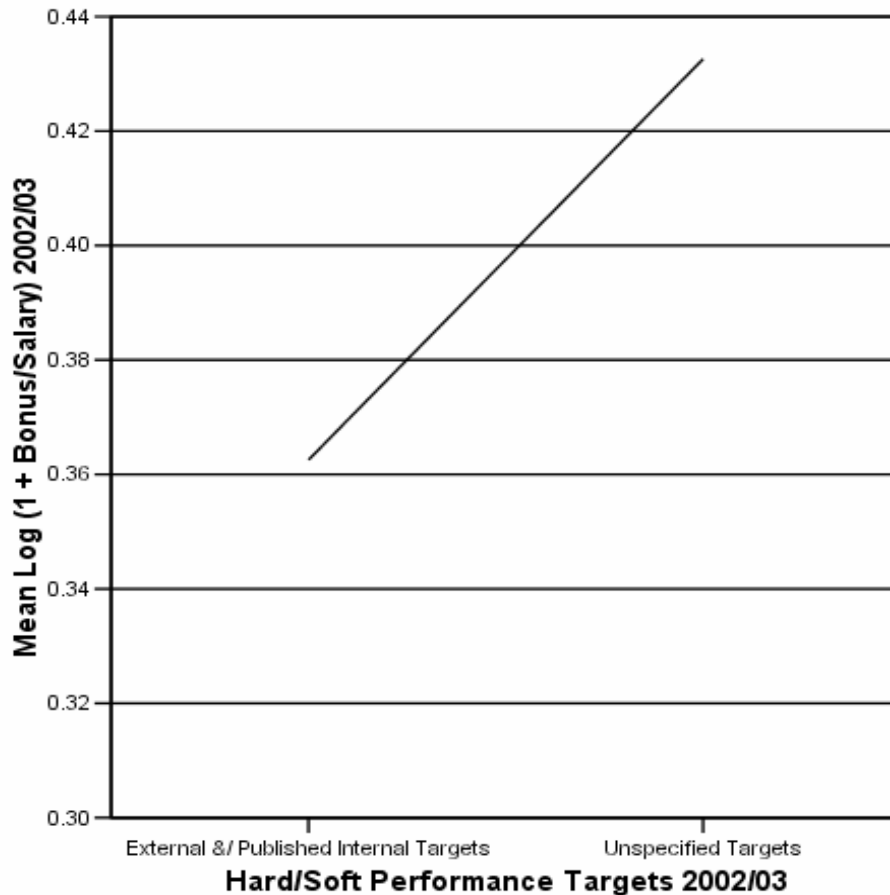


Figure 76. CEO hard/soft performance targets for 2002/03 compared with the mean Log (1 + Bonus/Salary) for 2002/03.

The results, which are consistent over both years, suggest that as the performance targets get increasingly softer (i.e. implementing vaguer performance targets) the size of the bonus increases relative to salary. In contrast, as performance targets get harder (i.e. making the performance targets more transparent) the size of the bonus decreases relative to salary. This is consistent with tougher, externally verifiable targets leading to lower rewards that are harder for executives to earn. It is also consistent with shareholder efforts to achieve managerial monitoring through harder conditions and the power of executives over bonus when governance is weak.

#### 5.3.7.2. CEO hard/soft performance targets and firm performance

Figures 77 and 78 overleaf compare hard/soft performance targets for 2001/02 and 2002/03 against the mean log-TSR values for 2001/02 and 2002/03 respectively. For the

purpose of this analysis, hard targets include measurable targets open to shareholder monitoring whereas soft targets consist of any unspecified element.

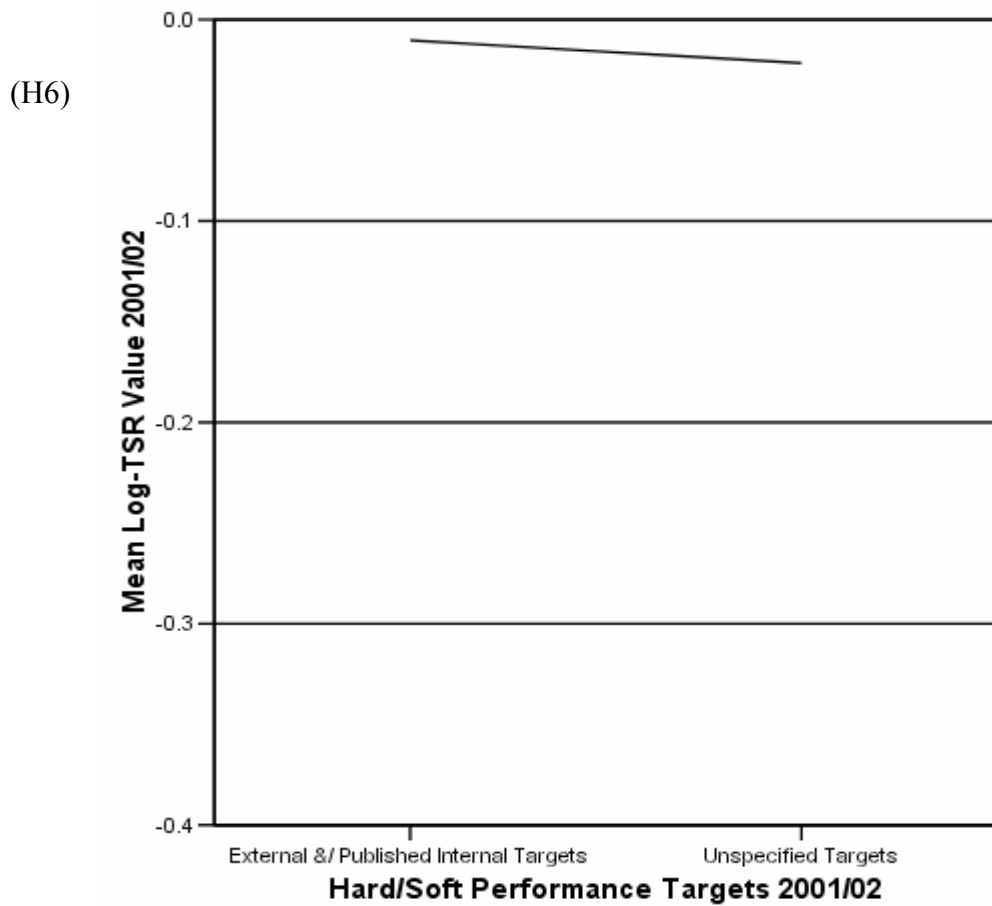


Figure 77. CEO hard/soft performance targets for 2001/02 compared with the mean log-TSR value for 2001/02.



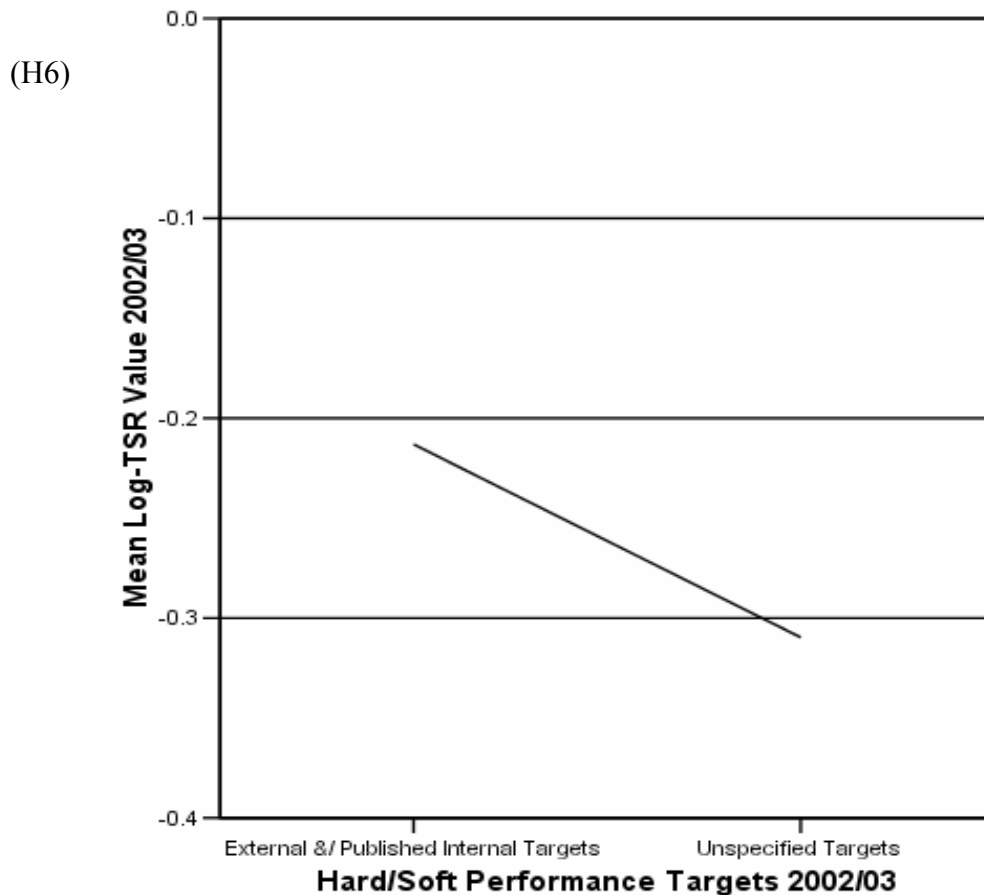


Figure 78. CEO hard/soft performance targets for 2002/03 compared with the mean log-TSR value for 2002/03.

The results, which are consistent over both years, are indicative of a negative association between TSR and soft performance targets. Consequently, as the performance targets become increasingly softer (i.e. implementing vaguer performance targets) TSR decreases. In contrast, hard targets are positively associated with TSR: as performance targets become harder (i.e. making the performance targets more transparent) TSR increases.

Alternatively, Figures 79 and 80 overleaf examine the relationship between hard/soft performance targets implemented for 2001/02 and 2002/03 and the mean EPS values for 2001/02 and 2002/03 respectively.

(H6)

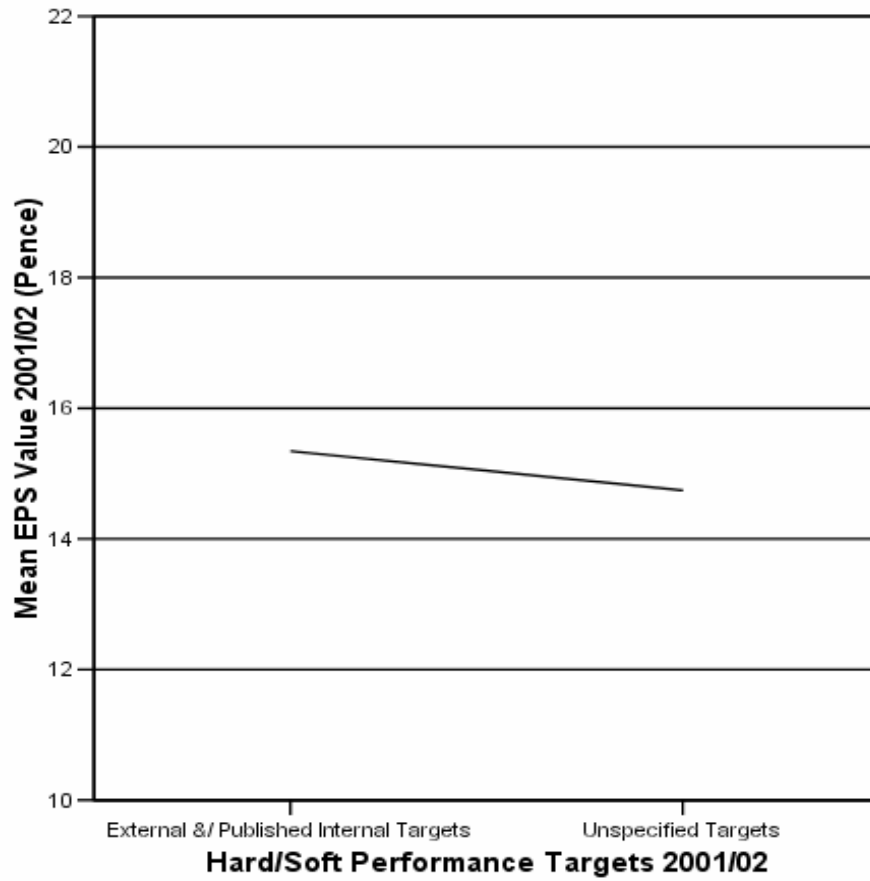


Figure 79. CEO type of performance target for 2001/02 compared with the mean EPS value for 2001/02.

(H6)

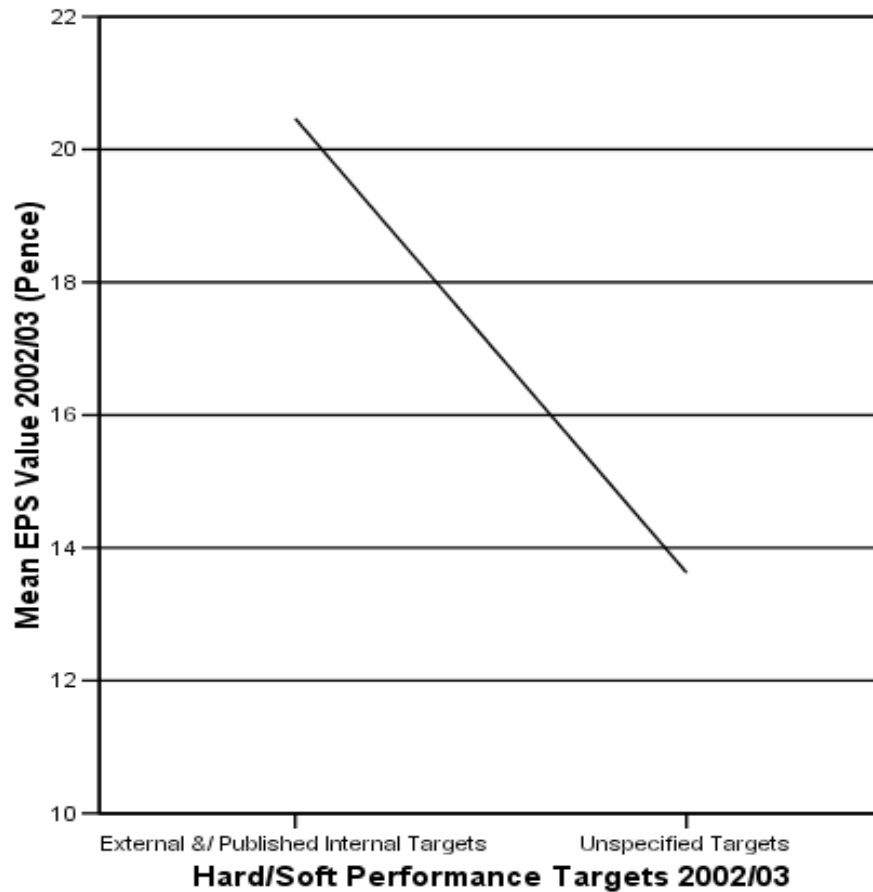


Figure 80. CEO type of performance target for 2002/03 compared with the mean EPS value for 2002/03.

The results are again consistent over both years and are indicative of a negative association between EPS and soft performance targets. Therefore, as the performance targets become increasingly softer (i.e. implementing vaguer performance targets) EPS decreases. In contrast, hard targets are positively associated with EPS: as performance targets become harder (i.e. making the performance targets more transparent) EPS increases.

To summarise, the results suggest soft performance targets are negatively associated with improved firm performance whereas hard performance targets are associated with improved company performance, as measured by TSR and EPS.

#### 5.3.7.2. CEO annual bonus value and simple/complex performance targets

As outlined in section 5.2.7.2, the complexity of performance targets and firm performance is examined using two separate but not mutually exclusive variables. Consequently, Figure 81 and 82 overleaf compare simple/complex performance targets for 2001/02 and 2002/03 based on performance target type against the mean  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  for 2001/02 and 2002/03. To supplement this, Figures 83 and 84 overleaf illustrate the relationship between simple/complex performance targets for 2001/02 and 2002/03 based on the number of performance measures and the mean  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  for 2001/02 and 2002/03. Again, simple targets include a single performance target/measure whereas complex targets consist of multiple performance targets/measures.

(H7)

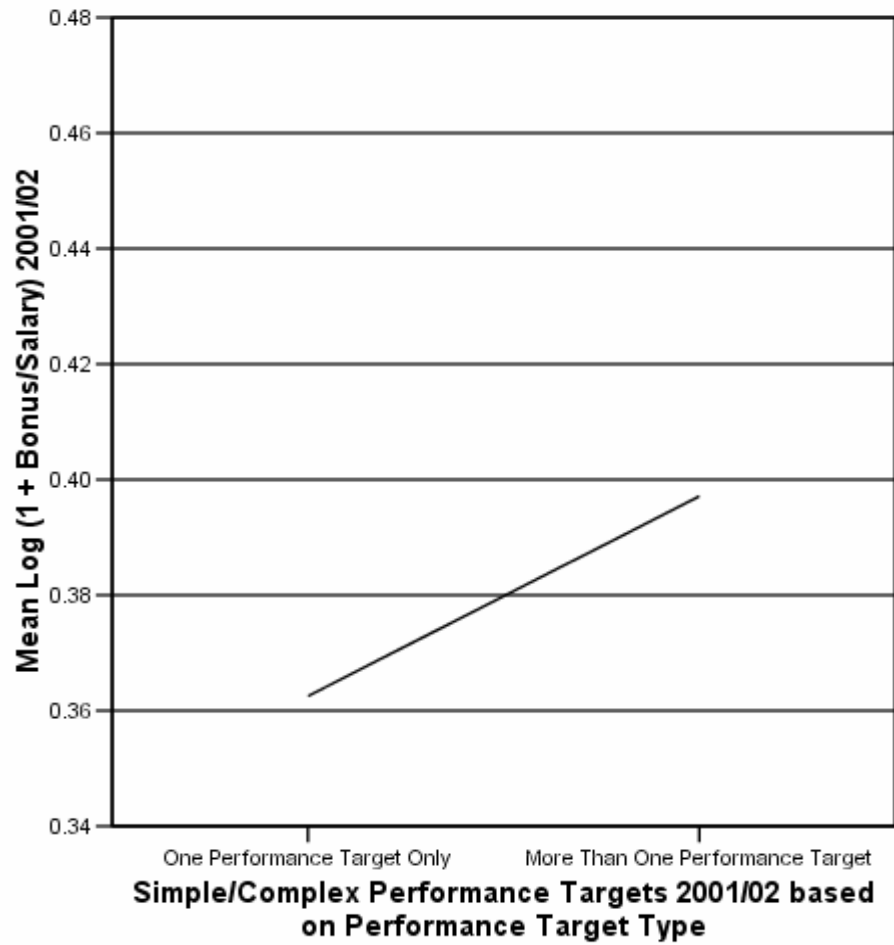


Figure 81. CEO simple/complex performance targets for 2001/02 based on performance target type compared with the mean Log (1 + Bonus/Salary) for 2001/02.

(H7)

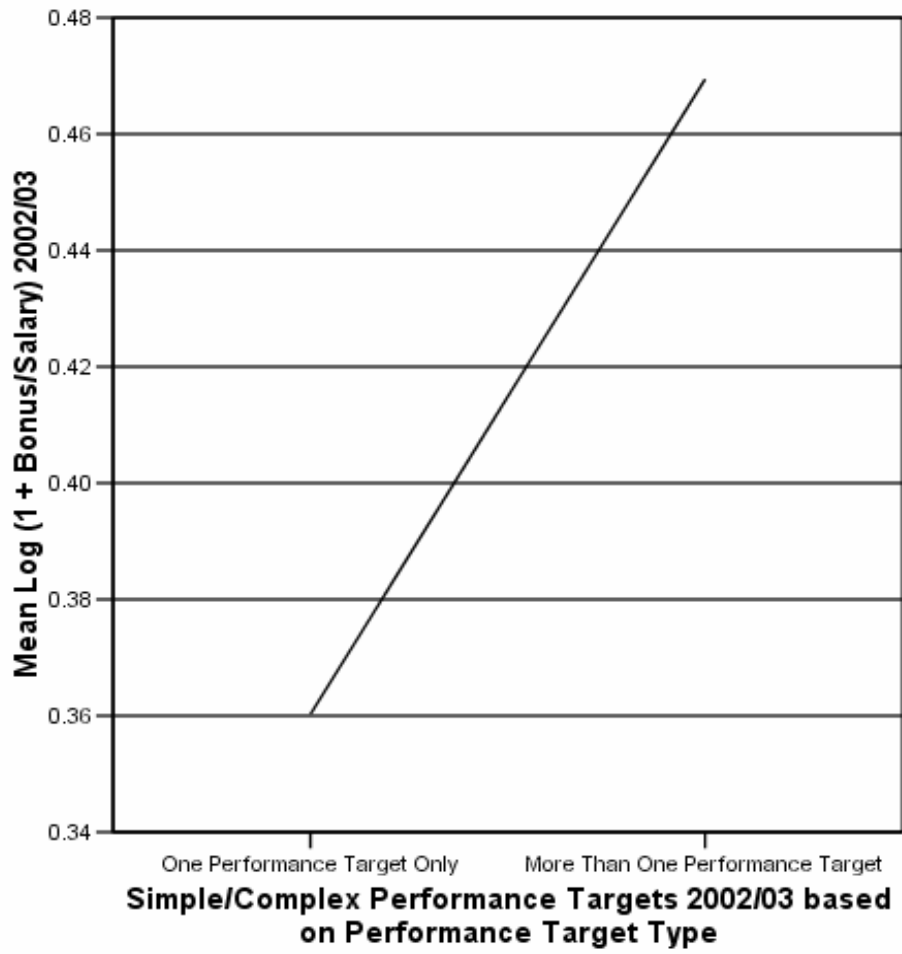


Figure 82. CEO *simple/complex performance targets for 2002/03 based on performance target type compared with the mean Log (1 + Bonus/Salary) for 2002/03.*

(H7)

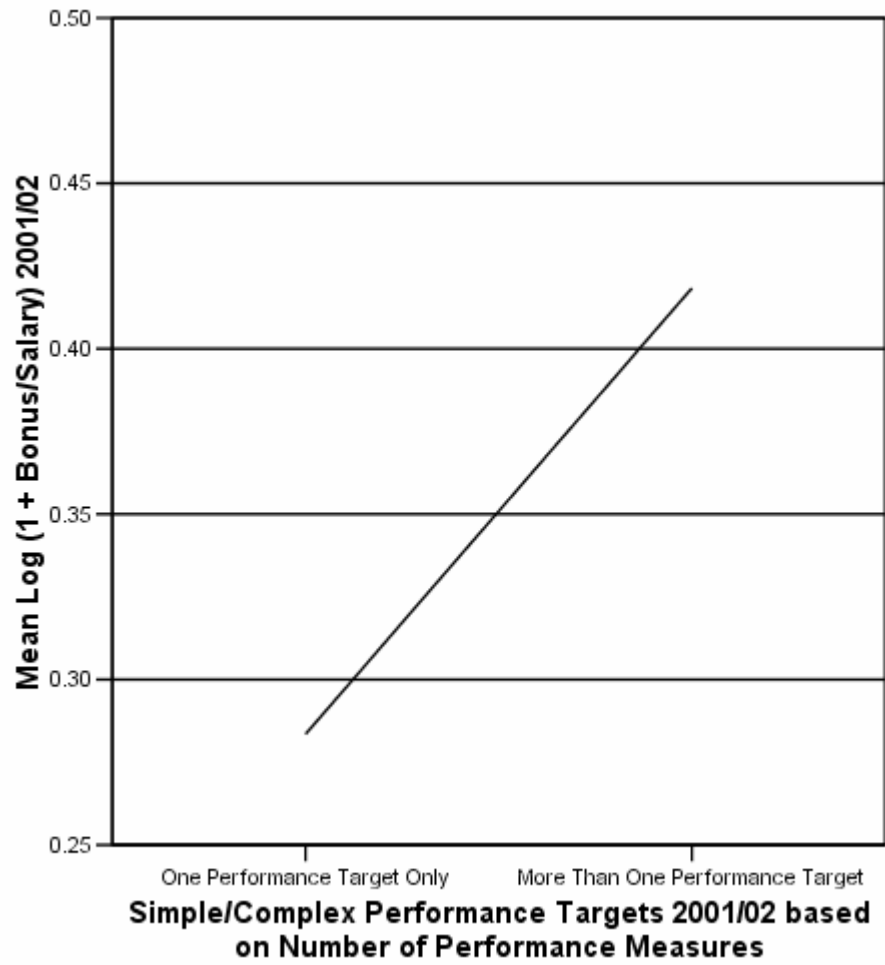


Figure 83. CEO simple/complex performance targets for 2001/02 based on number of performance measures compared with the mean Log (1 + Bonus/Salary) for 2001/02.

(H7)

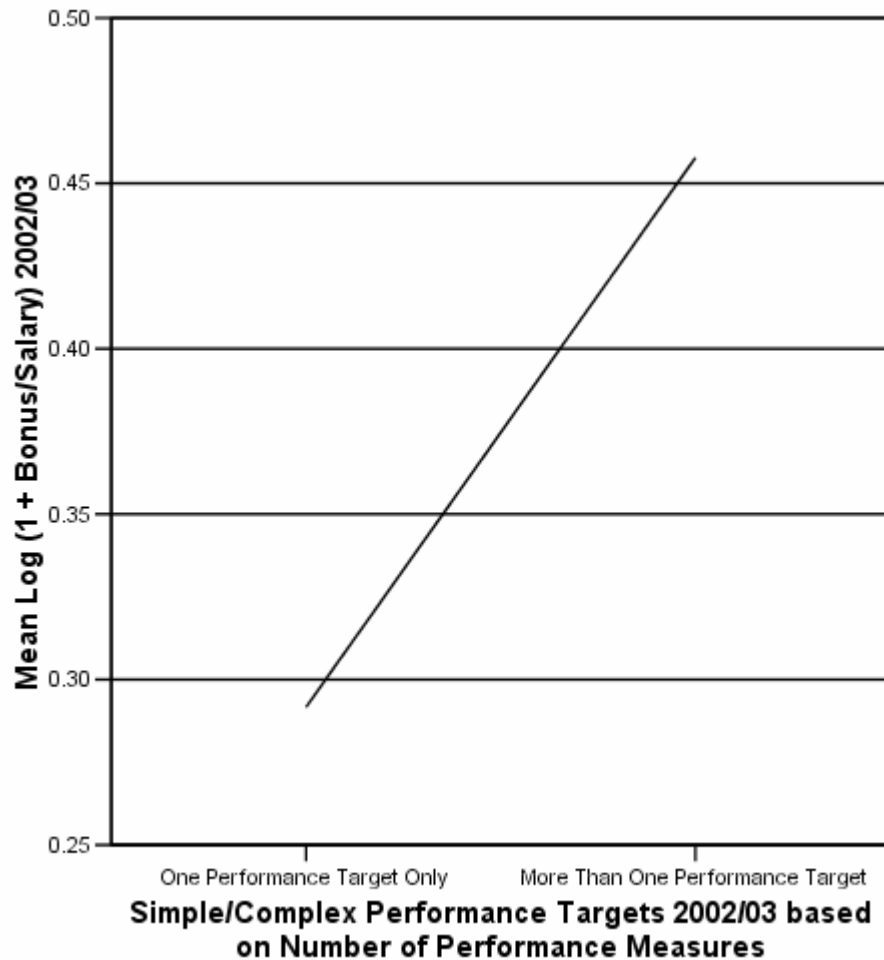


Figure 84. CEO simple/complex performance targets for 2002/03 based on number of performance measures compared with the mean Log (1 + Bonus/Salary) for 2002/03.

The results, which are again consistent over both years, are indicative of a positive trend between the complexity of performance targets (i.e. increasing the number of performance target types and/or number of measures) and the size of the bonus. Subsequently, CEOs that operate under complex performance target schemes can expect greater increments in bonus relative to salary. In contrast, results suggest that as performance targets become increasingly simpler (i.e. reducing the number of performance target types and/or number of measures) the bonus decreases. Therefore, CEOs that operate under simple performance target schemes can expect to receive smaller increments in bonus relative to salary. Significantly, simple targets do not



compensate CEOs as highly as those CEOs who are set complex targets, and CEOs may be acting self-interestedly, using complexity to mask softness in targets.

#### 5.3.7.3. CEO simple/complex performance targets and firm performance

Similar to section 5.2.7.3, the complexity of performance targets and firm performance is examined using two separate but not mutually exclusive variables. Therefore, Figure 85 overleaf examines the relationship between simple/complex performance targets for 2001/02 based on performance target type and the mean log-TSR value for 2001/02. To supplement this, Figure 86 overleaf compares simple/complex performance targets for 2001/02 based on number of performance measures against the mean log-TSR value in 2001/02.

(H8)

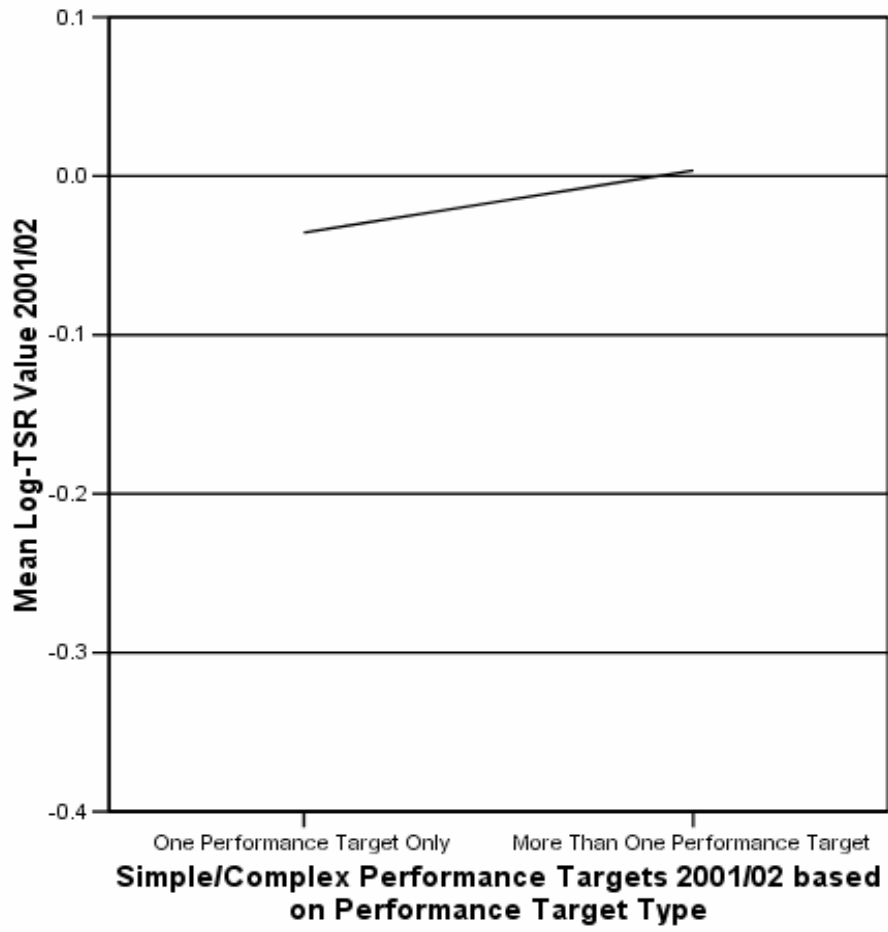


Figure 85. CEO simple/complex performance targets for 2001/02 compared with the mean log-TSR value for 2001/02 based on performance target type.

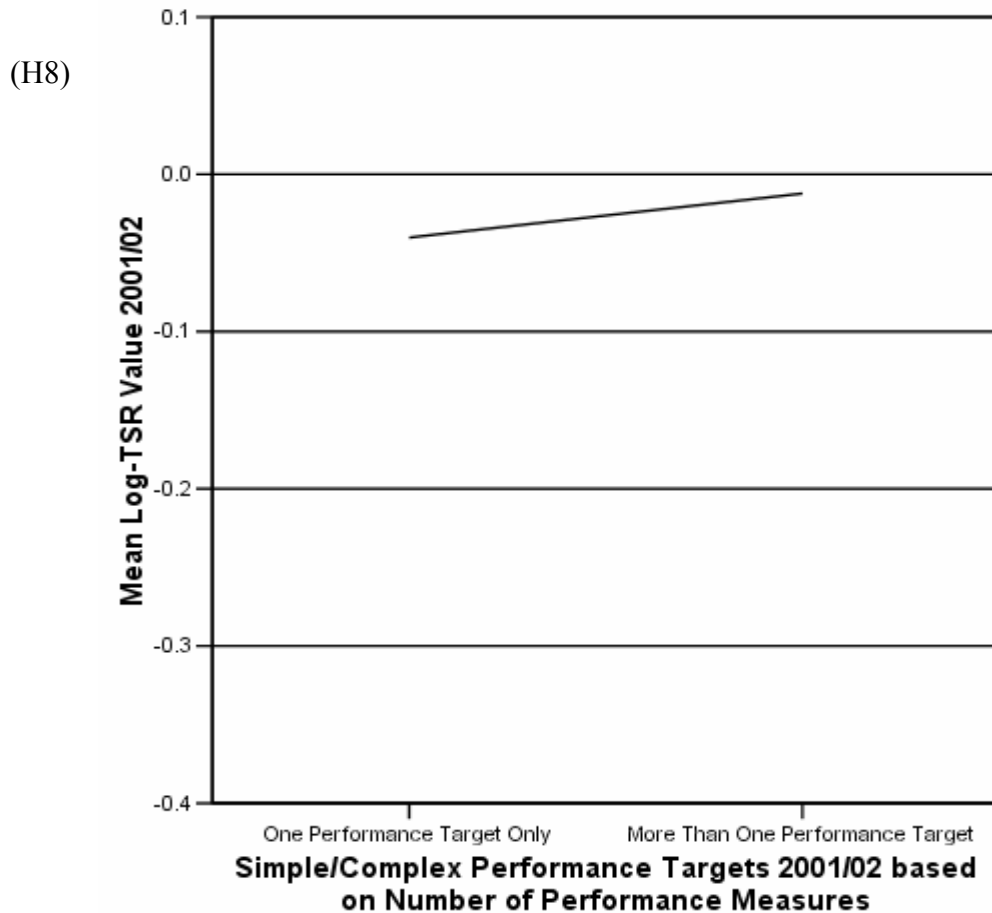


Figure 86. CEO simple/complex performance targets for 2001/02 compared with the mean log-TSR value for 2001/02 based on number of performance measures.

The results suggest that there is a positive association between TSR and complex performance targets. Subsequently, as performance targets become more complex (i.e. increasing the number of performance target types and/or measures) TSR increases. In contrast, simple targets are negatively associated with TSR: as performance targets become increasingly simpler (i.e. reducing the number of performance target types and/or measures) TSR decreases.

In addition, Figure 87 overleaf illustrates the relationship between simple/complex performance targets for 2002/03 based on performance target type and the mean log-TSR value for 2002/03. To supplement this, Figure 88 overleaf compares simple/complex

performance targets for 2002/03 based on number of performance measures against the mean log-TSR value for 2002/03.

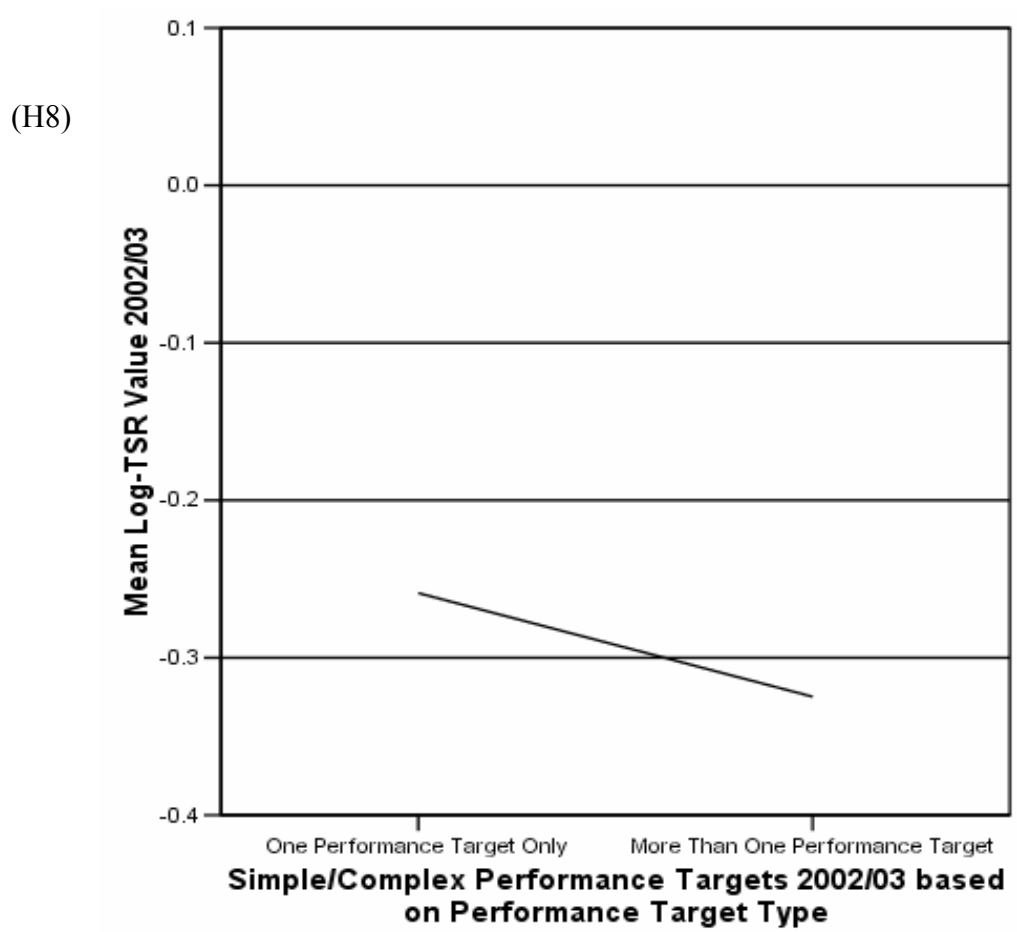


Figure 87. CEO simple/complex performance targets for 2002/03 compared with the mean log-TSR value for 2002/03 based on performance target type.

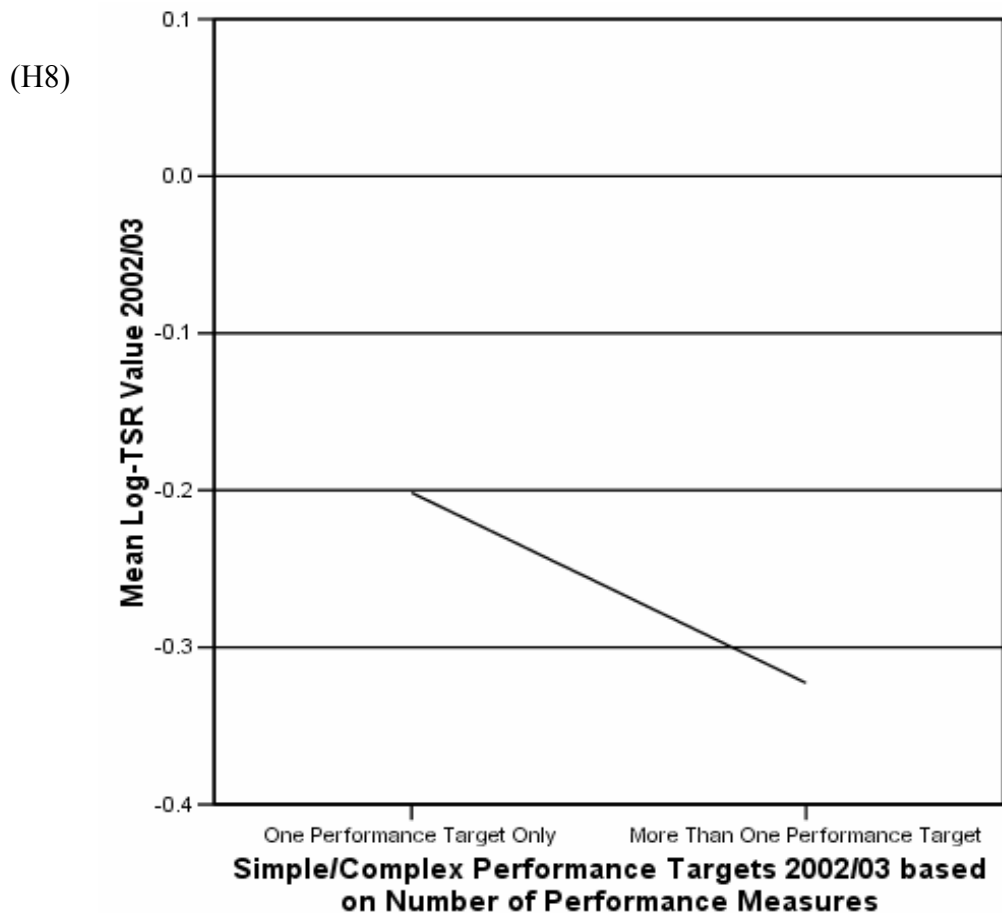


Figure 88. CEO simple/complex performance targets for 2002/03 compared with the mean log-TSR value for 2002/03 based on number of performance measures.

The results suggest that there is a negative association between TSR and complex performance targets. Therefore, as performance targets become more complex (i.e. increasing the number of performance target types and/or measures) TSR decreases. In contrast, simple targets are positively associated with TSR: as performance targets become increasingly simpler (i.e. reducing the number of performance target types and/or measures) TSR increases.

To summarise, first year results suggest that there is a positive association between complex performance targets and TSR and a negative association between simple targets and TSR. In contrast, second year results indicate that there is a negative association

between complex performance targets and TSR and a positive association between simple targets and TSR.

As an alternative, Figure 89 below examines the relationship between simple/complex performance targets for 2001/02 based on performance target type and the mean EPS value for 2001/02. To supplement this, Figure 90 overleaf compares simple/complex performance targets for 2001/02 based on number of performance measures against the mean EPS value for 2001/02.

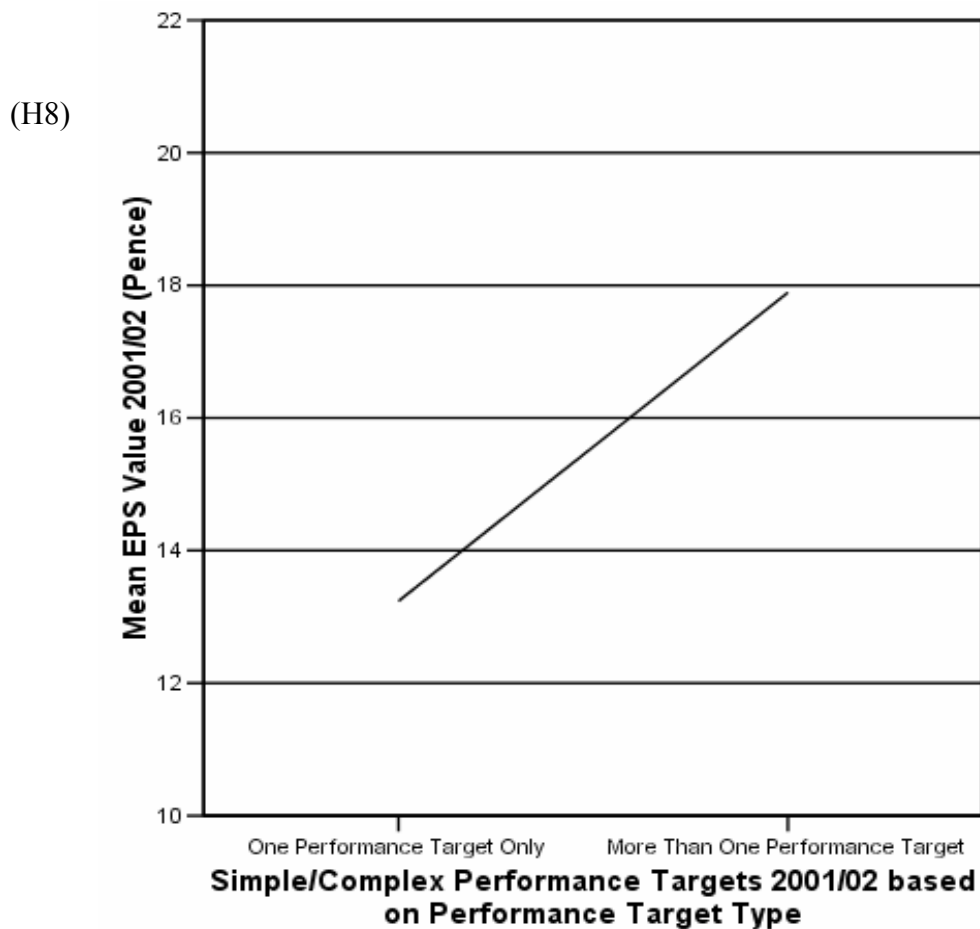


Figure 89. CEO simple/complex performance targets for 2001/02 compared with the mean EPS value for 2001/02 based on performance target type.

(H8)

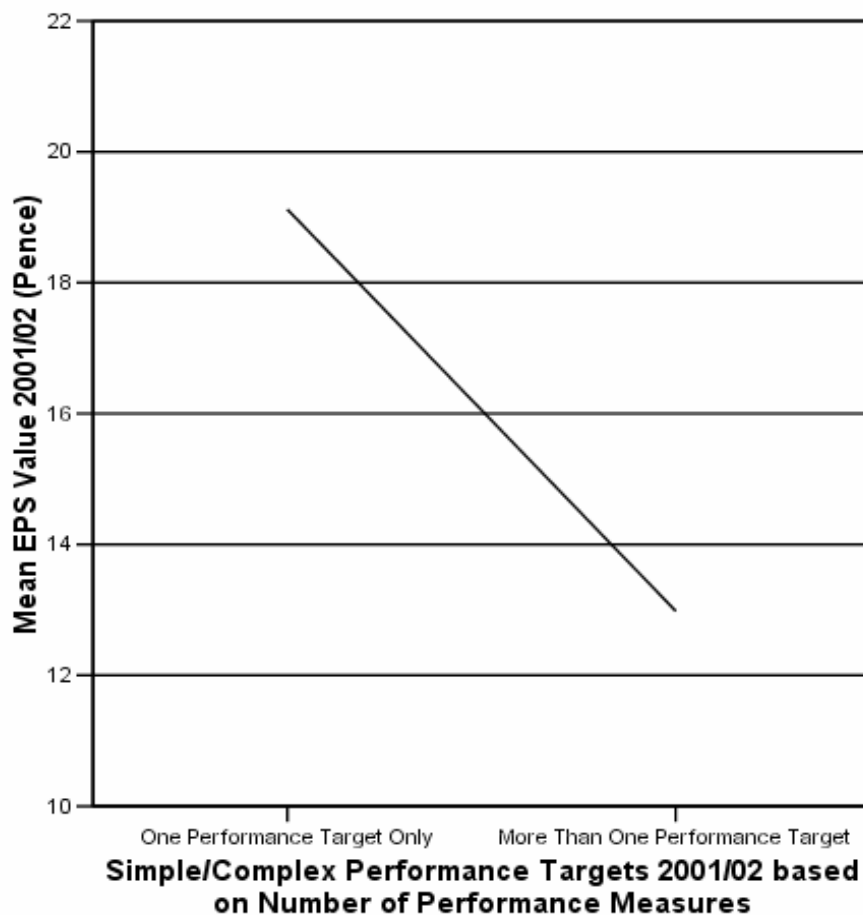


Figure 90. CEO simple/complex performance targets for 2001/02 compared with the mean EPS value for 2001/02 based on number of performance measures.

The results are conflicting. Figure 89 suggests that a positive association exists between EPS and complex performance targets. Subsequently, as performance targets become more complex (i.e. increasing the number of performance target types) EPS increases. In contrast, there is a negative association between EPS and simple performance targets. Therefore, as performance targets become increasingly simpler (i.e. reducing the number of performance target types) EPS decreases.

In contrast, Figure 90 is indicative of a negative trend between EPS and complex performance targets. Subsequently, as performance targets become more complex (i.e. increasing the number of performance measures) EPS decreases. Conversely, there is a positive trend between EPS and simple performance targets: as performance targets

become increasingly simpler (i.e. reducing the number of performance measures) EPS increases.

In addition, Figure 91 below compares simple/complex performance targets for 2002/03 based on performance target type against the mean EPS value for 2002/03. To supplement this, Figure 92 overleaf illustrates the relationship between simple/complex performance targets for 2002/03 based on number of performance measures and the mean EPS value for 2002/03.

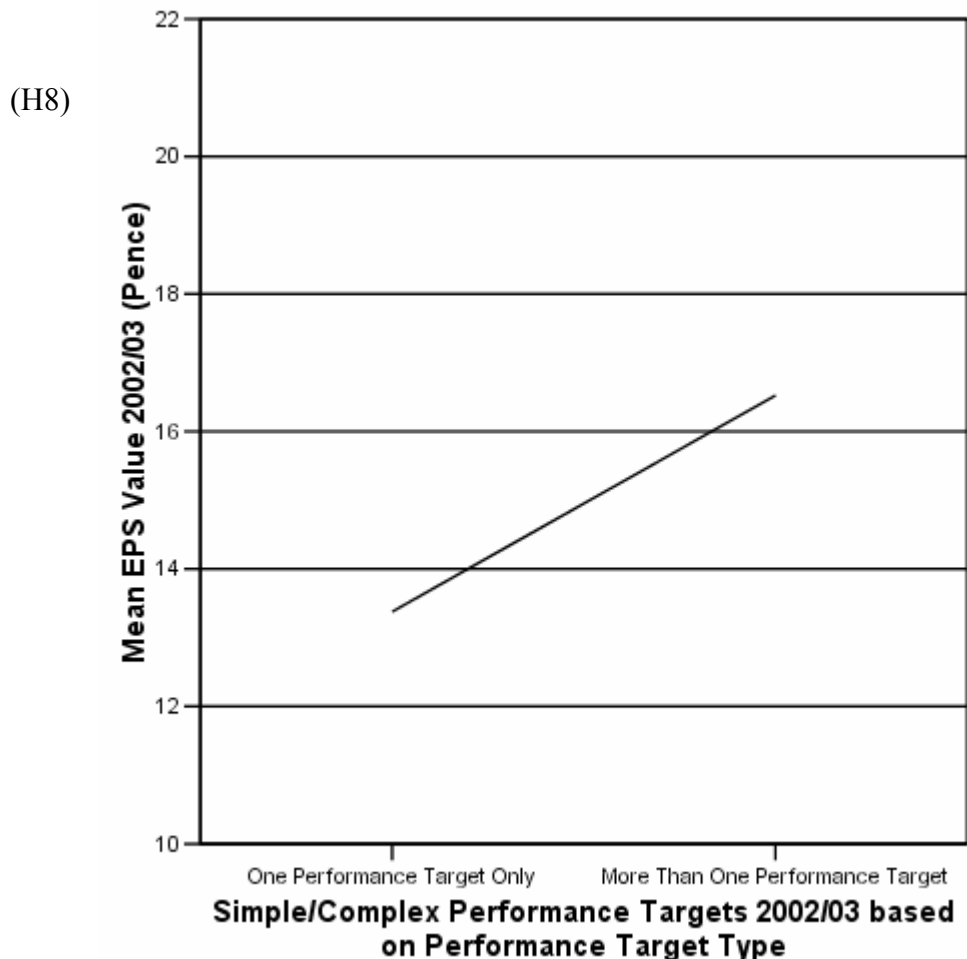


Figure 91. CEO simple/complex performance targets for 2002/03 compared with the mean EPS value for 2002/03 based on performance target type.



(H8)

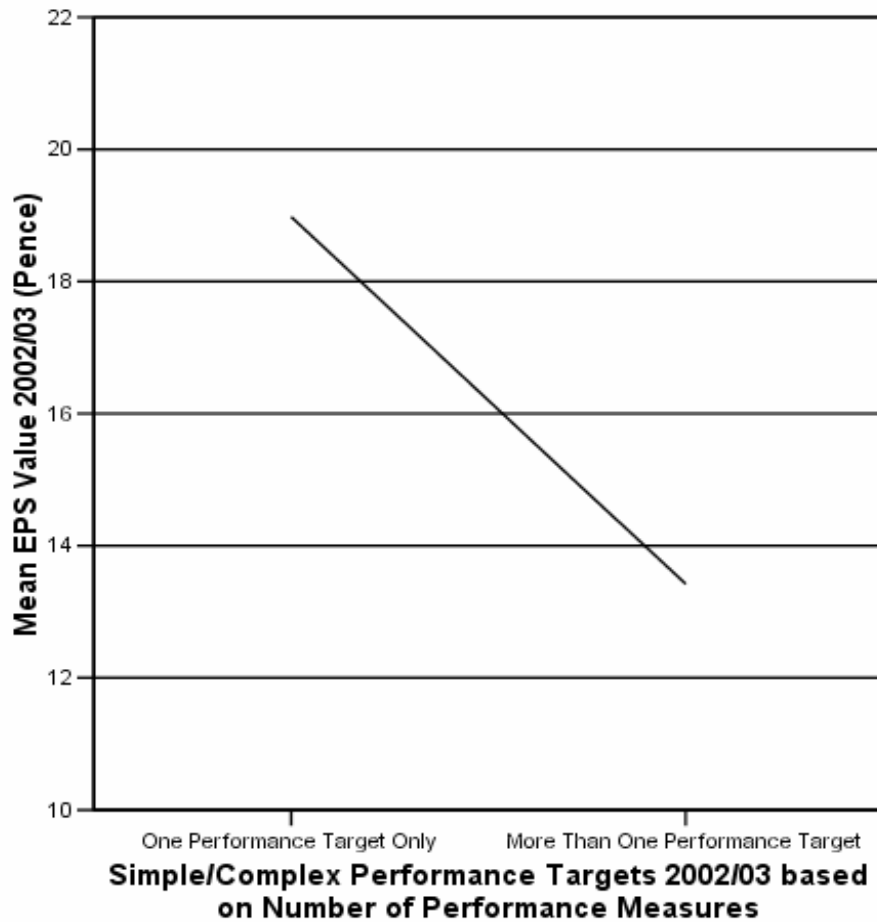


Figure 92. CEO simple/complex performance targets for 2002/03 compared with the mean EPS value for 2002/03 based on number of performance measures.

The results, as with the previous two figures (89 and 90), are also conflicting. Figure 91 shows a positive trend between EPS and complex performance targets. Therefore, as the performance targets become more complex (i.e. increasing the number of performance target types) EPS increases. Conversely, simple targets are negatively associated with EPS: as performance targets become increasingly simpler (i.e. reducing the number of performance target types) EPS decreases.

In contrast, Figure 92 suggests a negative association between EPS and complex performance targets. Therefore, as performance targets become more complex (i.e. increasing the number of performance measures) EPS decreases. Conversely, simple

targets are positively associated with EPS: as performance targets become increasingly simpler (i.e. reducing the number of performance measures) EPS increases.

To summarise this section, the complexity variables when examined together provide mixed results. However, when the variables are analysed separately the results indicate the following. There is a positive association between EPS and complex performance targets, and a negative association between EPS and simple targets, when based on performance target type. In contrast, when based on performance measures, complex performance targets are negatively associated with EPS whereas simple targets are positively associated with EPS. These findings are consistent over both years.

So far, however, no significance tests have been applied to these conclusions. Sections 5.4 and 5.5, therefore, present the results from the multiple regression analysis for both the main board executive directors and CEOs respectively.

#### 5.4. EXECUTIVE SINGLE PERIOD MULTIPLE REGRESSION ANALYSIS

The single period multiple regressions examine each year's cross-section independently, to be followed by panel regressions. The dependent variable, which for both years is the  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  figure awarded for that particular year as well as all independent variables for that particular year will remain the same for each individual regression. The results for each year will be presented in turn.

Diagnostic statistics have highlighted 20 extreme values, or outliers, which exerted undue leverage upon the values of the regression models for both years. In simple regression, an outlier is an observation whose dependent variable value is unusual given the value of the independent variable (Lewis-Beck, 1993). In addition, the combination of high leverage with an outlier produces substantial influence on the regression coefficients (Lewis-Beck, 1993). Although outlying and influential data might be problematic they should not be ignored or discarded automatically and thoughtlessly (Lewis-Beck, 1993). Consequently, following thorough investigation into the identified outliers it is evident that the unusual values belong, in general, to a small sub-sample of

executives who operate within the finance sector and who receive extremely large bonuses i.e. more than £1m, when compared to the average executive bonus.

Even when controlling for industry and nationality effects, the volatility of the annual bonus remains high and, subsequently, these extreme values influence the regression model significantly. This effect might be due to some unaccountable factor or additional independent variable that has not been considered in the regression model such as long-term compensation. Significantly, the discrepancies are not unusual increases in the explanatory variables such as EPS or TSR but increases in the value of the annual bonus. Therefore, to delete or respecify these values to accommodate the unusual data would distort the results and would not be an accurate representation of executive bonuses. Essentially, excessive bonuses are not an uncommon feature of executive pay. Consequently, on this basis it is difficult to omit the outliers altogether and, hence, all 20 will remain in the regression model.

#### *5.4.1. Executive single period multiple regression analysis 2001/02*

Table 4 overleaf presents the results of an iterative process of model construction and includes 10 explanatory variables.

Table 4. *Executive model summary: dependent variable Log (1 + Bonus/Salary) 2001/02.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.245(a)	.060	.059	.32997	.060	66.143	1	1039	.000
2	.338(b)	.114	.113	.32042	.055	63.896	1	1038	.000
3	.366(c)	.134	.131	.31702	.019	23.346	1	1037	.000
4	.387(d)	.150	.146	.31429	.016	19.112	1	1036	.000
5	.403(e)	.162	.158	.31205	.013	15.955	1	1035	.000
6	.410(f)	.168	.163	.31113	.006	7.137	1	1034	.008
7	.415(g)	.173	.167	.31045	.004	5.480	1	1033	.019
8	.421(h)	.177	.171	.30969	.005	6.128	1	1032	.013
9	.425(i)	.181	.174	.30923	.003	4.059	1	1031	.044
10	.429(j)	.184	.176	.30878	.003	4.013	1	1030	.045

a Predictors: (Constant), finance (dummy)

b Predictors: (Constant), finance (dummy), log-TSR value 2001/02

c Predictors: (Constant), finance (dummy), log-TSR value 2001/02, instant cash bonus payment 2001/02 (dummy)

d Predictors: (Constant), finance (dummy), log-TSR value 2001/02, instant cash bonus payment 2001/02 (dummy), American (dummy)

e Predictors: (Constant), finance (dummy), log-TSR value 2001/02, instant cash bonus payment 2001/02 (dummy), American (dummy), EPS value 2001/02 (pence)

f Predictors: (Constant), finance (dummy), log-TSR value 2001/02, instant cash bonus payment 2001/02 (dummy), American (dummy), EPS value 2001/02 (pence), oil, gas & minerals (dummy)

g Predictors: (Constant), finance (dummy), log-TSR value 2001/02, instant cash bonus payment 2001/02 (dummy), American (dummy), EPS value 2001/02 (pence), oil, gas & minerals (dummy), complex performance target 2001/02 based on number of performance measures (dummy)

h Predictors: (Constant), finance (dummy), log-TSR value 2001/02, instant cash bonus payment 2001/02 (dummy), American (dummy), EPS value 2001/02 (pence), oil, gas & minerals (dummy), complex performance target 2001/02 based on number of performance measures (dummy), e-business, software & computer services (dummy)

i Predictors: (Constant), finance (dummy), log-TSR value 2001/02, instant cash bonus payment 2001/02 (dummy), American (dummy), EPS value 2001/02 (pence), oil, gas & minerals (dummy), complex performance target 2001/02 based on number of performance measures (dummy), e-business, software & computer services (dummy), CEO/Chair duality (dummy)

j Predictors: (Constant), finance (dummy), log-TSR value 2001/02, instant cash bonus payment 2001/02 (dummy), American (dummy), EPS value 2001/02 (pence), oil, gas & minerals (dummy), complex performance target 2001/02 based on number of performance measures (dummy), e-business, software & computer services (dummy), CEO/Chair duality (dummy), CEO present on nominations committee (dummy)

Results indicate that adjusted  $R^2$  equals 0.18 for the model, which in turn explains 18% of the sample variance in the  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  figure for 2001/02. Among the variables that have a significant association with the  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  figure are TSR, EPS, cash bonuses, implementing multiple performance targets based on performance measures, CEO/Chair duality, CEO presence on the nominations committee, American nationality, and three industry types including finance, oil, gas and minerals, and e-business, software and computer services. Firm size, as measured by number of employees, however, is insignificant.

The coefficients presented in Table 5 below are used to approximate the size and direction of the association that each independent variable has with the dependent variable (i.e.  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  2001/02). Associations with each independent variable are discussed in turn.

Table 5. *Executive coefficients: dependent variable Log (1 + Bonus/Salary) 2001/02.*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
10	(Constant)	.333	.024		14.052	.000		
	Log-TSR value 2001/02	.168	.026	.223	6.370	.000	.649	1.542
	EPS value 2001/02 (pence)	.001	.000	.135	4.217	.000	.774	1.291
	Instant cash bonus payment 2001/02 (dummy)	-.105	.020	-.153	-5.306	.000	.956	1.046
	Complex performance target 2001/02 based on number of performance measures (dummy)	.058	.020	.085	2.868	.004	.903	1.108
	CEO/Chair duality (dummy)	.096	.044	.063	2.186	.029	.960	1.041
	CEO present on nominations committee (dummy)	-.043	.021	-.057	-2.003	.045	.971	1.030
	American (dummy)	.229	.047	.137	4.845	.000	.988	1.013
	Finance (dummy)	.226	.028	.238	8.063	.000	.912	1.096
	Oil, gas & minerals (dummy)	.122	.047	.073	2.572	.010	.983	1.018
	E-business, software & computer services (dummy)	.161	.060	.086	2.676	.008	.761	1.313

- TSR is positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . Results suggest that a 10% increase in TSR accounts for a 2% increase in the size of the annual bonus relative to salary. Specifically, a firm's TSR has an estimated cross-sectional effect of 0.168, which predicts that a 10% increase in TSR is associated with  $\exp(0.1 \cdot 0.168) - 1 = 0.0169$  increase in executive cash pay due to bonuses, whilst controlling for salary. In absolute terms, if evaluated at the median cash pay level in 2002, which was £335,000, implies an additional £5,662 in bonus pay.
- EPS is positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . Results suggest that a 10 pence increase in EPS accounts for a 1% increase in the size of the annual bonus relative to salary. In particular, a firm's EPS has an estimated cross-sectional effect of 0.001, which predicts that a 10 pence increase in EPS is associated with  $\exp(10 \cdot 0.001) - 1 = 0.01005$  increase in the executive cash pay due to bonuses, whilst controlling for salary. In absolute terms, if evaluated at the median cash pay level in 2002, which was £335,000, implies an additional £3,367 in bonus pay.
- Instant cash bonus payments are negatively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . It may be suggested that remunerating executives with cash-based bonuses will result in a 10% reduction in the size of the annual bonus relative to salary when compared with alternative more long-term bonuses ( $\exp(-0.105) - 1 = -0.0997$ ). Specifically, cash only bonuses are on average associated with a -0.0997 decrease in executive bonus pay, which implies a reduction of £33,399 in bonus at the median pay level.
- The use of multiple performance targets based on the number of performance measures included in the bonus design is positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . It may be suggested that, on average, complex performance measures (i.e. multiple) result in a 6% increase in the size of the annual bonus relative to salary when compared with simple (i.e. not more than one) performance measures ( $\exp(0.058) - 1 = 0.0597$ ). Significantly, making performance targets more complex does lead to larger bonuses. Furthermore, complex performance targets are on average associated with a 0.0597 rise in executive bonus pay, which implies an increase of £20,000 in bonus at the median pay level.
- CEO/Chair duality is positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . It may be suggested that, on average, companies who allow the CEO to operate as chairman of

the board leads to a 10% increase in the size of an executive's annual bonus relative to salary when compared with firms who do not operate under a dual role ( $\exp(0.096) - 1 = 0.101$ ). Significantly, CEO/Chair duality does lead to larger executive bonuses. In particular, the dual role, on average, is associated with a 0.101 rise in executive bonus pay, which implies an increase of £33,835 in bonus pay at the median pay level.

- The presence of the CEO on the nominations committee is negatively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ , with their presence on the committee leading to a 4% reduction in the size of the annual bonus relative to salary. Significantly, a CEO's presence on the nominations committee, who arguably can hand pick board members who are sympathetic to their interests, does not automatically result in large bonuses ( $\exp(-0.043) - 1 = -0.0421$ ). Specifically, a CEO who is in a position to influence the nominations process is associated with a -0.0421 reduction in executive bonus pay, which implies a decrease of £14,104 in bonus pay at the median pay level.
- Executives with American citizenship are positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . As a result, American executives can expect to receive an annual bonus relative to salary that is 26% larger than those executives who are not American ( $\exp(0.229) - 1 = 0.257$ ). In particular, American executives receive higher bonuses resulting in 0.257 higher cash pay independently of salary and performance effects. This is equivalent to a £86,095 increase at the median cash pay level. Significantly, American executives who traditionally are very well remunerated are in receipt of the largest bonuses.
- The finance, oil, gas and minerals, and e-business, software and computer services industries are all positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . In terms of each industry's effect on the size of the executive's annual bonus relative to salary in comparison to executives in retail and distribution, the results indicate increases by 25% ( $\exp(0.226) - 1 = 0.254$ ), 13% ( $\exp(0.122) - 1 = 0.130$ ), and 18% ( $\exp(0.161) - 1 = 0.175$ ) respectively. Specifically, executives in either industry are expected to receive higher bonuses resulting in 0.254, 0.130, and 0.175 higher cash pay independently of salary and performance effects respectively. This is

equivalent to a £85,090, £43,550, and £58,625 increase at the median cash pay level respectively.

Results also indicate that, based on the beta values, the top five independent variables ranked in order of importance are as follows: the finance industry (Beta = 0.238) has the greatest unique association with bonus variance, followed by TSR (Beta = 0.223), then by cash bonus payments (Beta = -0.153), then by American executives (Beta = 0.137), and finally by EPS (Beta = 0.135). As noted, firm size was insignificant and, therefore, cannot be ranked. Furthermore, high tolerance levels (i.e. significantly different from zero) suggest that multicollinearity is unlikely.

#### *5.4.2. Executive single period multiple regression analysis 2002/03*

Table 6 overleaf presents the results of an iterative process of model construction and includes 11 explanatory variables.



Table 6. *Executive model Summary: dependent variable Log (1 + Bonus/Salary) 2002/03.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.207(a)	.043	.042	.33425	.043	52.355	1	1172	.000
2	.292(b)	.085	.083	.32693	.042	54.039	1	1171	.000
3	.333(c)	.111	.108	.32246	.026	33.697	1	1170	.000
4	.357(d)	.128	.125	.31950	.017	22.767	1	1169	.000
5	.379(e)	.144	.140	.31669	.016	21.893	1	1168	.000
6	.396(f)	.157	.152	.31439	.013	18.113	1	1167	.000
7	.404(g)	.163	.158	.31329	.007	9.187	1	1166	.002
8	.412(h)	.170	.164	.31224	.006	8.895	1	1165	.003
9	.416(i)	.173	.167	.31173	.003	4.810	1	1164	.028
10	.420(j)	.177	.170	.31119	.004	5.077	1	1163	.024
11	.424(k)	.179	.172	.31079	.003	3.938	1	1162	.047

a Predictors: (Constant), finance (dummy)

b Predictors: (Constant), finance (dummy), log-TSR value 2002/03

c Predictors: (Constant), finance (dummy), log-TSR value 2002/03, instant cash bonus payment 2002/03 (dummy)

d Predictors: (Constant), finance (dummy), log-TSR value 2002/03, instant cash bonus payment 2002/03 (dummy), complex performance target 2002/03 based on number of performance measures (dummy)

e Predictors: (Constant), finance (dummy), log-TSR value 2002/03, instant cash bonus payment 2002/03 (dummy), complex performance target 2002/03 based on number of performance measures (dummy), EPS value 2002/03 (pence)

f Predictors: (Constant), finance (dummy), log-TSR value 2002/03, instant cash bonus payment 2002/03 (dummy), complex performance target 2002/03 based on number of performance measures (dummy), EPS value 2002/03 (pence), American (dummy)

g Predictors: (Constant), finance (dummy), log-TSR value 2002/03, instant cash bonus payment 2002/03 (dummy), complex performance target 2002/03 based on number of performance measures (dummy), EPS value 2002/03 (pence), American (dummy), log-employee 2002/03

h Predictors: (Constant), finance (dummy), log-TSR value 2002/03, instant cash bonus payment 2002/03 (dummy), complex performance target 2002/03 based on number of performance measures (dummy), EPS value 2002/03 (pence), American (dummy), log-employee 2002/03, transport & leisure (dummy)

i Predictors: (Constant), finance (dummy), log-TSR value 2002/03, instant cash bonus payment 2002/03 (dummy), complex performance target 2002/03 based on number of performance measures (dummy), EPS value 2002/03 (pence), American (dummy), log-employee 2002/03, transport & leisure (dummy), oil, gas & minerals (dummy)

j Predictors: (Constant), finance (dummy), log-TSR value 2002/03, instant cash bonus payment 2002/03 (dummy), complex performance target 2002/03 based on number of performance measures (dummy), EPS value 2002/03 (pence), American (dummy), log-employee 2002/03, transport & leisure (dummy), oil, gas & minerals (dummy), chemical & pharmaceutical (dummy)

k Predictors: (Constant), finance (dummy), log-TSR value 2002/03, instant cash bonus payment 2002/03 (dummy), complex performance target 2002/03 based on number of performance measures (dummy), EPS value 2002/03 (pence), American (dummy), log-employee 2002/03, transport & leisure (dummy), oil, gas & minerals (dummy), chemical & pharmaceutical (dummy), construction & building material (dummy)

Results indicate that adjusted  $R^2$  equals 0.17 for the model, which in turn explains 17% of the sample variance in the Log (1 + Bonus/Salary) figure for 2002/03. Among the variables that have a significant association with the Log (1 + Bonus/Salary) figure is TSR, EPS, firm size as measured by number of employees, cash bonuses, implementing multiple performance targets based on performance measures, American nationality, and five industry types including finance, transport and leisure, oil, gas and minerals, chemical and pharmaceutical, and construction and building material.

The coefficients presented in Table 7 below are used to approximate the size and direction of the association that each independent variable has with the dependent variable (i.e. Log (1 + Bonus/Salary) 2002/03). Associations with each independent variable are discussed in turn.

Table 7. *Executive coefficients: dependent variable Log (1 + Bonus/Salary) 2002/03.*

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics		
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF	
11	(Constant)	.173	.052		3.318	.001		
	Log-TSR value 2002/03	.111	.020	.164	5.643	.000	.840	1.191
	EPS value 2002/03 (pence)	.001	.000	.136	4.663	.000	.833	1.200
	Log-employee 2002/03	.018	.005	.090	3.304	.001	.948	1.055
	Instant cash bonus payment 2002/03 (dummy)	-.119	.019	-.172	6.358	.000	.960	1.042
	Complex performance target 2002/03 based on number of performance measures (dummy)	.090	.020	.124	4.521	.000	.932	1.073
	American (dummy)	.182	.045	.109	4.065	.000	.988	1.013
	Finance (dummy)	.195	.027	.204	7.217	.000	.884	1.131
	Transport & leisure (dummy)	-.067	.031	-.059	2.138	.033	.922	1.084
	Oil, gas & minerals (dummy)	.118	.046	.070	2.566	.010	.940	1.064
	Chemical & pharmaceutical (dummy)	.101	.041	.068	2.490	.013	.954	1.048
	Construction & building material (dummy)	.062	.031	.056	1.984	.047	.881	1.136

- TSR is positively correlated with Log (1 + Bonus/Salary). Results suggest that a 10% increase in TSR accounts for a 1% increase in the size of the annual bonus relative to salary. Specifically, a firms' TSR has an estimated cross-sectional effect of

0.111, which predicts that a 10% increase in TSR is associated with  $\exp(0.1 \times 0.111) - 1 = 0.0112$  increase in executive cash pay due to bonuses, whilst controlling for salary. In absolute terms, if evaluated at the median cash pay level in 2003, which was £356,000, implies an additional £3,987 in bonus pay.

- EPS is positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . Results suggest that a 10 pence increase in EPS accounts for a 1% increase in the size of the annual bonus relative to salary. In particular, a firm's EPS has an estimated cross-sectional effect of 0.001, which predicts that a 10 pence increase in EPS is associated with  $\exp(10 \times 0.001) - 1 = 0.01005$  increase in the executive cash pay due to bonuses, whilst controlling for salary. In absolute terms, if evaluated at the median cash pay level in 2003, which was £356,000, implies an additional £3,578 in bonus pay.
- Firm size, as measured by number of employees, is positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  and when doubled, accounts for a 1% increase in the size of the annual bonus relative to salary. The result is consistent with previous research whereby larger firms pay out larger bonuses. Specifically, a firm's size has an estimated cross-sectional effect of 0.018, which predicts that doubling the number of employees is associated with  $2^{0.018} - 1 = 0.0126$  increase in the executive cash pay due to bonuses, whilst controlling for salary. In absolute terms, if evaluated at the median cash pay level in 2003, which was £356,000, implies an additional £4,486 in bonus pay.
- Instant cash bonus payments are negatively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . It may be suggested that remunerating executives with cash bonuses will result in an 11% reduction in the size of the annual bonus relative to salary when compared with alternative more long-term bonuses ( $\exp(-0.119) - 1 = -0.112$ ). In particular, cash only bonuses are on average associated with a -0.112 decrease in executive bonus pay, which implies a reduction of £39,872 in bonus at the median pay level.
- The use of multiple performance targets based on the number of performance measures included in the bonus design is positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . It may be suggested that, on average, complex performance measures (i.e. multiple) result in a 9% increase in the size of the annual bonus relative to salary when compared with simple (i.e. not more than one) performance measures ( $\exp(0.09) - 1 = 0.0942$ ). Significantly, making performance targets more complex

does lead to larger bonuses. Furthermore, complex performance targets are on average associated with a 0.0942 rise in executive bonus pay, which implies an increase of £33,535 in bonus at the median pay level.

- Executives with American citizenship are positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . As a result, American executives can expect to receive an annual bonus relative to salary that is 20% larger than those executives who are not American ( $\exp(0.182) - 1 = 0.200$ ). Specifically, American executives receive higher bonuses resulting in 0.200 higher cash pay independently of salary and performance effects. This is equivalent to a £71,200 increase at the median cash pay level. Significantly, American executives who traditionally are very well remunerated are in receipt of the largest bonuses.
- The finance, oil, gas and minerals, and construction and building industries are all positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . In terms of each industries effect on the size of the executive's annual bonus relative to salary in comparison to executives in retail and distribution, the results indicate increases by 22% ( $\exp(0.195) - 1 = 0.215$ ), 13% ( $\exp(0.118) - 1 = 0.125$ ), and 6% ( $\exp(0.062) - 1 = 0.0640$ ) respectively. Furthermore, executives in either industry are expected to receive higher bonuses resulting in 0.215, 0.125, and 0.0640 higher cash pay independently of salary and performance effects respectively. This is equivalent to a £76,540, £44,500, and £22,784 increase at the median cash pay level respectively.
- The transport and leisure and chemical and pharmaceutical industries are both negatively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . In terms of each industries effect on the size of the executive's annual bonus relative to salary in comparison to executives in retail and distribution, the results indicate reductions of 6% ( $\exp(-0.067) - 1 = -0.0648$ ) and 10% ( $\exp(-0.101) - 1 = -0.0961$ ) respectively. Furthermore, executives in either industry are expected to receive reduced bonuses resulting in -0.0648, and -0.0961 lower cash pay independently of salary and performance effects respectively. This is equivalent to a £23,069 and £34,212 decrease at the median cash pay level respectively.

Results also indicate that, based on the beta values, the top five independent variables ranked in order of importance are as follows: the finance industry (Beta = 0.204) has the

greatest unique association with bonus variance, followed by cash bonus payments (Beta = -0.172), then by TSR (Beta = 0.164), then by EPS (Beta = 0.136), and finally by complex (i.e. multiple) performance measures (Beta = 0.124). Significantly, firm size was the seventh most important variable (Beta = 0.085). Furthermore, high tolerance levels (i.e. significantly different from zero) suggest that multicollinearity is unlikely.

Further analysis explores those independent variables, identified in sections 5.4.1 and 5.4.2, which are significantly associated with the dependent variable (i.e. Log (1 + Bonus/Salary) 2001/02 and 2002/03 respectively) over the two-year period. Table 8 below illustrates this comparison.

Table 8. *Association of independent variables with the dependent variable (i.e. Log (1 + Bonus/Salary) 2001/02 and 2002/03) over the two-year period for the executive sample.*

	Independent Variables	Annual Bonus 2001/02 (Effect: Size & Direction)	Annual Bonus 2002/03 (Effect: Size & Direction)	Percentage Difference	Effect Summary
(H1)	TSR	2% more	1% more	-1%	Reduced effect
(H1)	EPS	1% more	1% more	Nil	No change
(H3)	Instant cash bonus payments	10% less	11% less	+1%	Increased effect
(H7)	Complex performance targets based on number of performance measures	6% more	9% more	+3%	Increased effect
	American nationality	26% more	20% more	-6%	Reduced effect
	Finance industry	25% less	22% less	-3%	Reduced effect
	Oil, gas and minerals industry	13% less	13% less	Nil	No change

Table 8 above indicates that seven independent variables are significantly associated with the dependent variable during 2001/02 and 2002/03. In particular, the association between EPS, the oil, gas and minerals industry and Log (1 + Bonus/Salary) were unchanged from year one to year two. However, instant cash bonus payments and complex performance targets based on number of performance measures had an increased association with Log (1 + Bonus/Salary) over both years equalling 1% and 3% respectively. In contrast, TSR, executives of American nationality, and the finance

industry had a reduced association with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  over the two-year period totalling 1%, 6%, and 3% respectively.

#### 5.5. CEO SINGLE PERIOD MULTIPLE REGRESSION ANALYSIS

The single period multiple regressions examine each year's cross-section independently, to be followed by panel regressions. The dependent variable, which for both years is  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  figure awarded for that particular year as well as all independent variables for that particular year will remain the same for each individual regression. The results for each year will be presented in turn.

Similar to 5.4, diagnostic statistics have highlighted 8 extreme values, or outliers, which exerted undue leverage upon the values of the regression models for both years. Following thorough investigation into the identified outliers it is evident that the unusual values belong, in general, to a small sub-sample of CEOs who operate within the finance sector and who receive extremely large bonuses, i.e. more than £1m, when compared to the average CEOs bonus. Similarly, to delete or respecify these values in order to accommodate the unusual data would distort the results and would not be an accurate representation of CEO bonuses. Essentially, excessive bonuses are not an uncommon feature of CEO pay, and on this basis it is difficult to omit the outliers altogether and, hence, all 8 will remain in the regression model.

##### *5.5.1. CEO single period multiple regression analysis 2001/02*

Table 9 overleaf presents the results of an iterative process of model construction and includes 4 explanatory variables. A possible explanation for fewer explanatory variables may be due to the reduction in sample size.

Table 9. *CEO model summary: dependent variable Log (1 + Bonus/Salary) 2001/02.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.331(a)	.109	.106	.36625	.109	30.415	1	248	.000
2	.401(b)	.161	.154	.35628	.051	15.081	1	247	.000
3	.422(c)	.178	.168	.35327	.017	5.224	1	246	.023
4	.440(d)	.194	.180	.35061	.016	4.744	1	245	.030

a Predictors: (Constant), finance (dummy)

b Predictors: (Constant), finance (dummy), log-TSR value 2001/02

c Predictors: (Constant), finance (dummy), log-TSR value 2001/02, EPS value 2001/02 (pence)

d Predictors: (Constant), finance (dummy), log-TSR value 2001-02, EPS value 2001/02 (pence), American (dummy)

Results indicate that adjusted  $R^2$  equals 0.18 for the model, which in turn explains 18% of the sample variance in the Log (1 + Bonus/Salary) figure for 2001/02. Among the variables that are significantly associated with the Log (1 + Bonus/Salary) figure are: TSR, EPS, American nationality, and the finance industry. Firm size as measured by number of employees, however, is insignificant.

The coefficients presented in Table 10 below are used to approximate the size and direction of the association that each independent variable has with the dependent variable (i.e. Log (1 + Bonus/Salary) 2001/02). Associations with each independent variable are discussed in turn.

Table 10. *CEO coefficients: dependent variable Log (1 + Bonus/Salary) 2001/02.*

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
4	(Constant)	.302	.026607		11.359	.000		
	Log-TSR value 2001/02	.129	.053995	.153	2.396	.017	.803	1.245
	EPS value 2001/02 (pence)	.002	.000705	.160	2.480	.014	.795	1.258
	American (dummy)	.223	.102282	.126	2.178	.030	.990	1.010
	Finance (dummy)	.358	.065665	.314	5.447	.000	.988	1.013

- TSR is positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . Results suggest that a 10% increase in TSR accounts for a 1% increase in the size of the annual bonus relative to salary. Specifically, a firm's TSR has an estimated cross-sectional effect of 0.129, which predicts that a 10% increase in TSR is associated with  $\exp(0.1 \times 0.129) - 1 = 0.0130$  increase in CEO cash pay due to bonuses, whilst controlling for salary. In absolute terms, if evaluated at the median cash pay level in 2002, which was £500,000, implies an additional £6,500 in bonus pay.
- EPS is positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . Results suggest that a 10 pence increase in EPS accounts for a 2% increase in the size of the annual bonus relative to salary. The result suggests that as EPS increases so too does the size of the CEO's bonus. In particular, a firm's EPS has an estimated cross-sectional effect of 0.002, which predicts that a 10 pence increase in EPS is associated with  $\exp(10 \times 0.002) - 1 = 0.0202$  increase in CEO cash pay due to bonuses, whilst controlling for salary. In absolute terms, if evaluated at the median cash pay level in 2003, which was £500,000, implies an additional £10,100 in bonus pay.
- CEOs of American nationality are positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . American CEOs can expect to receive an annual bonus relative to salary that is 25% larger than those CEOs that are not American ( $\exp(0.223) - 1 = 0.250$ ). Specifically, American CEOs receive higher bonuses resulting in 0.250 higher cash pay independently of salary and performance effects. This is equivalent to a £125,000 increase at the median cash pay level. Significantly and in line with main board executives, American CEOs who traditionally are similarly very well remunerated are also in receipt of the largest bonuses.
- The finance industry is positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . CEOs in this industry receive a 43% increase in the size of the annual bonus relative to salary when compared to CEOs in retail and distribution ( $\exp(0.358) - 1 = 0.430$ ). In particular, CEOs in the finance industry tend to receive higher bonuses resulting in 0.430 higher cash pay independently of salary and performance effects. This is equivalent to a £215,000 increase at the median cash pay level. Therefore, finance industry firms are found to rely more heavily on bonuses than the sample average.



Results also indicate that, based on the beta values, the independent variables ranked in order of importance are as follows: the finance industry (Beta = 0.314) has the greatest unique association with bonus variance, followed by EPS (Beta = 0.160), then by TSR (Beta = 0.153) and, finally, by American CEOs (Beta = 0.126). As noted, firm size was insignificant and, therefore, cannot be ranked. Furthermore, high tolerance levels (i.e. significantly different from zero) suggest that multicollinearity is unlikely.

### 5.5.2. CEO single period multiple regression analysis 2002/03

Table 11 below presents the results of an iterative process of model construction, and includes 5 explanatory variables. Again, a possible explanation for fewer explanatory variables may be due to the reduction in sample size.

Table 11. CEO model Summary: dependent variable Log (1 + Bonus/Salary) 2002/03.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.283(a)	.080	.077	.38278	.080	23.221	1	267	.000
2	.325(b)	.106	.099	.37806	.026	7.708	1	266	.006
3	.357(c)	.128	.118	.37416	.022	6.577	1	265	.011
4	.386(d)	.149	.136	.37025	.021	6.624	1	264	.011
5	.408(e)	.166	.150	.36718	.017	5.433	1	263	.021

a Predictors: (Constant), finance (dummy)

b Predictors: (Constant), finance (dummy), instant cash bonus payment 2002/03 (dummy)

c Predictors: (Constant), finance (dummy), instant cash bonus payment 2002/03 (dummy), EPS value 2002/03 (pence)

d Predictors: (Constant), finance (dummy), instant cash bonus payment 2002/03 (dummy), EPS value 2002/03 (pence), complex performance target 2002/03 based on number of performance measures (dummy)

e Predictors: (Constant), finance (dummy), instant cash bonus payment 2002/03 (dummy), EPS value 2002/03 (pence), complex performance target 2002/03 based on number of performance measures (dummy), American (dummy)

Results indicate that adjusted  $R^2$  equals 0.15 for the model, which in turn explains 15% of the sample variance in the Log (1 + Bonus/Salary) figure for 2002/03. Among the variables that are significantly associated with the Log (1 + Bonus/Salary) figure are: EPS, cash bonuses, implementing multiple performance targets based on performance

measures, American nationality, and the finance industry. Firm size, as measured by number of employees, however, is insignificant.

The coefficients presented in Table 12 below are used to approximate the size and direction of the association that each independent variable has with the dependent variable (i.e.  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  2002/03). Associations with each independent variable are discussed in turn.

Table 12. *CEO coefficients: dependent variable  $\text{Log}(1 + \text{Bonus}/\text{Salary})$  2002/03.*

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
5	(Constant)	.321	.052051		6.167	.000		
	EPS value 2002/03 (pence)	.002	.000589	.162	2.858	.005	.992	1.008
	Instant cash bonus payment 2002/03 (dummy)	-.134	.046217	-.164	-2.907	.004	.996	1.004
	Complex performance target 2002/03 based on number of performance measures (dummy)	.139	.049740	.161	2.791	.006	.953	1.049
	American (dummy)	.241	.103399	.132	2.331	.021	.987	1.013
	Finance (dummy)	.287	.067052	.246	4.284	.000	.965	1.036

- EPS is positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . Results suggest that a 10 pence increase in EPS accounts for a 2% increase in the size of the annual bonus relative to salary. Specifically, a firm's EPS has an estimated cross-sectional effect of 0.002, which predicts that a 10 pence increase in EPS is associated with  $\exp(10 \times 0.002) - 1 = 0.0202$  increase in CEO cash pay due to bonuses, whilst controlling for salary. In absolute terms, if evaluated at the median cash pay level in 2003, which was £553,000, implies an additional £11,170 in bonus pay.
- Instant cash bonuses are negatively correlated with the bonus variable,  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . It may be suggested that remunerating CEOs with cash bonuses will result in a 13% decrease in the size of the annual bonus relative to salary when compared with alternative more long-term bonuses ( $\exp(-0.134) - 1 = -0.125$ ). In particular, cash only bonuses are on average associated with a -0.125 decrease in

CEO bonus pay, which implies a reduction of £69,125 in bonus at the median pay level.

- The use of multiple performance targets based on the number of performance measures included in the bonus design is positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . It may be suggested that, on average, complex performance measures (i.e. multiple) result in a 15% increase in the size of the annual bonus relative to salary when compared with simple (i.e. not more than one) performance measures ( $\exp(0.139) - 1 = 0.149$ ). Significantly, making performance targets more complex does lead to larger bonuses. Furthermore, complex performance targets are on average associated with a 0.149 rise in CEO bonus pay, which implies an increase of £82,397 in bonus at the median pay level.
- CEOs of American nationality are positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . American CEOs can expect to receive an annual bonus relative to salary that is 27% larger than those CEOs that are not American ( $\exp(0.241) - 1 = 0.273$ ). Specifically, American CEOs receive higher bonuses resulting in 0.273 higher cash pay independently of salary and performance effects. This is equivalent to a £150,969 increase at the median cash pay level. Once again, American CEOs who traditionally are similarly very well remunerated are also in receipt of the largest bonuses.
- The finance industry is positively correlated with  $\text{Log}(1 + \text{Bonus}/\text{Salary})$ . CEOs in this industry receive a 33% increase in the size of the annual bonus relative to salary when compared to CEOs in retail and distribution ( $\exp(0.287) - 1 = 0.332$ ). In particular, CEOs in the finance industry tend to receive higher bonuses resulting in 0.332 higher cash pay independently of salary and performance effects. This is equivalent to a £183,596 increase at the median cash pay level. Therefore, finance industry firms are found to rely more heavily on bonuses than the sample average.

Results also indicate that, based on the beta values, the independent variables ranked in order of importance are as follows: the finance industry (Beta = 0.246) has the greatest unique association with bonus variance, followed by cash bonuses (Beta = -0.164), then by EPS (Beta = 0.162), complex performance targets based on number of performance measures (Beta = 0.161) and, finally, by American CEOs (Beta = 0.132). As noted, firm

size was insignificant and, therefore, cannot be ranked. Furthermore, high tolerance levels (i.e. significantly different from zero) suggest that multicollinearity is unlikely.

Further analysis explores those independent variables, identified in sections 5.5.1 and 5.5.2, which are significantly associated with the dependent variable (i.e. Log (1 + Bonus/Salary) 2001/02 and 2002/03 respectively) over the two-year period. Table 13 below illustrates this comparison.

Table 13. *Association of independent variables with the dependent variable (i.e. Log (1 + Bonus/Salary) 2001/02 and 2002/03) over the two-year period for the CEO sample.*

	Independent Variables	Annual Bonus 2001/02 (Effect: Size & Direction)	Annual Bonus 2002/03 (Effect: Size & Direction)	Percentage Difference	Effect Summary
(H1)	EPS	2% more	2% more	Nil	No change
	American nationality	25% more	27% more	+2%	Increased effect
	Finance industry	43% less	33% less	-10%	Reduced effect

Table 13 above indicates that three independent variables had a significant association with the dependent variable during 2001/02 and 2002/03. In particular, the association between the EPS and Log (1 + Bonus/Salary) was unchanged from year one to year two. Additionally, the association between CEOs of American nationality and Log (1 + Bonus/Salary) increased over both years equalling 2%. Finally, the finance industry experienced a reduced association with Log (1 + Bonus/Salary) over the two-year period totalling 10%.

However, are these significance tests consistent over time? Therefore, sections 5.6 and 5.7 to follow take a longitudinal approach and present results from the panel regression analysis for both the main board executive directors and CEOs respectively.

For both samples the dependent variable Log (1 + Bonus/Salary) is non-normally distributed and the statistical analysis is based on generalized least squares (GLS) using

the fixed-effects (within) regression estimator available in STATA. The following equation is specified and estimated (Bruce et al., 2005):

$$\text{Log} \left( 1 + \frac{\text{Bonus}}{\text{Salary}} \right)_{i,t} = \beta_0 + \beta_1 x_{i,t} + u_i + \varepsilon_{i,t}$$

for observations  $t = 1,2$  on firm  $i = 1, \dots, 1452$  (2667 cases overall) for the executive director sample and  $t = 1,2$  on firm  $i = 1, \dots, 285$  (542 cases overall) for the CEO sample. Vector  $x_{i,t}$  consists of values of explanatory factors for firm  $i$  in moment  $t$ . It includes:

- 1) Firm performance indicators: log-TSR, EPS
- 2) Firm size indicator: log-Number of Employees
- 3) Bonus design factors:
  - a) Dummy = 1 if bonus is paid in cash only (bonus payment type is cash)
  - b) Dummy = 1 if bonus incorporates multiple performance target types (more than one performance target type is present)
  - c) Dummy = 1 if bonus incorporates multiple performance measures (more than one performance measure is present)
  - d) Dummy = 1 if bonus incorporates a soft performance target (an unspecified performance target is present)
- 4) Time effect (trend)

Here  $\beta_1$  is the vector of coefficients and  $u_i$  is the firm specific fixed effect, representing the effects of those variables constant over time and peculiar to the  $i$ th firm. Therefore, explanatory variables  $x_{i,t}$  do not include factors that are constant in time (such as CEO nationality and industry dummies). Effects of other omitted variables that vary across firms and time are represented by the independently, identically distributed error term  $\varepsilon_{i,t}$  which is assumed to be uncorrelated both with  $x_{i,1}$  and  $x_{i,2}$ .

In general, the fixed effect model captures all time constant variables, measured and unmeasured, and preserves the substantive story of fixed effects without reducing degrees of freedom by explaining changes in the explanatory variables that cause the independent variable to vary around a mean within the unit (Petersen, 2004). The fixed

effects procedure reports how much the dependent variable changes, on average, when changes are made to the independent variables (Petersen, 2004). In summary, the within estimator controls for all time invariant measured and unmeasured variables, addressing within individual changes or differences (Petersen, 2004). For example, as executives change from being paid in cash or not cash, what are the changes in bonus earned?

## 5.6. EXECUTIVE PANEL REGRESSION ANALYSIS

Table 14 below presents longitudinal results from the fixed effects model relating to executive bonus pay, bonus design, and firm performance. The longitudinal results for each of the variable categories under analysis will be discussed in turn.

Table 14. *Executive' bonus pay: results of a fixed-effects estimator.*

Dependent variable: Log (1 + bonus/salary)			
Fixed effects estimator of the effects of transitional change			
		Coeff.	Std. Err.
Firm performance & size (H1 & 2)	TSR	0.075536 (**)	0.013303
	EPS	0.000761 (**)	0.000277
	Firm SIZE	-0.055513	0.034632
Bonus scheme design (H3, 5, & 7)	CASH	-0.057784	0.032960
	Complex MEASURE	-0.022795	0.023235
	Complex TYPE	0.016486	0.018730
	SOFT	-0.024473	0.014044
Time trend & constant	American	(dropped)	(dropped)
	Finance	(dropped)	(dropped)
	cons	0.870114 (**)	0.315271
	Trend (Year dummy)	0.023636	0.010534
Number of obs.		2702	
Number of cases (Executives)		1487	
F-stat		F(8,1207)=7.76	
R <sup>2</sup>		4.9%	
* - 5%, ** - 1% significance level			

*5.6.1. Firm performance and firm size based on the executive sample: longitudinal analysis*

Table 14 detects a positive and significant association at the longitudinal level between a firms TSR and bonus pay. The estimated longitudinal effect is 0.0755, which predicts that a 10% increase in TSR is associated with  $\exp(0.1*0.0755) - 1 = 0.00758$  increase in executive cash pay due to bonuses, whilst controlling for salary. In absolute terms, if evaluated at the median cash pay level in 2003, which was £348,000, implies a rise of £2,638 in bonus pay.

In addition, Table 14 detects a positive and significant association at the longitudinal level between a firms EPS and bonus pay. The estimated longitudinal effect is 0.000761, which predicts that a 10 pence increase in EPS is associated with  $\exp(10*0.000761) - 1 = 0.00764$  increase in executive cash pay due to bonuses, whilst controlling for salary. In absolute terms, if evaluated at the median cash pay level in 2003, which was £348,000, implies a rise of £2,659 in bonus pay.

Longitudinal effects of changes in firm size are not statistically significant. This contrasts strongly with other empirical work, but is mainly a result of the transformation of the bonus variable, expressed as a proportion relative to salary.

*5.6.2. Executive annual bonus design: longitudinal analysis*

Longitudinal effects relating to changes in annual bonus design, in terms of shifts in the type of bonus payment employed, the number of performance measures and/or targets used are not statistically significant.

Table 15 overleaf summarises the cross-sectional and panel regression results and their estimated effects.

Table 15. Executives' bonus pay: summary of bonus effects of two single-period models and a fixed-effects estimator.

Dependent variable: Log (1 + bonus/salary)									
2001/02 cross-sectional model				2002/03 cross-sectional model			Fixed effects estimator of the effects of transitional changes		
		Relative change in cash earnings due to change in bonus pay	Absolute change in bonus pay at median pay level			Relative change in cash earnings due to change in bonus pay	Absolute change in bonus pay at median pay level		
Firm performance & size (H1 & 2)	TSR	0.0169 (**)	£5,662	TSR	0.0112 (**)	£3,987	TSR	0.00758 (**)	£2,638
	EPS	0.01005 (**)	£3,367	EPS	0.01005 (**)	£3,578	EPS	0.00764 (**)	£2,659
	Firm SIZE	(Not detected)	(Not detected)	Firm SIZE	0.0126 (**)	£4,486	Firm SIZE	(Not detected)	(Not detected)
Bonus scheme design (H3, 5, & 7)	CASH	-0.0997 (**)	£-33,399	CASH	-0.112 (**)	£-39,872	CASH	(Not detected)	
	Complex MEASURE	0.059 (**)	£20,000	Complex MEASURE	0.0942 (**)	£33,535	Complex MEASURE	(Not detected)	
	Complex TYPE	(Not detected)	(Not detected)	Complex TYPE	(Not detected)	(Not detected)	Complex TYPE	(Not detected)	
	SOFT	(Not detected)	(Not detected)	SOFT	(Not detected)	(Not detected)	SOFT	(Not detected)	
Corporate governance (H10 & 11)	CEO on nominations committee	-0.0421 (*)	£-14,104						
	CEO/Chair duality	0.101 (*)	£33,835						
Control variables & time trend	American	0.257 (**)	£86,095	American	0.200 (**)	£71,200	American	(Dropped)	
	Finance	0.254 (**)	£85,090	Finance	0.215 (**)	£76,540	Finance	(Dropped)	
	Oil, gas & minerals	0.130 (**)	£43,550	Oil, gas & minerals	0.125 (**)	£44,500			
	E-business, software & computer services	0.175 (**)	£58,625	Construction & building materials	0.0640 (*)	£22,784			
				Transport & leisure	-0.0648 (*)	£-23,069			
				Chemical & pharmaceuticals	-0.0961 (*)	£-34,212			

\* - 5%, \*\* - 1% significance level



To summarise, Table 15 indicates that TSR and EPS have a positive and significant effect on bonus pay at both the cross-sectional and longitudinal level. Significantly, firm size effects in relation to bonus pay was detected at the cross-sectional level for 2002/03 only.

In terms of bonus design factors, all are insignificant at both cross-sectional and longitudinal levels with the exception of cash bonuses and multiple performance measures in 2002/03. The former has a negative impact on bonus pay whereas the later has a positive effect on bonus pay at the cross-sectional level.

With the exception of CEO/Chair duality and the CEOs presence on the nominations committee in 2001/02 only, CG effects on bonus pay are not detected. The former has a positive effect on bonus pay whereas the later has a negative impact on bonus pay at the cross-sectional level.

In relation to nationality and industry variables, American CEOs, the finance, and oil, gas and minerals industries are positively associated with bonus pay over both years. In addition, e-business, software and computer services and construction and building materials industries are positively associated with bonus pay at the cross-sectional level in 2001/02 only and 2002/03 only respectively. Conversely, the transport and leisure and chemical and pharmaceuticals industries both have a negative impact on bonus pay at the cross-sectional level in 2002/03 only.

#### 5.7. CEO PANEL REGRESSION ANALYSIS

Table 16 overleaf presents longitudinal results from the fixed effects model relating to CEO bonuses, bonus design, and firm performance. The longitudinal results for each of the variable categories under analysis will be discussed in turn.

Table 16. *CEOs' bonus pay: results of a fixed-effects estimator.*

Dependent variable: Log (1 + bonus/salary)			
Fixed effects estimator of the effects of transitional change			
		Coeff.	Std. Err.
Firm performance & size (H1 & 2)	TSR	0.060561 (*)	0.025195
	EPS	0.000697	0.000578
	Firm SIZE	0.017392	0.066091
Bonus scheme design (H3, 5, & 7)	CASH	-0.125151	0.066828
	Complex MEASURE	0.016333	0.048190
	Complex TYPE	0.011581	0.039498
	SOFT	-0.028704	0.043148
Time trend & constant	American	(dropped)	
	Finance	(dropped)	
	cons	0.283061	0.592258
	Trend (Year dummy)	0.027112	0.017158
	Number of obs.	542	
	Number of cases (CEOs)	285	
	F-stat	F(8,249)=1.86	
	R <sup>2</sup>	5.6%	

\* - 5%, \*\* - 1% significance level

### 5.7.1. Firm performance and size based on the CEO sample: longitudinal analysis

Table 16 detects a positive and significant association between the changes in TSR and bonus pay. Estimated longitudinal effect is 0.0606, which predicts a 10% increase in TSR is associated with  $\exp(0.1 \cdot 0.0606) - 1 = 0.00608$  increase in CEOs' cash pay due to bonuses whilst controlling for CEO salary. In absolute terms, if evaluated at the median cash pay level in 2003, which is equal to £530,863, implies an additional £3,228 in bonus pay. Longitudinal effects of changes in EPS and firm size are not statistically significant.

### 5.7.2. CEO annual bonus design: longitudinal analysis

Longitudinal effects relating to changes in annual bonus design, in terms of shifts in the type of bonus payment employed, the number of performance measures and/or targets used are not statistically significant.

Table 17 overleaf summarises the cross-sectional and panel regression results and their estimated effects.

Table 17. *CEOs' bonus pay: summary of bonus effects of two single-period models and a fixed-effects estimator.*

Dependent variable: Log (1 + bonus/salary)									
		2001/02 cross-sectional model		2002/03 cross-sectional model			Fixed effects estimator of the effects of transitional changes		
		Relative change in cash earnings due to change in bonus pay	Absolute change in bonus pay at median pay level	Relative change in cash earnings due to change in bonus pay	Absolute change in bonus pay at median pay level	Relative change in cash earnings due to change in bonus pay	Absolute change in bonus pay at median pay level		
Firm performance & size (H1 & 2)	TSR	0.0130 (*)	£6,500	TSR	(Not detected)	(Not detected)	TSR	0.00608 (*)	£3,228
	EPS	0.0202 (*)	£10,100	EPS	0.0202 (**)	£11,170	EPS	(Not detected)	(Not detected)
	Firm SIZE	(Not detected)	(Not detected)	Firm SIZE	(Not detected)	(Not detected)	Firm SIZE	(Not detected)	(Not detected)
Bonus scheme design (H3, 5, & 7)	CASH	(Not detected)	(Not detected)	CASH	-0.125 (**)	£-69,125	CASH	(Not detected)	
	Complex MEASURE	(Not detected)	(Not detected)	Complex MEASURE	0.149 (**)	£82,397	Complex MEASURE	(Not detected)	
	Complex TYPE	(Not detected)	(Not detected)	Complex TYPE	(Not detected)	(Not detected)	Complex TYPE	(Not detected)	
	SOFT	(Not detected)	(Not detected)	SOFT	(Not detected)	(Not detected)	SOFT	(Not detected)	
Control variables	American	0.250 (*)	£125,000	American	0.273 (*)	£150,969	American	(Dropped)	
	Finance	0.430 (**)	£215,000	Finance	0.332 (**)	£183,596	Finance	(Dropped)	

\* - 5%, \*\* - 1% significance level

To summarise, Table 17 indicates that EPS has a positive effect on bonus pay at the cross-sectional level but is insignificant at the longitudinal level. In contrast, TSR has a positive effect on bonus pay at the cross-sectional level for 2001/02 only and also has a positive influence longitudinally. Significantly, firm size effects in relation to bonus pay were not detected at the cross-sectional and longitudinal levels.

In terms of bonus design factors, all are insignificant at both cross-sectional and longitudinal levels with the exception of cash bonuses and multiple performance measures in 2002/03. The former has a negative impact on bonus pay whereas the later has a positive effect on bonus pay at the cross-sectional level.

Significantly, CG effects on bonus pay are not detected. However, in relation to nationality and industry variables, American CEOs and the finance industry are positively associated with bonus pay over both years.

Chapter 6 to follow will discuss the results using the two theoretical models outlined previously (agency theory and the self/serving management perspective) and in the context of previous research.

## CHAPTER 6

### DISCUSSION OF RESULTS

With existing research on executive compensation preoccupied with long-term pay, this study is one of a few which has focused on the relationship between short-term executive bonuses and firm performance. Specifically, this chapter will address the main research aim, highlighted in chapter 1, which set out to explore the relationship between executive bonus pay, its characteristics, and firm performance in the UK. In order to present a detailed and focused discussion, each hypothesis developed in chapter 3 will be examined in turn. Furthermore, the implications of the results will be identified in relation to existing theory and models reviewed in chapter 2, previous empirical results, and in terms of current business practice and policy. Results for the two samples used in this study (i.e. executive director and CEO samples) are generally comparable. Therefore, for the purpose of this discussion, the CEO will be taken as representative of the board as a whole.

#### 6.1. BONUS AND FIRM PERFORMANCE

CEO pay details are outlined in section 5.3.3. Approximately 90% of all CEOs in this sample are in receipt of an annual bonus. This compares with Leonard (1990) who found that between 1981 and 1985 the proportion of sampled American firms using bonus systems increased from 95.6% to 98.3% and IDS (1993), which concluded that by 1993 almost all companies in the UK had some form of annual bonus scheme for their executives. These high proportions indicate that the annual bonus has been a consistently popular executive pay element in the UK and America.

In addition, the median bonus figure rose by 29.5% (£37,000) over the two-year period. This rise in bonus figure corresponds to the 18.32% (£17,349) found by McKnight (1996) and more recently by S. E. Hall and Koors (2004) who report that bonus pay for CEOs rose from 16% of salary in 2002 to 21% in 2003. Therefore, bonus pay remains a persistent and significant element of executive reward.

Generally, the descriptive analysis (Figures 65 to 68) and regressions (single period and panel) provide consistent support for H1a, the positive association with firm

performance, and the agency theory that underpins this relation. Both measures of firm performance (TSR and EPS) are shown to be positively and significantly related with bonus pay. In contrast, McKnight (1996) found that bonus pay was insignificantly linked with TSR but positively and significantly associated with EPS. He concluded that a firm realising a 10% growth in EPS would increase annual bonuses correspondingly by 1.4%, i.e. an ‘elasticity’ of 1.4% (Jensen & Murphy, 1990). Significantly, a later study by McKnight and Tomkins (1999) concluded that EPS was not related to bonus pay. However, in this study, with bigger samples and two cross-sections, executive director results show a weaker elasticity over the two-year period of 0.51%. Besides elasticity as a relative measure of the responsiveness of executive reward to firm performance, an absolute measure was also adopted, i.e. pay ‘sensitivity’, or the absolute increase in CEO pay associated with a £1,000 increase in shareholder value.

Therefore, in order to compare directly the responsiveness of bonus pay and shareholder return with the results of other studies, which are cited in Table 18 overleaf, the TSR coefficients reported in Table 16 were converted into sensitivities and elasticities (see footnotes to Table 18).

Table 18. *Estimates of Median Executive Pay-Performance (i.e. TSR) Sensitivities and Elasticities Compared.*

Researcher(s) (Date)	Country (Years studied)	Performance-Pay Sensitivity <sup>3</sup>	Performance- Pay Elasticity <sup>4</sup>	Absolute Effect
Jensen and Murphy (1990) (Salary and bonus only)	USA (1974-1986)	0.0135		
Jensen and Murphy (1990)	USA (1974-1986)	3.25		
B. J. Hall and Liebman (1998) (Salary and Bonus only)	America (1980-1994)		0.22	
B. J. Hall and Liebman (1998)	America (1980-1994)	6.00	3.9	
Benito and Conyon (1999) (Salary and Bonus only)	UK (1990-1996)		0.26	£1,852
<b>Current Study (2005) (Bonus only)</b>	<b>UK (2001/02, 2002/03)</b>	<b>0.022</b>	<b>0.22</b>	<b>£3,228</b>

Given the magnitudes of shareholder value (with the median firm's market capitalisation of £1.446 billion in 2002/03) and CEO pay, it has been observed that sensitivities are expected to be low. In this study, a £1,000 increase in shareholder value is associated with a median 2.2 pence increase in CEO pay, which yields a relatively low pay-performance sensitivity of 0.022. This corresponds to the 0.0135 sensitivity calculated by Jensen and Murphy (1990) for salary and bonus (see Table 18), a dimensionally similar result.

As mentioned, these quite low sensitivities (as a result of the shareholder value and CEO bonus magnitudes) suggest that relative rather than absolute measures of responsiveness

<sup>3</sup> Performance-Pay Sensitivity – this shows the absolute increment to pay associated with a 1,000 unit (e.g. \$) increase in shareholder value, so a sensitivity of 0.0135, for salary and bonus, denotes that an additional \$1,000 of shareholder value is associated with a 1.35 cents of additional executive pay (Jensen & Murphy, 1990). It is calculated by regressing changes in executive pay on changes in shareholder value.

<sup>4</sup> Performance-Pay Elasticity – this shows the % responsiveness of pay to a % change in performance. For example, an elasticity of 0.10 denotes that a CEO associated with a 20% rate of return would be paid 1% more than a CEO associated with 10% (B. J. Hall & Liebman, 1998, p. 654). It is calculated by regressing the change in the log of executive pay on change in the log of shareholder value.

may be more informative. Consequently, pay-performance elasticities were calculated and represent the percentage change in CEO pay associated with a percentage change in shareholder value. Over the two years, a 10% change in TSR was associated with a 2.2% increase in bonus, i.e. an elasticity of 0.22. This result, as presented in Table 18, is identical with the 0.22 calculated for cash pay by B. J. Hall and Liebman (1998) and similar to Benito and Conyon's (1999) estimate of approximately 0.26. Again, the broad correspondence of results across different studies, time, and countries is re-assuring.

In addition to examining the pay-performance elasticities, Table 18 also presents results in relation to the impact of TSR on bonus pay, as measured by its absolute effect. In absolute terms, results from the fixed effects panel model reveal that a 10% increase in TSR is associated with a £2,638 rise in CEO bonus whilst controlling for salary. Similarly, from their fixed effects model, Benito and Conyon (1999) concluded that a 10% increase in shareholder return was associated with a £3,228 increase in executive compensation.

Consistent with other research discussed above and presented in Table 18, the results of this study suggest that the performance effect on bonus pay, although positive, remains relatively weak. Also, in line with Jensen and Murphy (1990), the relationship between CEO and shareholder wealth continues to be small. Nevertheless, this close correspondence of pay-performance sensitivities, elasticities, and absolute effects in relation to the other studies offers strong support for H1a and the agency perspective.

To restate this hypothesis, agency theory is concerned with the problems that can arise in any cooperative exchange when one party (the principals) contracts with another (the agents) to make decisions on their behalf (Fama & Jensen, 1983). By their very nature, agency contracts separate ownership from control and create a risk differential that the board must manage so that agents are incentivised to raise shareholder value. Therefore, agency theory would argue that the relation between pay and performance may be positive and strong due to the benefits gained from aligning the interests of the executive agents with those of the principal shareholders. Consequently, from an agency



perspective, it is predicted that bonus pay will be positively associated with firm performance, as measured by TSR and EPS.

The evidence supports this hypothesis, and both TSR and EPS are positively and significantly related with bonus pay, albeit weakly. Therefore, in contrast to Aguilera and Jackson (2003) who predict that managers may prefer growth to profits, the results of this study would argue that CEOs are to an extent profit-orientated. Consequently, it would appear that, in general, boards have been able to use bonuses to relieve the agency problems highlighted by Ezzamel and Watson (2002). As a result, firm performance improvements observed in this study may be consistent with a greater alignment of interests between the principal and agent, and the use of incentives that contribute to both shareholder value as well as CEO utility. Furthermore, it may be inferred that the CEOs in this study are behaving more like stewards of corporate assets than as immediately self-interested CEOs.

Therefore, this result does not support H1b, which argues that bonus pay and performance will be negatively associated, or the power model that underpins it. Efficient contracting appears to have reduced the risk differential highlighted by Baysinger and Hoskisson (1990) between the principal and agent. It is suggested that, first, this reduction may have been achieved through effective and accurate accountability of CEO action. Secondly, this process may have limited opportunistic behaviour and the misallocation of effort.

Furthermore, the results do not support the contention that executives are inherently self-serving or opportunistic (Lubatkin et al., 2003). Often, the manipulation of financial results to mask underachievement in order to sustain a reward is indicative of an entrenched CEO exercising unfettered power. However, the results demonstrate a positive association between firm performance, measured through external (TSR) and internal (EPS) indicators, and bonus pay. Consequently, it may be inferred that, despite ownership becoming more dispersed and control more concentrated, and in contrast to Bebchuk and Fried (2003), CEOs are not abusing their power or authority to exploit corporate resources and extract greater rents even when firm performance may be weak.

In summary, the sensitivity of CEO bonus pay to changes in TSR and EPS is positive, and supports an agency view. To this extent the power perspective, which argues that CEOs pay themselves guaranteed income masquerading as a performance bonus is not supported. Consequently, these results contradict widespread suspicions in the popular press that pay is unrelated to performance. This may be considered to be re-assuring for shareholders and other stakeholders with an interest in shareholder return and the prosperity of the firm. However, in addition to these external and internal measures of firm performance, firm size, often regarded as the main determinant of executive pay (Berle & Means, 1991), may be associated with the value of the bonus, indicating another source of executive utility. This relationship between bonus pay and firm size is discussed next.

## 6.2. BONUS AND FIRM SIZE

It is generally accepted by most academics (see section 2.7.2) that firm size is significantly and positively related with total cash pay (i.e. salary plus bonus) in general, since salary and bonus rise proportionally with firm size. In this respect, this study is no different. However, this study uses a composite bonus figure (i.e.  $\text{Log } 1 + (\text{Bonus}/\text{Salary})$ ) and, hereafter, referred to as ‘bonus pay’) and in relation to firm size was statistically insignificant in general. As a result, although firm size may vary, the proportion of bonus pay relative to salary does not change. This suggests that both large and small firms pay out proportionally similar bonuses.

There is, however, one exception. Single period regression results for the executive directors in 2002/03 only suggest that firm size, as measured by number of employees, is weakly but positively related with bonus pay. Therefore, when doubled, firm size accounts for a 1% increase in the size of the annual bonus relative to salary. In absolute terms, if evaluated at the median cash pay level, implies an additional £4,486 in bonus pay. This result, albeit marginal, is consistent with previous research whereby larger firms pay out larger bonuses.

Although most, if not all, previous studies analysing the association between firm size and bonus pay use an absolute total pay figure or bonus value, this study, as indicated,

uses a composite bonus pay figure. Therefore, due to this difference, comparisons made with earlier research may be invalid. Nevertheless, it may be argued that this study lends support to studies conducted by Finkelstein and Hambrick (1989), Lambert et al. (1991), Pavlik et al. (1993), Main et al. (1995) and Murphy (1998) who all found that executive pay is weakly linked to firm size. As a result, the regressions (single period and panel) provide limited support for H2a, the weak association with firm size, and the agency theory underlying it.

From an agency perspective, a CEO's primary responsibility is to raise shareholder value through raising a company's share price. Therefore, strategies to increase firm size that were considered to be non-value maximising would be avoided as a course of action. Consequently, due to this focus on shareholder welfare, it is predicted that bonus pay will not be positively associated with total employment. The evidence generally supports this hypothesis and, from an agency view, it may be suggested that the CEO will avoid any dysfunctional behaviour, e.g. increasing firm size, if it fails to raise shareholder value. Consequently, this disinterest in growth strategies in favour of activities that benefit the shareholder (i.e. increasing a firm's TSR or EPS) again does not support Aguilera and Jackson's (2003) prediction that managers may prefer growth to profits. As a result, it may be inferred that principal and agent interests are in fact closely aligned.

By implication, this result does not support H2b, which argues that bonus pay is positively related with firm size, or the power theory that lies behind it. In contrast to Berle and Means (1991) and Werner and Tosi (1995), who argue that with control more centralised management may pursue their own interests oblivious to the welfare of the owners, the CEOs in this study appear to be less self-interested and motivated more by goals that are value maximising. Consequently, this result, to an extent, confirms that a CEO's primary concern is shareholder welfare and that the positive association between annual bonuses and TSR strengthens this conclusion.

Unusually, this result contrasts with many of the earlier studies, identified in section 2.7.2. In particular, it does not support Berle and Means' (1991) claim that firm size is the most compelling explanation for levels of executive pay or the conclusions reached

by Santerre and Neun (1989) and Tosi et al. (2000) where executive pay is positively associated with firm size. In particular, the former calculated the elasticity of executive compensation with respect to firm size and indicates that a 10% increase in size causes a 3% increase in salary. However, many of these studies address total pay (including option valuations) or cash pay (salary plus bonus) and no previous study has focused exclusively on the annual bonus. Therefore, it may be suggested that bonus is one element of CEO pay, which is not rigidly linked to firm size, offering more potential for influence from performance. This view is supported by Lambert et al. (1991) who concluded that factors other than firm size explain the majority of variance in executive compensation. However, in this study the transformation of the bonus variable employed, from an absolute bonus measure to a proportion of salary, must eliminate much of the influence of size on bonus pay. Consequently, this may provide one explanation for this insignificant association.

Therefore, in contrast to much of the existing research, firm size in this study is not significantly associated with bonus pay. Besides bonus/performance and bonus/size associations, however, it seems necessary to analyse how detailed bonus characteristics (e.g. payment types such as cash or shares) are associated with bonus pay and firm performance. This analysis is considered next.

### 6.3. FORM OF BONUS PAYMENT, BONUS VALUE AND FIRM PERFORMANCE

For both years, cash accounted for approximately 60% of the total bonus amount. This suggests that cash, as a bonus payment, remains significant in a climate where the emphasis is on more long-term pay strategies (Jensen & Murphy, 1990; Blair, 1995; Tosi et al., 1997). In general, however, results show that cash bonuses are not positively associated with the value of the bonus awarded. The descriptive analysis (Figure 69 and 70) and regressions (single period and panel) provide consistent support for H3a, the weak association between cash and bonus value, and the agency theory that underpins it.

According to Berle and Means (1991) and B. J. Hall (2000), share-based (rather than cash) bonuses, which are closely linked with share price performance, better align the interests of the shareholder with the CEO. Equity-based pay, therefore, sees the CEO

being paid like owners in order to act like owners (Berle & Means, 1991; B. J. Hall, 2000; Ezzamel & Watson, 2002). It is suggested that this alignment may have positive consequences, which include reducing risk aversion and managerial opportunism, promoting shareholder-wealth maximisation, and increasing firm performance (Sanders, 1999; Vogel & McGinnis, 1999; B. J. Hall, 2000; Pass et al., 2000; Sanders, 2001). Therefore, consistent with agency theory, external, verifiable performance measures better align the relationship between share-based pay and firm performance. Consequently, cash bonuses may be a less popular compensation device due to their general opaqueness and, therefore, it is predicted that cash payments will not be positively related to the value of the short-term bonus.

Evidence supports this hypothesis and, despite making up approximately two-thirds of the annual bonus, cash payments are related to the smallest bonuses. In contrast, results suggest that the largest bonuses are linked with more deferred schemes. Furthermore, based on the single period regression in 2002/03, cash bonuses are associated with 13% lower bonus pay for CEOs. In absolute terms, this implies a reduction of £69,125 in bonus at the median pay level. Consequently, this result suggests that, rather than ratcheting the value of the bonus, cash-based pay has the opposite effect. CEO restraint and caution in relation to such a transparent reward as cash bonus may explain this result.

In opposition to Larker (1983) and Healy (1985), it is suggested that cash bonuses may not be easily manipulated and, therefore, less likely to be tampered with. Consequently, despite short-term cash bonuses being, generally, awarded on the basis of achieving subjective, less visible, and internally generated performance targets, due to the magnitude of the cash payment in this study being marginal, it may be inferred that CEOs are not trying to extract greater rents through short-term bonus contracts but arguably have to earn their bonus (Lawler, 1990). This result, therefore, does not support H3b, which argues that cash payments will lead to larger bonuses, or the underlying power model.

In general, share-based bonuses are linked with large bonus values whereas cash bonuses are related to small bonus values. But, to what extent are these forms of payment

associated with firm performance? Consequently, based on the ‘bonding’ qualities of deferred pay (Eaton & Rosen, 1983), will share-based bonuses be associated with strong firm performance as measured by TSR? Alternatively, due to the emphasis on the short-term (Rajagopalan, 1996; Kaplan & Atkinson, 1998) and because cash incentives generate no further risk on the part of the CEO since the value of a cash bonus is not affected by how well the firm does in the future (Schuler & Huber, 1993; Rajagopalan, 1996; Murphy, 2001), will cash bonuses be associated with weak firm performance as measured by TSR? Each hypothesis is examined in turn.

H4a predicts that share-based bonuses will be positively associated with TSR. However, descriptive results (Figure 71 and 72) are contrasting. Year 1 (2001/02) findings show that share-based bonuses are related to weak TSR whereas year 2 (2002/03) results reveal share-based bonuses to be associated with strong TSR. Therefore, this mixed set of results provide partial support for H4a, the positive association between share-based pay and the level of firm performance, and the underpinning agency theory.

With the exception of stock option re-pricing, executives, in general, benefit from share-based pay only when the company’s performance on the stock market is strong. Therefore, in line with agency theory, this study, to an extent, confirms that share-based bonuses are linked, directly or indirectly, with the long-term goals of the firm. Consequently, this study offers some support for Berle and Means (1991) and B. J. Hall (2000) who argue that share-based (rather than cash) bonuses better align the interests of the shareholder with the executive. In addition, it tentatively supports the opinion of other academics (see Sanders, 1999; Vogel & McGinnis, 1999; B. J. Hall, 2000; Pass et al., 2000; Sanders, 2001) who claim that compensating executives through equity arrangements (as opposed to cash-based schemes) will reduce risk aversion and managerial opportunism, promote shareholder-wealth maximisation, and increase firm performance. Finally, although the results are mixed, it may nevertheless be inferred that share-based bonuses have the potential to align pay with firm performance.

At the same time, this mixed set of results provides partial support for H4b and the power theory that underlies it. To restate this hypothesis, cash bonuses are expected to be

negatively associated with TSR. However, year 1 (2001/02) findings show that cash bonuses are associated with stronger TSR whereas year 2 (2002/03) results reveal cash bonuses to be associated with weaker TSR. Consequently, this study, albeit weakly, corroborates with Rajagopalan (1996) who claims that cash bonuses encourage short-term achievement rather than long-term improvements in shareholder value. Essentially, short-term bonuses are measured by internal indicators, which are less transparent than external share-based targets. As a result, opaqueness may contribute to the weak association with TSR. Therefore, it may be suggested that, in agreement with Bebchuk and Fried (2004) and the power view in general, cash bonuses are a preferred method of payment for entrenched executives who try to avoid more stringent performance-related pay strategies. Despite the inconsistent results, it may be inferred that cash bonuses, in this power context, promote executive myopia and are often awarded irrespective of a firm's stock market performance.

In general the results are disproportionate. However, this study does suggest, albeit weakly, that share-based pay has the potential to align pay with performance and that cash bonuses are a vulnerable form of payment that may be exploited by opportunistic executives. Consequently, having established how different payment forms relate to bonus value and company performance, it is necessary to examine the association between different performance targets (hard/soft and simple/complex), the bonus value, and firm performance. As a result, each set of performance targets and their proposed relationships is now discussed.

#### 6.4. HARD/SOFT TARGETS, BONUS VALUE AND FIRM PERFORMANCE

Examining hard/soft performance targets first, results indicate that in 2002/03 of the 300 CEOs in this study 67% (n = 202) are assessed by at least one unspecified performance target (i.e. those targets that are not fully disclosed, if at all, in the company's annual report), with 24% (n = 71) of CEOs evaluated by unspecified targets only. In contrast, Ittner et al. (1997) from their 317 firms found that 36% (n = 114) employed non-financial measures such as internal customer satisfaction surveys, with 2% (n = 5) measuring CEO performance based exclusively on non-financial metrics.

Consequently, the results of this study suggest that, over time, performance targets have become increasingly softer, in the sense of being unobservable by shareholders. This may be due to powerful CEOs who are in a position to manipulate the type of performance targets used or, alternatively, an indication that a CEO's duties are too complex to be assessed exclusively by external measures and, consequently, unspecified or non-financial measures attempt to bridge this gap. However, performance target migration results (see Figure 63) indicate that companies, in general, are utilising more measurable hard targets (i.e. external and/or internal targets that are published in annual reports) rather than softer, unspecified targets. Despite this, a significant proportion of firms still include an unspecified element into their performance target design. But, what is the association between these hard/soft targets and the value of the annual bonus?

Hard, published targets will be negatively related with bonus pay as outlined in H5a. Descriptive results (Figure 75 and 76) show that hard targets are negatively associated with bonus pay for both years, and responsible for the lowest payouts. This result provides support for H5a, the ability of hard targets to limit bonus value, and the agency theory that lies behind it. Therefore, on an agency view, it may be suggested that hard targets, which are both difficult to manipulate and influenced by uncontrollable noise, may limit excessive bonuses (Healy, 1985; Murphy, 1986a; Rajagopalan, 1996). Consequently, it may be inferred that this increased transparency and tighter shareholder monitoring has reduced the pay-performance gap.

In contrast, H5b argues that soft performance targets (i.e. unspecified or non-financial measures such as internal customer satisfaction surveys) will be positively related with bonus pay. Regressions (single period and panel) found no significant association between soft targets and the bonus variable. Similarly, Holthausen et al. (1995) found no evidence that executives manipulate earnings in response to their bonus plans. However, descriptive results (see Figure 75 and 76 also) show that soft targets are positively associated with bonus pay for both years, and responsible for the highest payouts.

This finding provides some support for H5b, the imperfections associated with soft targets that expose them to CEO abuse, and the underlying power model. Therefore, it



may be suggested that soft targets, albeit reflecting factors that are more under a CEOs' control (Healy, 1985), are more vulnerable to manipulation. In addition, entrenched CEOs may be more likely to select remuneration practices that obscure the total amount of compensation and appear to be more performance based than they actually are. Consequently, in line with Murphy (2001) who reported that internally determined standards are subject to ratcheting and provide incentives to smooth earnings, it may be inferred that CEOs may promote soft, unspecified performance targets which are, generally, opaque, open to camouflage, and non-verifiable, as a means to distort the pay-performance relationship and, ultimately, extract greater rents.

Evidence indicates that hard targets are associated with small bonuses whereas soft targets are linked with large bonuses. But, what is the association between hard/soft targets and firm performance? Consequently, based on the transparency of external targets, which make them difficult to manipulate, will hard targets be associated with strong firm performance as measured by TSR and EPS? Alternatively, due to the opaqueness of internal, unspecified targets, which make them vulnerable to manipulation, will soft targets be associated with weak firm performance as measured by TSR and EPS? Each hypothesis is now examined.

H6a predicts that hard targets will be positively related to TSR and EPS. Descriptive results (Figures 77 to 80) show that hard targets for both years are associated with improvements in both TSR and EPS. Therefore, H6a, the ability of hard targets to effectively align pay with performance, and the agency theory that underpins it, is supported in this context. Consequently, it may be inferred that because hard targets are, in general, external, visible and more difficult to attain, they give CEOs an incentive to improve external performance indicators that may increase the demand for the company's shares and hence TSR, and the size of the dividends released through EPS. However, Murphy (2001) would argue that external standards are not influenced by managerial actions *per se* but that share prices and price-related performance are frequently subject to the vagaries of the market.

However, descriptive results (see Figures 77 to 80 also) show that soft targets are negatively associated with TSR and EPS over both years. In addition, Ittner et al. (1997) report a negative relation between the use of non-financial performance measures and the correlation between accounting returns and stock returns. Consequently, these results confirm that soft targets, which are generally internal, less visible and easier to attain, are not associated with stronger overall firm performance. Therefore, in accordance with Healy (1985), Rajagopalan (1996), and Bebchuk and Fried (2004) soft targets, which are easy to manipulate or camouflage, enable powerful CEOs to extract greater rents even when performance is weak. Consistent with the power view, it may be inferred that entrenched CEOs will, first, prefer soft, unspecified targets and, secondly, with incentives to improve internal less visible measures of performance are more likely to neglect actions that increase shareholder value. This outcome, therefore, lends support for H6b, which argues that soft targets will be negatively related to firm performance, and the power model that underlies it.

In line with empirical expectations in general, hard targets are associated with small bonuses and strong firm performance whereas soft targets are associated with large bonuses and weak firm performance. But, how does this relationship hold up when the simple/complex dimension of bonus targets is considered? This question is addressed next.

#### 6.5. SIMPLE/COMPLEX TARGETS, BONUS VALUE AND FIRM PERFORMANCE

An extension of the performance target hypothesis includes the dimension of simple versus complex performance targets. In contrast to Murphy (2001), who reported that the majority of companies in his sample utilised a mixture of internal and external performance standards, and Bushman et al. (1996) who found that one-third of their sample used some form of IPE (a mixture of performance measures which include subjective evaluations of individual performance, explicit non-financial performance criteria, and aspects of managerial input) in determining the level of CEO bonus, results of this study are indicative of a 50:50 split. Half the population of CEOs are evaluated using two or more different performance targets whereas the remaining half is assessed using one type of performance target only.

Therefore, it may be inferred that, over time, performance targets attached to the bonus have become increasingly more complex. This is supported by the performance target migration analysis (Figure 64), which shows that companies in general are using more types of performance targets and, hence, adopting a more complex (i.e. multiple targets) rather than simple (i.e. not more than one target) approach when designing CEO bonuses. This approach may be due to powerful CEOs being in a position to manipulate and increase the number of performance targets used as a means of camouflaging weak performance or, alternatively, an indication that a CEO's duties are too complex to be assessed exclusively by a single measure and, consequently, using supplementary measures attempt to bridge this gap. But, what is the association between simple/complex targets and the value of the annual bonus?

Simple performance targets are related to smaller bonuses as predicted by H7a, and descriptive results (Figures 81 to 84) show that simple targets are indeed negatively associated with bonus pay for both years as well as being responsible for the lowest payouts. Therefore, this result provides some support for H7a, the ability of simple targets to limit bonus value, and the underpinning agency theory.

In accordance with the recommendations outlined by Lingle and Schiemann (1996), Ho and McKay (2002), and Franco and Bourne (2003), this study suggests that measures that are clear and simple as well as easy to manage and communicate may facilitate CEO focus, the monitoring of CEO action by shareholders, and the identification of achievement. Consequently, it may be inferred that through improvements in the clarity of goals set and tighter shareholder monitoring, simplicity has the potential to limit CEO discretion and reduce the pay-performance gap.

In contrast, H7b predicts that complex performance targets are related to larger bonuses. Results from the panel regressions were insignificant, however, descriptive analysis (see Figures 81 to 84 also) and single period regressions for 2002/03 show a positive and significant association between complex targets and the value of the bonus. Specifically, the results from the 2002/03 single period regressions indicate that complex performance measures are associated with a 15% increase in bonus pay relative to salary. In absolute

terms, this implies an increase of £82,397 in bonus pay at the median pay level. This outcome, therefore, provides limited support for the imperfections associated with complex targets that expose them to camouflage strategies outlined in H7b, and the power model that lies behind it.

Significantly, this result suggests that making performance targets more complex is associated with larger bonuses. A possible explanation for this positive association is that complexity has the potential to hamper monitoring strategies and limit the ability of shareholders to identify CEOs' achievements. It may also allow multi-tasking agents to misallocate effort across tasks (Holmstrom & Milgrom, 1991), thereby complicating the decision-making process (Yearta et al., 1995), diluting CEO incentives, creating opportunities for powerful CEOs, and widening the pay-performance gap. Consequently, it may be inferred that entrenched CEOs may try to maximise their bonus payments by promoting complex targets, which are opaque, open to manipulation, and which make it difficult for shareholders to isolate CEOs' achievements.

Overall, simple targets are linked with small bonuses whereas complex targets are related to large bonuses. But, what is the association between simple/complex targets and firm performance? Consequently, based on the clarity of simple targets, which make them easier to monitor, will simple targets be associated with strong firm performance as measured by TSR and EPS? Alternatively, due to the opaqueness of complex targets, which make them susceptible to camouflage and difficult to monitor, will complex targets be associated with weak firm performance as measured by TSR and EPS? Each hypothesis is now discussed in turn.

As predicted by H8a, simple targets will be positively related to firm performance as measured by TSR and EPS. However, descriptive results (Figures 85 to 92) show contrasting results. Therefore, due to this mixed set of findings, H8a, the ability of simple targets to better align pay with performance, or the underlying agency theory, is not supported. Consequently, this result does not support Locke et al. (1981) and Chidester and Grigsby (1984) who both reported that setting either difficult or specific goals was associated with increased performance. Therefore, this study is unable

confirm, with any degree of certainty, that simple targets facilitate CEO focus, shareholder monitoring, and identifying achievement. As a result, it may be inferred that simplicity, through improved transparency and closer shareholder monitoring, may not consistently limit executive discretion and by extension may not tighten the pay-performance gap.

To restate H8b, complex targets will be negatively related to firm performance. By implication, therefore, these mixed results (see Figures 85 to 92 also) do not support this hypothesis or the power model underpinning it. Consequently, this result is unable to corroborate Yearta et al's (1995) findings which suggest that complexity may complicate the decision-making process and influence performance. Furthermore, results do not verify Emsley's (2003) assertion that as the number of goals increase performance deteriorates. As a result, complex targets may not consistently dilute CEO incentives, create opportunities for powerful CEOs, encourage CEO discretion, and widen the pay-performance gap. In contrast to the power model, it may be inferred that entrenched CEOs may not automatically prefer complex targets because they are opaque and easier to manipulate.

Consequently, simple targets are, in general, associated with small bonuses whereas complex targets are linked with large bonuses. Due to inconclusive results, however, the relationship between simple/complex targets and firm performance is difficult to determine. Therefore, having now discussed the association between the different payment forms and performance targets with pay and performance, this next section addresses additional CG factors that previous research identifies as contributing to the pay-performance relationship.

## 6.6. BONUS AND GOVERNANCE CHARACTERISTICS

Sections 6.6.1 to 6.6.5 discuss the five main governance variables (including the ratio of NEDs on the remuneration committee, CEO presence on the nominations committee, CEO/Chair duality, tenure, and power), which have been identified in the existing literature (see section 2.4) as making a significant contribution to pay and performance.

### *6.6.1. Remuneration committee NEDs*

Results reveal that NEDs dominate the composition of remuneration committees with 8.4% of firms having insiders. This suggests that most, if not all, firms in this sample are adhering to the recommendations set out in the Cadbury (1992), Greenbury (1995), and Hampel (1998) reports respectively, and potentially reaping the benefits from adopting a non-executive board. However, results from the single period and panel regressions are insignificant, and do not support H9a, which predicts that a high percentage of NEDs will reduce the value of the bonus, or the agency theory that lies behind it.

Consequently, in accordance with research conducted by Mangel and Singh (1993), this study suggests that the percentage of NEDs that sit on the remuneration committee has no significant association with executive bonus pay. Furthermore, in contrast to Conyon and Peck (1998), a higher proportion of NEDs serving on the committee may not better align pay with performance. Therefore, it may be suggested that NEDs are not as independent as much of the earlier research suggests but potentially more akin to insiders.

Similarly, H9b, which argues that a lower proportion of NEDs will increase the value of the bonus, or the underlying power model, is not supported. As a result, a higher proportion of NEDs may not be more representative of shareholder interests, more objective, or better monitors. At the same time, the board may not be composed of sympathetic NEDs. Consequently, in contrast to O'Reilly et al. (1988) and Daily et al. (1998), it may be inferred that the composition of the remuneration committee may not be a major determinant of CEO bonus pay.

### *6.6.2. CEO presence on the nominations committee*

Results indicate that 32.3% (n = 97) of firms actively prevent the CEO from sitting on the nominations committee whereas in 67.7% (n = 203) of firms the CEO is eligible to sit on the committee. This result suggests that CEOs, in a majority of firms in the sample, are in a strong position to co-opt board members. In general, results from the single period and panel regressions are insignificant. However, single period regression results for the executive directors in 2001/02, found that the presence of the CEO on the

nominations committee is negatively correlated with bonus pay. Therefore, CEO presence on the committee is associated with a 4% reduction in the size of the annual bonus relative to salary and, in absolute terms, implies a drop in bonus at the median pay level of £14,104. Significantly, this result suggests that a CEO's presence on the committee, who arguably can hand pick board members that are sympathetic to their own interests, does not automatically result in large bonuses.

Consequently, it may be inferred that executive or insider nominations who provide first-hand, in-depth company knowledge, and bring a recognizable emotional commitment to, and involvement with, the company (Demb & Neubauer, 1992), facilitate the decision-making process by removing the ambiguities and conflicts that could otherwise arise when board composition is mixed. As a result, this creates an environment that supports and is focused on raising shareholder value rather than CEO interests and the exploitation of corporate resources to extract greater rents. Therefore, this conclusion offers limited support for H10a, which predicts a negative association between CEO presence on the nominations committee and bonus value, and the underpinning agency theory.

However, in contrast to Pfeffer (1981) and Tosi and Gomez-Mejia (1989), manipulating nominations may not be an effective means of building or protecting power bases or legitimising decisions that may not be in the best interest of owners. Consequently, it may be inferred that CEOs, who have an active presence on the nominations committee, are very much aware of their duties to shareholders. Therefore, it is unlikely that CEOs may be co-opting the board by favouring the appointment of sympathetic new directors (Finkelstein & Hambrick, 1989) as one strategy in order to enhance board support for their initiatives and decisions, minimise the risk of dissention (Westphal & Zajac, 1995), and extract rents which are not in line with performance. As a result H10b, which argues that CEO presence on the nominations committee will be positively associated with bonus pay, or the power model that underpins it, is not supported. However, these results do indicate that CEO pay may be influenced by the social and psychological dynamics that operate within the inner circle of corporate leaders (Westphal & Zajac, 1997).

### *6.6.3. CEO/Chair duality*

Results indicate that only 5% of CEOs (n = 15) also operate as chairman of the board, whereas the remaining 95% (n = 285) function solely as CEO. This suggests that most, if not all, firms are adhering to the recommendations set out in the Cadbury (1992), Greenbury (1995), and Hampel (1998) reports respectively, and aware of the pitfalls of adopting a dual role.

As mentioned in section 3.9.3, CEO/Chair duality may be interpreted by agency theory as being consistent with an efficient arrangement involving synergy. Alternatively, it may be seen as just another dimension of the variety of ways in which CEOs exert their power over the firm at the expense of shareholders.

Looking first at the agency view, which underlies H11a and predicts that CEO/Chair duality will be negatively associated with bonus pay, results from the single period and panel regressions are, in general, insignificant. However, single period regression results for the executive directors in 2001/02, show that CEO/Chair duality is positively associated with bonus. It may be suggested that, on average, companies who allow the CEO to operate as chairman of the board is associated with a 10% increase in the size of the bonus relative to salary, which in absolute terms is associated with a rise in bonus pay at the median pay level equalling £33,835. Significantly, CEO/Chair duality is related to larger bonuses.

In line with Weisbach (1988), this study confirms that CEO/Chair duality may be responsible for assisting in the entrenchment of CEOs, which enables them to exploit firm resources in order to further their own interests. This dual role may also allow entrenched CEOs to control the nominations process, which facilitates the consideration of new directors that are sympathetic to their interests (Finkelstein & D'Aveni, 1994). Often seen as an indicator of CEO power over a board (Finkelstein & Hambrick, 1996), this study agrees with the views outlined by Sora and Natale (2004) who argue that merging the roles of the CEO and chairman into one individual is a recipe for corruption and the misuse of power to extract greater rents.



Therefore, in contrast to the agency view, the results of this study do not support the view that CEO/Chair duality facilitates the decision-making process by removing the ambiguities and conflicts that could otherwise arise where power is shared. Furthermore, in conflict with Harrison et al. (1988) who suggest that the increase in power and responsibility that the combined position affords is accompanied by an increase in accountability, it is inferred that this increase in accountability may not limit the misuse of power to extract greater bonuses regardless of the level of performance.

However, this result does offer limited support for H11b, which argues that CEO/Chair duality will be positively associated with bonus pay, and the power model that lies behind it. This finding is supplemented by additional studies (see Main, 1991; Boyd, 1994; Core et al., 1999; Bebchuk et al., 2001) who found that CEO/Chair duality was positively related with executive pay. Therefore, in accordance with Donaldson and Davis (1991) and Rechner and Dalton (1991), a dual role may increase CEO power, restrict board independence, reduce its ability to fulfil its governance function, and may constitute a conflict of interest. Consequently, the combined role may weaken shareholder monitoring and, by extension, may lead to behaviour that is self-interested and the abuse of corporate assets in order to deliver bonuses that are misaligned with performance.

#### *6.6.4. Tenure*

In line with Charkham's (2001) findings, the median number of years a CEO will remain on the board is 8. In general, the relation between bonus pay and tenure is insignificant. This result is supported by Deckop (1988) and Mangel and Singh (1993) who both reported that tenure was not a significant determinant of executive pay. In addition, Lippert and Porter (1997) found a negative relationship between tenure and bonus pay. Consequently, regressions (single period and panel) provide support for H12a, which predicts that bonus pay will not be positively associated with tenure, and the underpinning agency theory. According to Buchholtz et al. (2003), long-periods of tenure may enhance a CEO's level of firm-specific human capital, which may manifest itself in greater expertise and experience and a CEO who is better qualified to enhance shareholder value. Furthermore, it may be suggested that as tenure increases, the CEO

may be more willing to receive compensation in the form of stock and options. Therefore, it may be inferred that length of tenure may have a greater association with long-term aspects of CEO pay as opposed to short-term bonuses.

By implication, this result does not support H12b or the power model that underlies it. This hypothesis argues that bonus will be positively associated with tenure and contrasts with the findings of Murphy (1986a), H. D. Platt (1987) Henderson and Fredrickson (1996), Lippert and Porter (1997), and Wright et al. (2002) who all found a significant positive relationship between executive pay and tenure. Nevertheless, it may be inferred that, in contrast to power theory, extended periods of tenure may not automatically allow the CEO to control the board or provide opportunities to exert their social influence in order to weaken the pay-performance relationship.

#### *6.6.5. Executive power*

Results indicate that 78% (n = 234) of CEOs operate within a weak governance framework (as defined in section 5.1, page 97) and, subsequently, occupy a strong executive position in the firm. The remaining 22% (n = 66) function within a strong governance framework and, consequently, occupy a weak position in the firm. This suggests that a vast majority of companies practice weak governance and, in general, CEOs have a powerful position in firms. However, regressions (single period and panel) are insignificant and lend support for H13a, which predicts that power will be negatively associated with bonus, and the underlying agency theory.

Consequently, this result suggests that entrenchment (e.g. dual roles and extensive tenure) and the cooptation of new directors may better align the pay-performance relationship. For example, a CEO who is more knowledgeable and experienced with extensive contacts may improve firm performance to the benefit of company shareholders. Therefore, it may be inferred that, on an agency view, power may have a greater association with long-term pay strategies rather than short-term annual bonuses.

In contrast to Bebchuk and Fried (2003) and Shen (2003), power may not increase over time nor will a CEO become entrenched without the intervention of a vigilant board.

Therefore, in contrast to popular belief (see Murphy, 2002; Dedman, 2003; Bebchuk & Fried, 2004), it may be inferred that increased power will not enhance a CEO's ability to exercise unfettered power through the exploitation of corporate assets, the manipulation of captive directors, and the extraction of greater rents. Consequently, H13b in this context, which argues that power will be positively associated with bonus, or the power model that underpins it, is not supported.

In summary, these peripheral governance mechanisms indicate that, apart from CEO presence on the nominations committee and CEO/Chair duality in 2001/02 only, CG factors, in general, have a negligible impact on bonus pay. Therefore, in contrast to much of the research and opinion from both academics and practitioners alike, which consistently highlight the importance of strong CG as a means of controlling pay and performance, CG in this study is of less significance. Therefore, it may be inferred that many of the negative views, which surround the CEO in relation to the power model are exaggerated. It would appear that governance frameworks do not detract from the fact that CEOs may have an inherent drive to be respected and successful stewards of their firm's assets.

However, it may also be argued that this lack of association is indicative of governance mechanisms working effectively. Unfortunately, the evidence does not support this claim. It could, therefore, be concluded that shareholders wishing to impose tougher, more open performance conditions are wasting their time, since they mainly leave pay-performance sensitivities unaffected.

Significantly, two control variables (the finance industry and American CEOs) in the single period regressions were found to be positively and significantly associated with bonus pay. This result did not extend to the panel regressions. Essentially, firms in the finance sector clearly show a tendency towards higher cash pay, after allowing for performance. Similarly, firms with American CEOs seem to offer a cash pay premium.

This concludes the discussion of the project's results. The next chapter proposes conclusions in relation to the main findings and also highlights any limitations in the

study. It will also offer some recommendations to practitioners and academics on practice and policy and future research.

## CHAPTER 7

### CONCLUSIONS, RECOMMENDATIONS, LIMITATIONS

This chapter will summarise the main findings discussed in chapter 6 and propose conclusions and recommendations for practice and policy. At the same time, it will highlight the limitations of the study and make recommendations for future research. To aid the reader, Table 19 overleaf presents each hypothesis in chapter 3 and the results from the tests performed in chapters 5 and 6.

Table 19. *Summary of results (descriptive, single and/or panel regressions) in relation to hypotheses.*

Hypotheses	Support	Positive effect of independent variable on bonus	Negative effect of independent variable on bonus
H1a: bonus positively associated with firm performance	Yes	EPS (elasticity) = 0.51% TSR (elasticity & sensitivity) = 0.22 & 0.022 10% increase in TSR associated with £2,638 rise in bonus	
H1b: bonus negatively associated with firm performance	Not detected		
H2a: bonus not positively associated with firm size	Yes (weak)		Firm size not associated with bonus
H2b: bonus positively associated with firm size	Not detected		
H3a: bonus not positively associated with cash form of payment	Yes		Cash bonuses associated with 13% or £69,125 reduction in bonus
H3b: bonus positively associated with cash form of payment	Not detected		
H4a: share-based bonuses positively associated with firm performance	Yes (weak)	Share-based bonuses associated with strong firm performance	
H4b: cash bonuses negatively associated with firm performance	Yes (weak)		Cash bonuses associated with weak firm performance
H5a: bonus negatively associated with hard targets	Yes		Hard targets associated with reduced bonus
H5b: bonus positively associated with soft targets	Yes	Soft targets associated with large bonus	
H6a: firm performance positively associated with hard targets	Yes	Hard targets associated with strong firm performance	
H6b: firm performance negatively associated with soft targets	Yes		Soft targets associated with weak firm performance
H7a: bonus negatively associated with simple targets	Yes		Simple targets associated with reduced bonus
H7b: bonus positively associated with complex targets	Yes	Complex targets associated with 15% or £82,397 rise in bonus	
H8a: firm performance positively associated with simple targets	Not detected		
H8b: firm performance negatively associated with complex targets	Not detected		
H9a: more NEDs negatively associated with bonus	Not detected		
H9b: fewer NEDs positively associated with bonus	Not detected		
H10a: CEO on nominations committee negatively associated with bonus	Yes (weak)		CEO on nominations committee associated with 4% or £14,104 reduction in bonus
H10b: CEO on nominations committee positively associated with bonus	Not detected		
H11a: bonus negatively associated with CEO/Chair duality	Not detected		
H11b: bonus positively associated with CEO/Chair duality	Yes (weak)	CEO/Chair duality associated with 10% or £33,835 rise in bonus	
H12a: bonus not positively associated with tenure	Yes		Bonus not associated with length of tenure
H12b: bonus positively associated with tenure	Not detected		
H13a: power negatively associated with bonus	Yes		Bonus not associated level of executive power
H13b: power positively associated with bonus	Not detected		

## 7.1. CONCLUSIONS AND RECOMMENDATIONS

Guidelines on bonus pay outlined in government-backed reports such as Greenbury (1995) or the advice communicated by large institutional investors like the ABI (2002) stress that executives should not be automatically entitled to bonuses nor should it become a guaranteed element of remuneration.

In this context, this study has found that a positive bonus pay/TSR and EPS performance relation holds. Therefore, shareholders and other stakeholders may be satisfied that bonuses have not been an automatic entitlement but have indeed been earned through firm performance. Consequently, an advocate of the agency perspective on the role of executive bonus would draw positive inferences from the significant relationship overall between CEO bonus pay and a firm's financial performance.

Therefore, in accordance with B. J. Hall and Liebman (1998), this result contradicts the claim that CEO contracts are widely inefficient due to the lack of association between pay and performance. As B. J. Hall and Liebman (1998) state, it would appear that in general the fortunes of the CEO are inherently linked to the fortunes of the companies that they manage. Consequently, the evidence suggests that bonus pay tends not to be a guaranteed element of compensation but is contingent upon performance, a view echoed by Sturman and Short (2000).

However, according to Conyon (1995; 1997a), many of the studies on executive pay and performance show that it is difficult to isolate a robust relationship, or infer direction of causation, and even when a link can be determined the quantitative impact appears to be negligible. Significantly, this study is no different and, despite a positive pay-performance relationship, the association remains relatively weak. Therefore, this study supports the caveat expressed in a recent article published by IDS, which stressed that performance-related pay schemes do not always deliver expected results (Taylor, 2005). Consequently, this weak association may provide some entrenched CEOs with opportunities to exploit the pay-performance relationship. As a result, in order to prevent this potential abuse, it is recommended that current and future pay schemes, especially short-term bonuses, are continually monitored and revised in the light of this possibility.

In this context, it seems important to monitor the detailed characteristics of bonus schemes, governance mechanisms and their association with bonus pay and firm performance.

For example, in line with agency theory, cash payments are not positively related to the actual value of the annual bonus. Therefore, it may be argued that, in contrast to the power model, short-term bonuses are not a regular and permanent addition to salary that is unearned or any more vulnerable to manipulation by self-serving, entrenched executives than other forms of remuneration. Consequently, in contrast to Grant (2003), this study suggests that (cash) bonuses are not entirely responsible for the persistent rise in CEO pay. As a result, it is recommended that cash bonuses, as one form of short-term reward, are not devalued and left idle based on the misconception that they are easily manipulated and exploited, but continue to be used as an effective remuneration strategy to incentivise CEOs and help to align pay with performance.

However, some caution is needed. The results linking cash bonuses with firm performance, although mixed, show partial support for a negative association. Therefore, it may be argued that cash bonuses encourage short-term achievement rather than long-term improvements in shareholder value (Rajagopalan, 1996) and, consistent with power theory, may be adopted by entrenched executives as one way to avoid objective performance-related targets. Consequently, it is recommended that cash bonuses are not used as the only method of remuneration but supplemented by long-term share-based strategies.

In contrast, share-based payments are positively associated with the actual value of the annual bonus. This result is supported by agency theory and suggests that compensating through deferred methods may be one way to align the interests of the CEO with those of the shareholder. In effect, CEOs are being paid like owners in order to act like owners (Berle & Means, 1991; B. J. Hall, 2000; Ezzamel & Watson, 2002).

However, the results linking long-term payments with firm performance found in this study were similarly mixed. This may be explained in terms of methodology whereby a



two-year data sample is too short a time frame to accurately measure any long-term effect or because the data does not document a long-term payment figure e.g. stock option or LTIP value. Also, a volatile stock market may contribute to this discrepancy. In line with earlier studies (see Berle & Means, 1991; B. J. Hall, 2000), partial support is given to the positive association between long-term pay and stock market performance. Therefore, as agency theory would predict, it may be argued that share-based bonuses (rather than cash bonuses) may be more effective at aligning pay with performance.

In summary, this evident ambiguity may create opportunities for powerful CEOs to extract rents that are not in keeping with the actual performance of the firm. Consequently, it is recommended that cash bonuses and share-based bonuses are continually monitored by vigilant shareholders and, when possible, are not used as solitary incentives but as complementary reward schemes. It is suggested that the deficiencies of each payment will be compensated by the counter-balancing strengths of another.

Many argue that firm size is the most compelling explanation of executive pay (Berle & Means, 1991). However, by using a composite bonus pay figure, this study has found that although firm size may change, the proportion of bonus pay relative to salary does not vary. This suggests that both large and small firms pay out proportionally similar bonuses.

Regulators, institutional investors and shareholders have for some time been championing for greater transparency of remuneration details of corporate elites in order to ensure that CEO reward is fair and in line with firm performance. It may be suggested that this pressure on companies to improve their disclosure of compensation details may have contributed to the positive association between bonus pay and firm performance found in this study.

In particular, transparency in bonus schemes (in relation to hard and simple targets) is positively associated with firm performance, on an agency view. This all suggests that CEO bonuses offer a strong and consistent basis for the alignment of principals' and

agents' interests. While bonus hardness and simplicity is associated positively with performance, results suggest that detailed bonus scheme characteristics are generally insensitive to this relationship. Bonus schemes in the UK continue to become softer and more complex with the former referring to internal or unspecified targets, whereas the latter refers to the use of multiple targets. These targets may create opportunities for executives to act self-interestedly, mask weak performance, abuse corporate assets and, ultimately, extract rents that are not aligned with performance. Consequently, although a multi-dimensional performance measurement system may represent a more accurate definition of the organisation's goals (Kaplan & Atkinson, 1998), this study would recommend that hard targets which are less amenable to tampering and simple targets that are easier to communicate, follow and monitor, should be adopted more frequently by large firms. Essentially, it may be suggested that these targets will encourage the CEO to behave more consonantly with shareholder interests.

Of course IPEs, where boards have some discretion over the amount of bonus paid against unspecified targets, may succeed in theory, especially where the nature of the business makes it advisable to keep CEO targets confidential. Nevertheless, the implication of this thesis is that, on balance, transparency in the form of hardness and simplicity (i.e. external or published targets that are easy to communicate, understand and monitor) generate the best results.

In general, CG as a moderator of executive pay was insignificant in this study. It could, therefore, be concluded that regulators, institutional investors and shareholders expecting firms to follow the tenets associated with strong CG (e.g. independent boards, non-CEO/Chair duality, limited involvement of the CEO in the nominations process, and reduced tenure) may be wasting their time, since they mainly leave pay-performance sensitivities unaffected. However, it is suggested that through the application of strong CG it may be possible to at least indirectly influence the form in which the bonus is received (i.e. cash or shares) and the type of targets used (i.e. hard/soft and/or simple/complex) as one way of controlling CEO behaviour.

This finding also contrasts with some of the recommendations discussed by Conyon et al. (1995) who call for the expulsion of all executives on the remuneration committee and an open selection process for NEDs, which would mean prohibiting the CEO from sitting on the nominations committee. However, it is possible that weak governance may foster the rise of powerful CEOs who may exploit their position and due to the relative impotence of the shareholder and stakeholder this study suggests that continued vigilance and control is still needed.

Finally, this study challenges part of Murphy's (2002) claim that the managerial power model is problematic as a theoretical approach and too simplistic to explain executive pay practices. In terms of theory, the power model has not been problematic and, in fact, has proved to be particularly useful in some cases. For example, explaining the relationship between soft targets and firm performance (H6b) and complex targets and the bonus value (H7b). However, although the hypotheses based on the power perspective were not supported in general, the model nevertheless facilitates a fuller discussion of the pay-performance relationship than would otherwise be the case if agency theory were used exclusively. Therefore, it may be argued that agency theory needs to be developed and extended so that the findings in H6b and H7b may be explained.

Alternatively, it may be suggested that this lack of support is potentially due to the simplicity of the power approach to explain the intricacies associated with pay practices and subsequent performance of the firm that Murphy (2002) alludes to. For example, independent boards do not automatically reduce executive pay levels, and newly appointed CEOs enjoy just as attractive, if not better, remuneration packages than incumbent executives that are expected to use their influence over the board to extract rents. However, in general, this study argues that both theories are needed in order to fully explain the pay-performance relation.

## 7.2. LIMITATIONS AND FUTURE RESEARCH

It is acknowledged that this study has a number of potential limitations. The limitations, proposed amendments and recommendations for future research will be discussed under the following headings: research design and variable changes.

### *7.2.1. Research design*

It is evident that this study's main focus is on short-term remuneration (i.e. bonus pay). However, it is widely accepted that long-term, more deferred payments such as equity holdings, stock options, etc, have come to dominate executive pay (Jensen & Murphy, 1990; Blair, 1995; Tosi et al., 1997), and may be an important influence on firm performance not considered here. Therefore, it is recommended that future research on short-term incentives include long-term pay strategies (even as a control variable) in order to complement the analysis and provide a more holistic explanation of the pay-performance relation. This view is echoed by McKnight (1996). At the same time, the valuation of long-term rewards such as executive stock options and LTIPs is a tortuous and controversial process, with one year of data demanding one researcher-year of effort (Buck et al., 2003). In any case, long-term incentives may have little effect on year-on-year variations.

This study collected data over a two-year period, which in relation to investigating pay and performance over the short-term may be deemed appropriate. However, it is recommended that future research extend the years of data collected to a 5 to 10 year panel. A difficulty associated with this proposed extension is the accessibility to the required information. Under the Companies Act of 1985 companies were required to disclose salary details for the highest paid director and total emoluments for all other directors. Additional details with regard to payment methods, performance targets, etc, were left to the companies' discretion. However, since 1985 through various government initiatives like the Cadbury (1992) and Greenbury (1995) reports, disclosure requirements for publicly listed firms has steadily improved. Despite this development, it is highly likely that much of this compensation data will be incomplete and these gaps may weaken the effectiveness of this research proposal. Nevertheless, a longitudinal study on the association between short-term pay and performance and examining its

durability over the long-term is an interesting research scope and, at the same time, may increase the study's level of robustness.

Consistent with much of the research on executive pay, access to main board executive directors is difficult if not impossible. Nevertheless, a valuable contribution to executive remuneration would be to examine how executives perceive themselves to be motivated through annual bonuses. This may be achieved through interviews or psychological/motivational surveys. Again, access will be the single most important factor that will hamper this research endeavour.

Although this study does, to some extent, compare UK findings with American data, another valuable area for comparison is with Europe e.g. Germany or across regions. The institutional, cultural and regulatory norms surrounding executive remuneration are very different across the economic triad: Europe, America, and Austral-Asia. Limited evidence in this study showed American CEOs and American companies tended to have significantly higher bonus payments, which suggests country variations exist. This view is supported by Teather (2005) who found that British pay scales are dwarfed by the cash and perks lavished on executives in corporate America. Therefore, direct international comparisons may create opportunities for countries to learn from the successes and/or failures of alternative remuneration practices and policies. Equally, it may create a better understanding of the role the institution and company play in constructing remuneration packages, the cultural differences, and international effects.

This study consists of a relatively large and broad sample of executive directors in addition to the CEO, who is often the focus of most studies on executive pay (Ezzamel & Watson, 2002). However, shareholder dissent was recently even stronger on the issue of non-executive pay at the AGM of Royal London (Thornhill, 2005). Therefore, it is recommended that future samples exploring executive pay-performance relations be extended to include all NEDs that sit on the board of directors. It is suggested that this extension will explore what has become an interesting and topical debate in the sense that: are the custodians of shareholder welfare remunerated appropriately in order to maximise shareholder value? At the same time, it is believed that this approach may

enhance our understanding of remuneration packages in general and, in particular, indicate not only how these remuneration strategies may differ, compare, and integrate with the executive population, but how well aligned they may be with firm performance. It might also be valuable to look qualitatively at how these NEDs operate. However, access will restrict this proposal.

The sample framework used in this study is the FTSE-350. This sample is representative of medium to large UK firms. It is recommended that in order to gain a more complete picture of remuneration practices and policies and how well aligned they may be with firm performance, across the UK, it is necessary to collect data on small firms. It is believed that the inclusion of small firms into any future research will improve the generalisations that can be made from the study. For example, Bacon et al. (1996) argue that studying human resource practices in small businesses is no less important than those in large organisations. Essentially, the small business sector, which has been traditionally marginalized, has become increasingly important economically and politically and an area that is open to new research. However, it is acknowledged that ascertaining the relevant information from small firms is difficult due to the problems associated with obtaining the relevant management, share price, and company data.

Finally, in this study, CG as a moderator of executive pay was insignificant. Nevertheless, CG remains an important determinant in shaping executive pay and continues to be a valuable mechanism that can potentially limit executive entrenchment and opportunism. Therefore, it is suggested that future research look more closely at the interaction effects between the individual governance mechanisms.

### *7.2.2. Variable changes*

Although TSR is a primary benchmark for shareholders and investors in assessing firm performance (see McKnight, 1996; Pass et al., 2000; Conyon et al., 2001), it is acknowledged that as a short-term measure of performance TSR is weak. This was, however, compensated for by including EPS in the analysis. Nevertheless, TSR is more commonly found in long-term assessments of economic performance and, therefore, it is

recommended that future studies, analysing short-term performance, use indicators that are more agreeable over the short-term such as alternative group profit targets.

In order to prevent zero values from being excluded from the analysis, a logarithm equation was used, which estimates changes in the bonus through relative changes in the executives total cash rewards holding salary constant (see page 84 for further details). Unfortunately, it transpired that this transformation of the bonus variable expressed as a proportion relative to salary had an important effect on the size variable i.e. total number of employees. However, it is important that zero bonus values are not excluded from further studies as they potentially represent (non) payments for poor performance. Therefore, it is recommended that an alternative size variable be used, which may be less sensitive to this transformation e.g. sales turnover or total assets.

As in the case of Conyon and Peck (1998), this study focused on a particular set of variables to include the presence (or absence) of board monitoring and vigilance. Therefore, this analysis excluded other indicators that may be important drivers of executive compensation e.g. equity ownership of executives. It is recommended that a measure for the level of ownership be included in future research.

Finally, the whole approach of this thesis could be described as being over-concerned with the perspective of shareholders and executives, to the exclusion of other important stakeholders. In this study, level of employment is used as a proxy for firm size and was used as a control variable. However, this variable may be used as a radically alternative measure of firm performance that could be considered as being important for employee stakeholders. The results differed very little from the financial performance measures such as TSR and EPS. It would appear, at least in the narrow ambit of this study of executive bonus, that executive reward packages that favour shareholders also favour employees, probably lenders and arguably suppliers and customers too. All these stakeholders may benefit from executive bonus packages that are more transparent and that result in a more significant positive relation between bonus pay and firm financial performance.

In summary, this study has found that executive annual bonus pay is closely, albeit weakly, aligned with firm performance and, therefore, is an aspect of reward that is very much earned. It also suggests that combining cash bonuses with share-based bonuses and adopting hard and simple targets, which are generally more transparent in nature tend to generate the best results. Above all, this study acknowledges that executive excess cannot be entirely controlled through the design of remuneration packages and, hence, stresses the importance of continued vigilance by active shareholders.



## APPENDIX

### INTERVIEWS AND TRANSCRIPTS

As mentioned in the main report, six interviews with five pay and benefits managers from the FTSE-350 sample and a remuneration consultancy was conducted during the months of June and July 2004. The inclusion of these qualitative, semi-structured interviews into the research design was to validate the objectivity of the annual reports and inform some of the methodological choices.

In relation to the former, the interviews confirmed specific details, which had been extracted from the company's annual report on issues relating to CG (e.g. the CEO is not chairman of the board? There is an active remuneration committee made up solely of four NEDs? The CEO is a member of the nominations committee?), payment form (e.g. the annual bonus is paid in cash for 2001/02 and in 2002/03 the annual bonus is paid in cash, deferred shares and matching shares?), and performance target type (e.g. for 2001/02 and 2002/03 the performance targets used include EPS, operating cash flow, operating profit, and individual performance?). In general, the results from the interviews confirmed what was already documented in the company's annual report and, therefore, no changes were made. Based on this finding, the annual reports were considered to be a reliable source of data.

With respect to the later, the interviews helped to clarify the value of some of the independent variables e.g. TSR, EPS and number of employees. The opinions relating to TSR and EPS are outlined in the main report (see chapter 4, points 3 and 4, pages 84 to 85). However, in relation to number of employees this, originally, was considered to be a suitable measure of firm performance. Prior to interviewing, there were some serious reservations about its value as an indicator of firm performance. The results from the interviews were expected to assist the decision-making process. In general, number of employees was considered inappropriate and misleading due to the many factors that can influence head count. Following the interview process, number of employees was omitted as a measure of firm performance and used as an indicator of firm size only.

The transcripts of these interviews are available upon request.

## REFERENCES

- ABI. (2002). *Association of British Insurers - Guidelines on Executive Remuneration*. Retrieved 12 August, 2004, from [http://www.abi.org.uk/Display/File/85/ABI\\_-\\_Guidelines\\_on\\_Exe\\_Rem\\_19\\_Dec\\_2002.doc](http://www.abi.org.uk/Display/File/85/ABI_-_Guidelines_on_Exe_Rem_19_Dec_2002.doc)
- Abowd, J. M. (1990). Does performance-based managerial compensation affect corporate performance? *Industrial and Labour Relations Review*, 43(Special Issue), 52-73.
- Abowd, J. M., & Kaplan, D. S. (1999). Executive compensation: Six questions that need answering. *Journal of Economic Perspectives*, 13(4), 145-167.
- Ackroyd, S., & Hughes, J. (1983). *Data collection in context*. Harlow: Longman.
- Agarwal, N. C. (1981). Determinants of executive compensation. *Industrial Relations*, 20(1), 36-46.
- Aggarwal, R. K., & Samwick, A. A. (1999a). Executive compensation, strategic competition and relative performance evaluation: Theory and evidence. *Journal of Finance*, LIV(6), 1999-2043.
- Aggarwal, R. K., & Samwick, A. A. (1999b). The other side of the trade-off: The impact of risk on executive compensation. *Journal of Political Economy*, 107(1), 65-105.
- Aggarwal, R. K., & Samwick, A. A. (2003). Performance incentives within firms: The effect of managerial responsibility. *The Journal of Finance*, LVIII(4), 1613-1649.
- Aguilera, R. V., & Jackson, G. (2003). The cross-national diversity of corporate governance: Dimensions and determinants. *Academy of Management Review*, 28(3), 447-465.
- Akhigbe, A., Mandura, J., & Tucker, A. L. (1995). Re-examining the link between executive compensation and corporate performance: A note. *American Business Review*, June, 83-89.
- Andrews, K. R. (1980). *The concept of corporate strategy*. Homewood, Ill: Irwin Custom Publishing.
- Andrews, K. R. (1987). *The concept of corporate strategy* (3rd ed.). Burr Ridge, Ill.: Irwin Custom Publishing.
- Antle, R., & Smith, A. J. (1986). An empirical investigation of the relative performance evaluation of corporate executives. *Journal of Accounting Research*, 24(1), 1-39.
- Attaway, M. C. (2000). A study of the relationship between company performance and CEO compensation. *American Business Review*, 18(1), 77-85.
- Bacon, N., Ackers, P., Storey, J., & Coates, D. (1996). It's a small world: Managing human resources in small businesses. *The International Journal of Human Resource Management*, 7(1), 82-100.
- Baker, G. P. (1992). Incentive contracts and performance measures. *Journal of Political Economy*, 100(51), 598-614.
- Baker, G. P., Gibbons, R., & Murphy, K. J. (1994). Subjective performance measures in optimal incentive contracts. *Quarterly Journal of Economics*, 439, 1125-1156.
- Baker, G. P., Jensen, M. C., & Murphy, K. J. (1988). Compensation and incentives: Practice vs. theory. *Journal of Finance*, XLIII(3), 593-616.
- Baliga, B. R., Moyer, R. C., & Rao, R. S. (1996). CEO duality and firm performance: What's all the fuss? *Strategic Management Journal*, 17(1), 41-53.
- Balkin, D. B., Markman, G. D., & Gomez-Mejia, L. R. (2000). Is CEO pay in high-technology firms related to innovation? *Academy of Management Journal*, 43(6), 1118-1129.

- Barkema, H. G., Geroski, P., & Schwalbach, J. (1997). Managerial compensation, strategy and firm performance: An introduction. *International Journal of Industrial Organisation*, 15, 413-416.
- Barkema, H. G., & Gomez-Mejia, L. R. (1998). Managerial compensation and firm performance: A general research framework. *Academy of Management Journal*, 41, 135-145.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Barney, J. (2002). Strategic management: From informed conversation to academic discipline. *Academy of Management Executive*, 16(2), 53-57.
- Baron, J. N., & Kreps, D. M. (1999). *Strategic human resources. Frameworks for general managers*. Chichester: John Wiley & Sons.
- Barron, J. M., & Waddell, G. R. (2003). Executive rank, pay and project selection. *Journal of Financial Economics*, 67, 305-349.
- Baysinger, B., & Hoskisson, R. E. (1990). The composition of Boards of Directors and strategic control: Effects on corporate strategy. *Academy of Management Review*, 15(1), 72-87.
- Beatty, R. P., & Zajac, E. J. (1994). Managerial incentives, monitoring and risk bearing: A study of executive compensation, ownership and board structure in initial public offerings. *Administrative Science Quarterly*, 39, 313-335.
- Bebchuk, L. A., & Fried, J. M. (2003). Executive compensation as an agency problem. *Journal of Economic Perspectives*, 17.
- Bebchuk, L. A., & Fried, J. M. (2004). *Pay without performance: The unfulfilled promise of executive remuneration*: Harvard University Press.
- Bebchuk, L. A., Fried, J. M., & Walker, D. I. (2001). Executive compensation in America: Optimal contracting or extraction of rents? *University of Chicago Law Review*, Oct, 1-107.
- Bebchuk, L. A., Fried, J. M., & Walker, D. I. (2002). Managerial power and executive compensation. *University of Chicago Law Review*, 69, 847-869.
- Benito, A., & Conyon, M. J. (1999). The governance of directors' pay: Evidence from UK companies. *Journal of Management & Governance*, 3(2), 117-136.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New York, NY: Commerce Clearing House.
- Berle, A. A., & Means, G. C. (1991). *The modern corporation & private property* (Rev. ed.). New Brunswick, NJ: Transaction Publishers.
- Blaikie, N. (1993). *Approaches to social enquiry*. Oxford: Blackwell Publishers Ltd.
- Blair, M. M. (1994). CEO pay. *Brookings Review*, 12(1), 22-27.
- Blair, M. M. (1995). *Ownership and control: Rethinking corporate governance for the twenty-first century*. Washington: The Brookings Institution.
- Bloom, M. (1999). The performance effects of pay dispersion on individuals and organizations. *Academy of Management Journal*, 42(1), 25-40.
- Bloom, M., & Milkovich, G. T. (1998). Relationships among risk, incentive pay and organisational performance. *Academy of Management Journal*, 41(3), 283-297.
- Boeker, W. (1992). Power and managerial dismissal: Scapegoating at the top. *Administrative Science Quarterly*, 37, 400-421.
- Boschen, J. F., & Smith, K. J. (1995). You can pay me now and you can pay me later: The dynamic response of executive compensation to firm performance. *Journal of Business*, 68(4), 577-608.

- Boyd, B. (1994). Board control and CEO compensation. *Strategic Management Journal*, 15(5), 335-344.
- Brading, E., & Wright, V. (1990). Performance-related pay. *Management Factsheets*(30).
- Brontas, P. P. (2004). Rethinking your board committees. *The Corporate Board*, May/June, 11-13.
- Brown, M. P., Sturman, M. C., & Simmering, M. J. (2003). Compensation policy and organisational performance: The efficiency, operational, and financial implications of pay levels and pay structures. *Academy of Management Journal*, 46(6), 752-762.
- Bruce, A., & Buck, T. (1997). Executive reward and corporate governance. In K. Keasey, S. Thompson & M. Wright (Eds.), *Corporate governance - Economic, management and financial issues*. Oxford: Oxford University Press.
- Bruce, A., Skovorova, R., Fattorusso, J., & Buck, T. (2005). *Executive bonus and firm performance in the UK* (Discussion Paper). Leicestershire: Loughborough University.
- Bryman, A. (1989). *Research methods and organisation studies*. London: Routledge.
- Buchholtz, A. K., Ribbens, B., A., & Houle, I. T. (2003). The role of human capital in post acquisition CEO departure. *Academy of Management Journal*, 46(4), 506-514.
- Buck, T., Bruce, A., Main, B. G. M., & Udueni, H. (2003). Long term incentive plans, executive pay and UK company performance. *Journal of Management Studies*, 40(7), 1709-1727.
- Bulmer, M. (1986). The role of theory on applied social science. In C. Weiss (Ed.), *Social science and social policy*. London: George Allen and Unwin.
- Burns, R. B. (2000). *Introduction to research methods*. London: Sage Publications Ltd.
- Bushman, R. M., Indjejikian, R. J., & Smith, A. (1996). CEO compensation: The role of individual performance measures. *Journal of Accounting & Economics*, 21, 161-193.
- Bushman, R. M., & Smith, A. J. (2001). Financial accounting information and corporate governance. *Journal of Accounting & Economics*, 32, 237-333.
- Bushman, R. M., & Smith, A. J. (2003). Transparency, financial accounting information, and corporate governance. *Economic Policy Review*, 9(1), 65-87.
- Butler, F. E., Ferris, G. R., & Napier, N. K. (1991). *Strategy and human resources management*. Cincinnati: South-Western.
- Cadbury, A. (1992). *Report of the Committee on the Financial Aspects of Corporate Governance: The code of best practice (Cadbury Code)*. London: Gee.
- Callahan, J. S., Brownlee, A. L., Brtek, M. D., & Tosi, H. L. (2003). Examining the unique effects of multiple motivational sources on task performance. *Journal of Applied Social Psychology*, 33(12), 2515-2535.
- Cannella, A. A. (2001). Upper echelons: Donald Hambrick on executive strategy. *Academy of Management Executive*, 15(3), 36-44.
- Carpenter, M. A. (2000). The price of change: The role of CEO compensation in strategic variation and deviation from industry strategy norms. *Journal of Management*, 26(6), 1179-1198.
- Carpenter, M. A., & Sanders, W. M. G. (2002). Top management team compensation: The missing link between CEO pay and firm performance. *Strategic Management Journal*, 23, 367-375.

- Castanias, R. P., & Helfat, C. E. (1991). Managerial resources and rents. *Journal of Management*, 17, 155-172.
- Certo, S. T., Daily, C. M., Cannella, A. A., & Dalton, D. R. (2003). Giving money to get money: How CEO stock options and CEO equity enhance IPO valuations. *Academy of Management Journal*, 46(5), 643-653.
- Charkham, J. (2001). *Keeping good company: A study of corporate governance in 5 countries*. Oxford: Oxford University Press.
- Chidambaran, N. K., & Prabhala, N. R. (2003). Executive stock option repricing, internal governance mechanisms and management turnover. *Journal of Financial Economics*, 69, 153-189.
- Chidester, T. R., & Grigsby, W. C. (1984). A meta-analysis of the goal setting-performance literature. *Academy of Management Proceedings*, 202-206.
- Child, J., & Rodrigues, S. B. (2003). Corporate governance and new organisational forms: Issues of double and multiple agency. *Journal of Management and Governance*, 7, 337-360.
- Ciscel, D. H. (1974). Determinants of executive compensation. *Southern Economic Journal*, 40(4), 613-617.
- Ciscel, D. H., & Carroll, T. M. (1979). The determinants of executive salaries: An econometric survey. *The Review of Economics and Statistics*, 7-13.
- Colbert, B. A. (2004). The complex resource-based view: Implications for theory and practice in strategic human resource management. *Academy of Management Review*, 29(3), 341-358.
- Collins, C. J., & Clark, K. D. (2003). Strategic human resource practices, top management team social networks, and firm performance: The role of human resource practices in creating organisational competitive advantage. *Academy of Management Journal*, 46(6), 740-751.
- Combs, J. G., & Skill, M. S. (2003). Managerialist and human capital explanations for key executive pay premiums: A contingency perspective. *Academy of Management Journal*, 46(1), 63-73.
- Conlon, E. J., & Parks, J. M. (1990). Effects of monitoring and tradition on compensation arrangements: An experiment with principal-agent dyads. *Academy of Management Journal*, 33(3), 603-622.
- Conyon, M. (1995). Directors' pay in the privatised utilities. *British Journal of Industrial Relations*, 33(2), 159-171.
- Conyon, M. (1997a). Corporate governance and executive compensation. *International Journal of Industrial Organisation*, 15, 493-509.
- Conyon, M. (1997b). Institutional arrangements for setting Directors' compensation in UK companies. In K. Keasey, S. Thompson & M. Wright (Eds.), *Corporate governance - Economic, management and financial issues*. Oxford: Oxford University Press.
- Conyon, M. (1998). Directors' pay and turnover: An application to a sample of large UK firms. *Oxford Bulletin of Economics and Statistics*, 60(4), 485-507.
- Conyon, M., Gregg, P., & Machin, S. (1995). Taking care of business: Executive compensation in the United Kingdom. *The Economic Journal*, 105(May), 704-714.
- Conyon, M., & Leech, D. (1993). Top pay, company performance and corporate governance. *Warwick Economic Research Papers*.

- Conyon, M., & Murphy, K. J. (1998). The prince and the pauper? CEO pay in the United States and United Kingdom. *The Economic Journal*, 110(Nov), 640-671.
- Conyon, M., & Murphy, K. J. (2000). The prince and the pauper? CEO pay in the United States and United Kingdom. *The Economic Journal*, 110(467), 640-671.
- Conyon, M., & Peck, S. I. (1998). Board control, remuneration committees and top management compensation. *Academy of Management Journal*, 41(2), 146-157.
- Conyon, M., Peck, S. I., & Sadler, G. V. (2001). Corporate tournaments and executive compensation: Evidence from the UK. *Strategic Management Journal*, 22, 805-815.
- Conyon, M., & Sadler, G. V. (2001). Executive pay, tournaments and corporate performance in UK firms. *International Journal of Management Reviews*, 3(2), 141-168.
- Conyon, M., & Schwalbach, J. (2000). Executive compensation: Evidence from the UK and Germany. *Long Range Planning*, 33(4), 504-526.
- Cook, T. D., Campbell, D. T., & Peracchio, L. (1990). Quasi experimentation. In M. Hough (Ed.), *Handbook of Industrial and Organisational Psychology* (Vol. 1, pp. 491-576). Palo Alto, CA: Consulting Psychologists Press, Inc.
- Core, J. E., Holthausen, R. W., & Larcker, D. F. (1999). Corporate governance, chief executive officer compensation and firm performance. *Journal of Financial Economics*, 51, 371-406.
- Cosh, A. (1975). The remuneration of chief executives in the United Kingdom. *The Economic Journal*, Mar, 75-94.
- Cosh, A., & Hughes, A. (1997). Executive remuneration, executive dismissal and institutional shareholdings. *International Journal of Industrial Organization*, 15, 469-492.
- Coughlan, A. T., & Schmidt, R. M. (1985). Executive compensation, management turnover and firm performance: An empirical investigation. *Journal of Accounting and Economics*, 7, 43-66.
- Cresswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. London: Sage Publications.
- Currall, S. C., Hammer, T. H., Baggett, L. S., & Doniger, G. M. (1999). Combining qualitative and quantitative methodologies to study group processes: An illustrative study of a corporate board of directors. *Organizational Research Methods*, 2(1), 5-36.
- Daily, C. M., & Dalton, D. R. (1993). Board of directors leadership and structure: Control and performance implications. *Entrepreneurship: Theory & Practice*, 17(3), 65-82.
- Daily, C. M., & Dalton, D. R. (1994). Bankruptcy and corporate governance: The impact of board composition and structure. *Academy of Management Journal*, 37, 1603-1617.
- Daily, C. M., Dalton, D. R., & Rajagopalan, N. (2003). Governance through ownership: Centuries of practice, decades of research. *Academy of Management Journal*, 46(2), 151-158.
- Daily, C. M., Johnson, J. L., & Ellstrand, A. E. (1996). Board governance as a determinant of CEO compensation. *Academy of Management Proceedings*, 6-10.
- Daily, C. M., Johnson, J. L., Ellstrand, A. E., & Dalton, D. R. (1998). Compensation committee compensation as a determinant of CEO compensation. *Academy of Management Journal*, 41(2), 209-220.

- Dane, F. C. (1990). *Research methods*. Belmont, CA: Brooks/Cole Publishing Company.
- Datta, D. K., Guthrie, J. P., & Wright, P. M. (2005). Human resource management and labour productivity: Does industry matter? *Academy of Management Journal*, 48(1), 135-145.
- D'Aveni, R. (1994). *Hypercompetition*. New York, NY: Free Press.
- Davidson, J. (2002). Multi-tasking: Good for computers, bad for people? *OfficePro*, 62, 4.
- Davis, E., & Kay, J. (1993). Corporate governance, take-overs, and the role of the non-executive director. In M. Bishop & J. Kay (Eds.), *European mergers and merger policy*. (pp. 200-216). Oxford: Oxford University Press.
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, 22(1), 20-47.
- Deckop, J. R. (1988). Determinants of Chief Executive Officer compensation. *Industrial and Labour Relations Review*, 41(2), 215-226.
- Dedman, E. (2003). Executive turnover in UK firms: The impact of Cadbury. *Accounting & Business Research*, 33(1), 33-50.
- Delaney, J. T., & Huselid, M. (1996). The impact of human resource management practices on perceptions of organisational performance. *Academy of Management Journal*, 39(4), 949-969.
- Demb, A., & Neubauer, F. F. (1992). *The corporate board: Confronting the paradoxes*. Oxford: Oxford University Press.
- Denscombe, M. (2002a). *The good research guide for small-scale social research projects*. Buckingham: Open University Press.
- Denscombe, M. (2002b). *Ground rules for good research: A 10-point guide for social researchers*. Buckingham: Open University Press.
- Denzin, N. K. (1989). *The research act: A theoretical introduction to sociological methods* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.
- Donaldson, L. (1990). The ethereal hand: Organisational economics and management theory. *Academy of Management Review*, 15(3), 369-381.
- Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management*, 16(1), 49-65.
- Downward, P., Finch, J. H., & Ramsay, J. (2002). Critical realism, empirical methods and inference: A critical discussion. *Cambridge Journal of Economics*, 26, 481-500.
- Dulebohn, J. H., Ferris, G. R., & Stodd, J. T. (1995). The history and evolution of human resource management. In G. R. Ferris, S. D. Rosen & D. T. Barnum (Eds.), *Handbook of human resource management* (pp. pp. 18-41). Oxford: Blackwell Publishers.
- Dulewicz, V., & Herbert, P. (2004). Does the composition of the boards of directors bear any relationship to the performance of their companies. *Corporate Governance*, 12(3), 263-280.
- Dyson, J. R. (2001). *Accounting for non-accounting students* (5th ed.). London: Prentice Hall.
- Easterby-Smith, M., Thorpe, R., & Lowe, A. (2002). *Management research: An introduction* (2nd ed.). London: Sage Publications Ltd.
- Eaton, J., & Rosen, H. S. (1983). Agency, delayed compensation, and the structure of executive remuneration. *The Journal of Finance*, XXXVIII(5), 1489-1505.

- ECS. (1992). *The 1991/1992 top management report*. Fort Lee, NJ: Wyatt Data Services.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57-74.
- Elvira, M. M. (2001). Pay me now or pay me later: Analysing the relationship between bonus and promotion incentives. *Work & Occupations*, 28(3), 346-370.
- Emsley, D. (2003). Multiple goals and managers' job-related tension and performance. *Journal of Managerial Psychology*, 18(4), 345-356.
- Eskew, D., & Heneman, R. L. (1996). A survey of merit pay plan effectiveness: End of the line for merit pay or hope for improvement? *Human Resource Planning*, 19(2), 12-19.
- Ezzamel, M., & Watson, R. (1998). Market comparison earnings and the bidding-up of executive cash compensation: Evidence from the UK. *Academy of Management Journal*, 41(2), 221-231.
- Ezzamel, M., & Watson, R. (2002). Pay comparability across and within UK boards: An empirical analysis of the cash pay awards to CEOs and other board members. *Journal of Management Studies*, 39(2), 207-232.
- Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88(2), 288-307.
- Fama, E. F., & Jensen, M. C. (1983). The separation of ownership and control. *Journal of Law and Economics*, 26, 301-325.
- Feltham, G. A., & Xie, J. (1994). Performance measure congruity and diversity in multi-task principal/agent relations. *The Accounting Review*, 69(3), 429-453.
- Ferris, G. R., Hochwarter, W. A., Buckley, M. R., Harrell-Cook, G., & Frink, D. D. (1999). Human resource management: Some new directions. *Journal of Management*, 25(3), 385-415.
- Fey, C. F., & Denison, D. R. (2003). Organisational culture and effectiveness: Can American theory be applied in Russia? *Organization Science*, 14(6), 686-706.
- Fielding, N. G., & Fielding, J. L. (1986). *Linking data*. Beverley Hills: Sage Publications Ltd.
- Finch, J., & Treanor, J. (2005, August 04). Chief executives' pay rises to £2.5m average. *The Guardian*, p. 1.
- Finch, J., Treanor, J., & Moore, C. (2005, August 04). £650m...and still plenty in store as directors continue to rack up rewards. *The Guardian*, p. 17.
- Finkelstein, S., & Boyd, B. K. (1998). How much does the CEO matter? The role of managerial discretion in the setting of CEO compensation. *Academy of Management Journal*, 41(2), 179-199.
- Finkelstein, S., & D'Aveni, R. (1994). CEO duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command. *Academy of Management Journal*, 37(5), 1079-1108.
- Finkelstein, S., & Hambrick, D. C. (1988). Chief executive compensation: A synthesis and reconciliation. *Strategic Management Journal*, 9, 543-558.
- Finkelstein, S., & Hambrick, D. C. (1989). Chief executive compensation: A study of the intersection of markets and political processes. *Strategic Management Journal*, 10, 121-134.
- Finkelstein, S., & Hambrick, D. C. (1996). *Strategic leadership: Top executives and their effect on organisations*. St. Paul: West.
- Finn, M., Elliot-White, M., & Walton, M. (2000). *Tourism and Leisure Research Methods: Data collection, analysis and interpretation*. London: Longman.



- Fischer, F. (1998). Beyond empiricism: Policy inquiry in postpositivist perspective. *Policy Studies Journal*, 26(1), 129-146.
- Forbes, W., & Watson, R. (1993). Managerial remuneration and corporate governance: A review of the issues, evidence and Cadbury committee proposals. *Accounting and Business Research*, 23(91A), 331-338.
- Franco, M., & Bourne, M. (2003). Factors that play a role in managing through measures. *Management Decision*, 41(8), 698-710.
- Frankfort-Nachmias, C., & Nachmias, D. (1996). *Research methods in the social sciences* (5th ed.). London: Arnold.
- Garen, J. E. (1994). Executive compensation and principal-agent theory. *Journal of Political Economy*, 102(61), 1175-1199.
- Garvey, G., & Milbourn, T. (2003). Incentive compensation when executives can hedge the market: Evidence of relative performance evaluation in the cross section. *The Journal of Finance*, LVIII(4), 1557-1581.
- Gerhart, B., & Milkovich, G. T. (1990). Organisational differences in managerial compensation and financial performance. *Academy of Management Journal*, 33, 663-690.
- Gibbons, R., & Murphy, K. J. (1990). Relative performance evaluation for chief executive officers. *Industrial & Labour Relations Review*, 43(Special Issue), 392-413.
- Giddens, A. (1974). *Positivism and sociology*. London: Heinemann.
- Glenberg, A., & Langston, W. (1992). Comprehension of illustrated text: Pictures help to build mental models. *Journal of Memory & Language*, 31, 129-151.
- Gomez-Mejia, L. R. (1994). Executive compensation: A reassessment and a future research agenda. *Personnel and Human Resources Management*, 12, 161-222.
- Gomez-Mejia, L. R., Larraza-Kintana, M., & Makri, M. (2003). The determinants of executive compensation in family-controlled public corporations. *Academy of Management Journal*, 46(2), 226-237.
- Gomez-Mejia, L. R., Tosi, H., & Hinkin, T. (1987). Managerial control, performance and executive compensation. *Academy of Management Journal*, 30(1), 51-70.
- Gomez-Mejia, L. R., & Wiseman, R. M. (1997). Reframing executive compensation: An assessment and outlook. *Journal of Management*, 23(3), 291-375.
- Gomez-Mejia, L. R., & Wiseman, R. M. (2003). Does agency theory have universal relevance? A reply to Lubatkin, Lane, Collin, and Very. *Working Paper*, 1-16.
- Grant, G. H. (2003). The evolution of corporate governance and its impact on modern corporate America. *Management Decision*, 41(9), 923-934.
- Gratton, L. (1998, June). The new rules of HR strategy. *HR Focus*, 13-14.
- Greenbury, R. (1995). *Directors' remuneration*. London: Gee Publishing.
- Greene, C. N., & Podsakoff, P. M. (1978). Effects of removal of a pay incentive: A field experiment. *Academy of Management Proceedings*, 206-210.
- Gregg, P., Machin, S., & Szymanski, S. (1992). The disappearing relationship between directors' pay and corporate performance. *British Journal of Industrial Relations*, 31(1), 1-9.
- Gregg, P., Machin, S., & Szymanski, S. (1993). The disappearing relationship between directors' pay and corporate performance. *British Journal of Industrial Relations*, 31(1), 1-9.

- Guest, D. (1998). Human resource management, trade unions and industrial relations. In C. Marby, G. Salaman & J. Storey (Eds.), *Strategic human resource management: A reader*. London: Sage Publications.
- Guest, D. (1999). Human resource management - The workers' verdict. *Human Resource Management Journal*, 9(3), 5-25.
- Guest, D., Michie, J., Conway, N., & Sheehan, M. (2003). Human resource management and corporate performance in the UK. *British Journal of Industrial Relations*, 41(2), 291-314.
- Hall, B. J. (2000). What you need to know about stock options. *Harvard Business Review*, Mar/Apr, 121-129.
- Hall, B. J., & Liebman, J. B. (1998). Are CEOs really paid like bureaucrats? *The Quarterly Journal of Economics*, CXIII(3), 653-691.
- Hall, S. E., & Koors, J. L. (2004). Restoring pay for performance. *The Corporate Board*, July/August, 11-17.
- Hambrick, D. C., & Finkelstein, S. (1987). Managerial discretion: A bridge between two polar views of organisations. In L. L. Cummings & B. M. Staw (Eds.), *Research in organisational behaviour* (Vol. 9, pp. 369-406). Greenwich, CT: JAI Press.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organisation as a reflection of its top managers. *Academy of Management Review*, 9(2), 193-206.
- Hammersley, M. (2000). Varieties of social research: A typology. *International Journal of Social Research Methodology*, 3(3), 221-229.
- Hampel, R. (1998). *Committee on corporate governance: Final Report*. London: Gee Publishing.
- Harris, M., & Raviv, A. (1979). Optimal incentive contracts with imperfect information. *Journal of Economic Theory*, 20(2), 231-259.
- Harrison, J. R., Torres, D. L., & Kukalis, S. (1988). The changing of the guard: Turnover and structural change in top-management positions. *Administrative Science Quarterly*, 33, 211-232.
- Hart, O. (1995). Corporate governance: Some theory and implications. *The Economic Journal*, 105(May), 678-689.
- Hayes, M. R., & Schaefer, S. (2000). Implicit contracts and the explanatory power of top executive compensation for future performance. *Rand Journal of Economics*, 31(2), 273-293.
- Healy, P. M. (1985). The effect of bonus schemes on accounting decisions. *Journal of Accounting & Economics*, 7, 85-107.
- Henderson, A. D., & Fredrickson, J. W. (1996). Information-processing demands as a determinant of CEO compensation. *Academy of Management Journal*, 39(3), 575-606.
- Henderson, A. D., & Fredrickson, J. W. (2001). Top management team coordination needs and the CEO pay gap: A competitive test of economic and behavioural views. *Academy of Management Journal*, 44(1), 96-117.
- Herzberg, F. (1968). One more time: How do you motivate employees? *Harvard Business Review*, January-February, 53-62.
- Hill, C. W. L., & Phan, P. (1991). CEO tenure as a determinant of CEO pay. *Academy of Management Journal*, 34(3), 707-717.
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383-396.

- Hinton, P. R. (1995). *Statistics explained. A guide for social science students*. London: Routledge.
- Hitt, M. A., Hoskisson, R. E., Johnson, R. A., & Moesel, D. D. (1996). The market for corporate control and innovation. *Academy of Management Review*, 39(5), 1084-1118.
- Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (1996). *Strategic management: Competitiveness and globalisation* (2nd ed.). St. Paul, MN: West Publishing Company.
- Ho, S., & McKay, R. B. (2002). Balanced scorecard: Two perspectives. *The CPA Journal*, 72(3), 20-25.
- Holland, P. W. (1986). Statistics and causal inference. *Journal of the American Statistical Association*, 81(396), 945-960.
- Holmstrom, B. (1979). Moral hazard and observability. *The Bell Journal of Economics*, 10(1), 74-91.
- Holmstrom, B., & Milgrom, P. (1991). Multitask principal-agent analyses: Incentive contracts, asset ownership and job design. *Journal of Law, Economics & Organisation*, 7(Special Issue), 24-52.
- Holstein, J. A., & Gubrium, J. F. (2002). Active interviewing. In D. Weinberg (Ed.), *Qualitative research methods* (pp. 112-126). Oxford: Blackwell Publishers Ltd.
- Holthausen, R. W., Larcker, D. F., & Sloan, R. G. (1995). Annual bonus schemes and the manipulation of earnings. *Journal of Accounting and Economics*, 19, 29-74.
- Hoskisson, R. E., Hitt, M. A., Wan, W. P., & Yiu, D. (1999). Theory and research in strategic management: Swings of a pendulum. *Journal of Management*, 25(3), 417-456.
- Hsiao, C. (2003). *Analysis of panel data* (2nd ed.). Cambridge: Cambridge University Press.
- Hubbard, G. R., & Palia, D. (1995). Executive pay and performance: Evidence from the US banking industry. *Journal of Financial Economics*, 39, 105-130.
- Hughes, J. (1990). *The philosophy of science*. London: Longman.
- Hunt, H. G. (1986). The separation of corporate ownership and control: Theory, evidence and implications. *Journal of Accounting Literature*, 5, 85-124.
- Huselid, M. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38, 635-672.
- Huselid, M., & Becker, B. E. (1997). The impact of high performance work systems, implementation effectiveness and alignment with strategy on shareholder wealth. *Academy of Management Proceedings*, 144-148.
- Hussey, J., & Hussey, R. (1997). *Business research: A practical guide for undergraduate and postgraduate students*. London: McMillan Press Ltd.
- IDS. (1993). *Management bonus schemes* (Management Pay Review Research File No. 28). London: Incomes Data Services Ltd.
- Indjejikian, R. J., & Nanda, D. (2002). Executive target bonuses and what they imply about performance standards. *The Accounting Review*, 77(4), 793-819.
- Ittner, C. D., Larcker, D. F., & Rajan, M. V. (1997). The choice of performance measures in annual bonus contracts. *Accounting Review*, 72(2), 231-255.
- Jensen, M. C. (1988). Takeovers: Their causes and consequences. *Journal of Economic Perspectives*, 2(1), 21-48.

- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48, 831-880.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305-360.
- Jensen, M. C., & Murphy, K. J. (1990). Performance pay and top-management incentives. *Journal of Political Economy*, 98(2), 225-264.
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24, 602-611.
- Johnson, J. L., Daily, C. M., & Ellstrand, A. E. (1996). Boards of directors: A review and research agenda. *Journal of Management*, 22, 409-438.
- Jones, G. (2004). Non-executive directors: A link between governance and performance. *Corporate Governance International*, 7(1), 27-36.
- Joyce, W. B. (1999). Executive bonuses: Determination and payment. *Journal of Compensation & Benefits*, 14(4), 59-62.
- Jung, C. G. (1995). *Memories, dreams, reflections*. London: Fontana.
- Kaplan, R. S., & Atkinson, A. A. (1998). *Advanced management accounting* (3rd ed.). London: Prentice-Hall International (UK).
- Keasey, K., Thompson, S., & Wright, M. (1997). Introduction: The corporate governance problem - Competing diagnosis and solutions. In K. Keasey, S. Thompson & M. Wright (Eds.), *Corporate governance - Economic, management and financial issues*. Oxford: Oxford University Press.
- Kernon, M. C., & Lord, R. G. (1990). The effects of valence, expectancies and goal-performance discrepancies in single and multiple goal environments. *Journal of Applied Psychology*, 75(2), 194-203.
- Kerr, J., & Bettis, R. A. (1987). Boards of directors, top management compensation, and shareholder returns. *Academy of Management Journal*, 30(4), 645-664.
- Kerr, J., & Kren, L. (1992). Effect of relative decision monitoring on chief executive compensation. *Academy of Management Journal*, 35(2), 370-397.
- Kerr, S. (1975). On the folly of rewarding A, while hoping for B. *Academy of Management Journal*, 18(4), 769-783.
- Kostiuk, P. F. (1990). Firm size and executive compensation. *The Journal of Human Resources*, 25(1), 90-105.
- Krug, J. A. (2003). Executive turnover in acquired firms: An analysis of resource-based theory and the upper echelons perspective. *Journal of Management and Governance*, 7, 117-143.
- Laffont, J.-J., & Martimort, D. (2002). *The theory of incentives: The principal-agent model*. Princeton, NJ: Princeton University Press.
- Laing, D., & Weir, C. (1999). Corporate performance and the influence of human capital characteristics on executive compensation in the UK. *Personnel Review*, 28(1/2), 28-40.
- Lambert, R. A., & Larcker, D. F. (1985). Executive compensation, corporate decision-making and shareholder wealth: A review of the evidence. *Midland Corporate Finance Journal*, 3(1), 6-22.
- Lambert, R. A., & Larcker, D. F. (1987). An analysis of the use of accounting and market measures of performance in executive compensation contracts. *Journal of Accounting Research*, 25, 85-125.

- Lambert, R. A., Larcker, D. F., & Weigelt, K. (1991). How sensitive is executive compensation to organizational size? *Strategic Management Journal*, *12*, 395-402.
- Lambert, R. A., Larcker, D. F., & Weigelt, K. (1993). The structure of organizational incentives. *Administrative Science Quarterly*, *38*, 438-461.
- Larker, D. F. (1983). The association between performance plan adoption and corporate capital investment. *Journal of Accounting & Economics*, *5*, 3-30.
- Larsen, H. H., & Brewster, C. (2000). Human Resource Management in Northern Europe: Trends, dilemmas and strategies. In C. Brewster & H. H. Larsen (Eds.), *HRM in Northern Europe: Trends, dilemmas and strategy* (pp. 1-23). Oxford: Blackwell Publishers Ltd.
- Lawler, E. E. (1990). *Strategic pay: Aligning organisational strategies and pay systems*. San Francisco, CA: Jossey-Bass Inc.
- Lawson, T. (1997). *Economics and reality*. London: Routledge.
- Lee, P. M., & O'Neill, H. M. (2003). Ownership structure and R & D investments of US and Japanese firms: Agency and stewardship perspectives. *Academy of Management*, *46*(2), 212-225.
- Legge, K. (2001). Human resource management: A critical analysis. In J. Storey (Ed.), *New perspectives on human resource management*. London: International Thomson Publishing Company.
- Lengnick-Hall, C. A., & Lengnick-Hall, M. L. (1988). Strategic human resource management: A review of the literature and a proposed typology. *Academy of Management Review*, *13*(3), 454-470.
- Leonard, J. (1990). Executive pay and firm performance. *Industrial and Labour Relations Review*, *43*, 13-29.
- Lewellen, W. G., Loderer, C., & Martin, K. (1987). Executive compensation and executive incentive problems. *Journal of Accounting & Economics*, *9*, 287-310.
- Lewis-Beck, M. S. (1993). *Regression analysis* (Vol. 2). London: Sage Publication Ltd.
- Lingle, J. H., & Schiemann, W. A. (1996). From balanced scorecard to is measurement worth it? *Management Review*, *85*(3), 56-61.
- Lippert, R. L., & Porter, G. (1997). Understanding CEO pay: A test of two pay-to-performance sensitivity measures with alternative measures of alignment and influence. *Journal of Business Research*, *40*(127-138).
- Llewellyn, W. G. (1968). *Executive compensation in large industrial corporations*. New York, NY: National Bureau of Economic Research.
- Llewellyn, W. G., & Huntsman, B. (1970). Managerial pay and corporate performance. *The American Economic Review*, *60*(4), 710-720.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliff, NJ: Prentice-Hall.
- Locke, E. A., & Latham, G. P. (2004). What should we do about motivation theory? Six recommendations for the twenty-first century. *Academy of Management Review*, *29*(3), 388-403.
- Locke, E. A., Shaw, K. N., Saari, L. M., & Latham, G. P. (1981). Goal setting and task performance: 1969-1980. *Psychological Bulletin*, *90*, 125-152.
- London, M., & Oldham, G. R. (1976). Effects of varying goal types and incentive systems on performance and satisfaction. *Academy of Management Journal*, *19*(4), 537-546.

- Lowery, C. M., Beadles, N. A., Petty, N. M., Amsler, G. M., & Thompson, J. W. (2002). An empirical examination of a merit bonus plan. *Journal of Managerial Issues*, *XIV*(1), 100-117.
- Lubatkin, M., Lane, P. J., Collin, S., & Very, P. (2003). An embeddedness framing of governance and opportunism: Towards a cross-nationality accommodating theory of agency. *Working Paper*, 1-18.
- Mahoney, T. A. (1992). Multiple pay contingencies: Strategic design of compensation. In G. Salaman (Ed.), *Human resource strategies* (pp. 337-346). London: Sage Publications.
- Main, B. G. M. (1991). Top executive pay and performance. *Managerial & Decision Economics*, *12*, 219-229.
- Main, B. G. M., Bruce, A., & Buck, T. (1996). Total board remuneration and company performance. *The Economic Journal*, *106*(Nov), 1627-1644.
- Main, B. G. M., & Johnston, J. (1993). Remuneration committees and corporate governance. *Accounting and Business Research*, *23*(91A), 351-362.
- Main, B. G. M., O'Reilly, C. A., & Wade, J. (1995). The CEO, the board of directors and executive compensation: Economic and psychological perspectives. *Industrial & Corporate Change*, *4*(2), 293-332.
- Mangel, R., & Singh, H. (1993). Ownership structure, board relationships and CEO compensation in large US corporations. *Accounting and Business Research*, *23*(91A), 339-350.
- Marchington, M., & Grugulis, I. (2000). 'Best practice' human resource management: perfect opportunity or dangerous illusion? *International Journal of Human Resource Management*, *11*(6), 1104-1124.
- Marchington, M., & Wilkinson, A. (2000). *Core personnel and development* (2nd ed.). Wiltshire: The Cromwell Press.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*(4), 370-396.
- Masson, R. T. (1971). Executive motivations, earnings, and consequent equity performance. *Journal of Political Economy*, *79*(6), 1278-1292.
- May, T. (1993). *Social research: Issues, methods and process*. Buckingham: Open University Press.
- Mayer, C. (2000). Corporate governance in the UK. *Hume Papers on Public Policy*, *8*(1), 1-9.
- McGuire, J., & Matta, E. (2003). CEO stock options: The silent dimension of ownership. *Academy of Management Journal*, *46*(3), 255-265.
- McKnight, P. J. (1996). An explanation of top executive pay: A UK study. *British Journal of Industrial Relations*, *34*(4), 557-566.
- McKnight, P. J., & Tomkins, C. (1999). Top executive pay in the UK: A corporate governance dilemma. *International Journal of the Economics of Business*, *6*(2), 223-243.
- McNeill, P. (1990). *Research methods* (2nd ed.). London: Routledge.
- Meeks, G., & Whittington, G. (1975). Directors' pay, growth and profitability. *The Journal of Industrial Economics*, *XXIV*(1), 1-14.
- Milkovich, G. T., & Newman, J. M. (2002). *Compensation* (7th ed.). London: McGraw-Hill.
- Miller, D. (1991). Stale in the saddle. *Management Science*, *1*, 34-54.

- Miller, J. S., Wiseman, R. M., & Gomez-Mejia, L. R. (2002). The fit between CEO compensation design and firm risk. *Academy of Management Journal*, 45(4), 745-756.
- Mitchell, D. J., Lewin, D., & Lawler, E. E. (1990). Alternative pay systems, firm performance and productivity. In A. Blinder (Ed.), *Paying for productivity: A look at the evidence* (pp. 15-87). Washington, DC: Brookings Institution.
- Monks, R. A. G. (2002). Creating value through corporate governance. *Corporate Governance*, 10(3), 116-123.
- Mueller, G. C., & Barker, V. L. (1997). Upper echelons and board characteristics of turnaround and nonturnaround declining firms. *Journal of Business Research*, 39, 119-134.
- Murphy, K. J. (1985). Corporate performance and managerial remuneration: An empirical analysis. *Journal of Accounting & Economics*, 7, 11-42.
- Murphy, K. J. (1986a). Incentives, learning, and compensation: A theoretical and empirical investigation of managerial labor contracts. *Rand Journal of Economics*, 17(1), 59-76.
- Murphy, K. J. (1986b). Top executives are worth every nickel they get. *Harvard Business Review*, Mar-Apr, 125-132.
- Murphy, K. J. (1998). Executive compensation. *Handbook of Labour Economics*, 3, 1-90.
- Murphy, K. J. (2001). Performance standards in incentive contracts. *Journal of Accounting & Economics*, 30(3), 245-278.
- Murphy, K. J. (2002). Explaining executive compensation: Managerial power versus the perceived cost of stock options. *The University of Chicago Law Review*, 69(3), 847-869.
- Muth, M., & Donaldson, L. (1998). Stewardship theory and board structure: A contingency approach. *Corporate Governance: An international Review*, 6(5-8).
- O'Reilly, C. A., Main, B. G. M., & Crystal, G. S. (1988). CEO compensation as tournaments and social comparisons: A tale of two theories. *Administrative Science Quarterly*, 33.
- O'Reilly, C. A., Wade, J. B., & Chandratat, I. (1990). The CEO, the board of directors, and executive compensation: Who manages whom? *Working Paper*.
- Osborne, D. (2001). Paying for results. *Government Executive*, 33(2), 61-66.
- Ostle, B., & Malone, L. C. (1988). *Statistics in research: Basic concepts and techniques for research workers* (4th ed.). Iowa, IO: Iowa State University Press.
- Pass, C. (2004). Corporate governance and the role of non-executive directors in large UK companies: An empirical study. *Corporate Governance*, 4(2), 52-63.
- Pass, C., Robinson, A., & Ward, D. (2000). Performance criteria of corporate option and long-term incentive plans: A survey of 150 UK companies 1994-1998. *Management Decision*, 38(2), 130-137.
- Pavlik, E. L., Scott, T. W., & Tiessen, P. (1993). Executives compensation: Issues and research. *Journal of Accounting Literature*, 12, 131-189.
- Petersen, T. (2004). Analysing panel data: Fixed- and random-effects models. In A. Bryman (Ed.), *Handbook of data analysis* (pp. 331-345). London: Sage Publications Ltd.
- Peterson, A. (2004). Improving board information flow. *The Corporate Board*, May/June, 6-10.
- Pfeffer, J. (1981). *Power in organizations*. Boston: Pitman.

- Platt, H. D. (1987). Determinants of executive compensation: The neoclassical model versus concept formation. *Journal of Economic Psychology*, 8, 255-272.
- Platt, J. R. (1964). Strong inference. *Science*, 146, 347-353.
- Poole, M., & Jenkins, G. (1998). Human resource management and the theory of rewards: Evidence from a national survey. *British Journal of Industrial Relations*, 36(2), 227-247.
- Porac, J. F., Wade, J. B., & Pollock, T. G. (1999). Industry categories and the politics of the comparable firm in CEO compensation. *Administrative Science Quarterly*, 44, 112-144.
- Prasad, S. B. (1974). Top management compensation and corporate performance. *Academy of Management Journal*, 17, 554-558.
- Prendergast, C. (1999). The provision of incentives in firms. *Journal of Economic Literature*, XXXVII(Mar), 7-63.
- Prodhan, B. (1993). Corporate governance and long term performance. *Management Research Papers*, 13(May), 1-7.
- Purcell, J. (1992). The impact of corporate strategy on human resource management. In G. Salaman (Ed.), *Human resource strategies*. London: Sage Publications.
- Rajagopalan, N. (1996). Strategic orientations, incentive plan adoptions, and firm performance: Evidence from electric utility firms. *Strategic Management Journal*, 18(10), 761-785.
- Rajagopalan, N., & Prescott, J. E. (1990). Determinants of top management compensation: Explaining the impact of economic, behavioural and strategic constructs and the moderating effects of industry. *Journal of Management*, 16(3), 515-538.
- Rechner, P. L., & Dalton, D. R. (1991). CEO duality and organisational performance: A longitudinal analysis. *Strategic Management Journal*, 12, 155-160.
- Redman, T., & Wilkinson, A. (2001). In search of human resource management. In T. Redman & A. Wilkinson (Eds.), *Contemporary human resource management* (pp. 3-23). Harlow, England: Pearson Education Limited.
- Remenyi, D., Williams, B., Money, A., & Swartz, E. (1998). *Doing research in business and management: An introduction to process and method*. London: Sage Publications Ltd.
- Riahi-Belkaoui, A. (1992). Executive compensation, organisational effectiveness, social performance and firm performance: An empirical investigation. *Journal of Business Finance & Accounting*, 19(1), 25-38.
- Roberts, D. R. (1956). The general theory of executive compensation based on statistically tested propositions. *Quarterly Journal of Economics*, 70(2), 270-294.
- Rodek, J. (2004). Putting Sarbanes-Oxley to work in the boardroom. *The Corporate Board*, May/June, 1-5.
- Rothfeder, J. (2004). Privacy in the age of transparency. *Strategy & Business*, 34, 99-105.
- Sanders, W. G. (1999). Incentive structure of CEO stock option pay and stock ownership: The moderating effects of firm risk. *Managerial Finance*, 25(10), 61-75.
- Sanders, W. G. (2001). Behavioural responses of CEOs to stock ownership and stock option pay. *Academy of Management Journal*, 44(3), 447-492.
- Santerre, R. E., & Neun, S. P. (1989). Managerial control and executive compensation in the 1930s: A reexamination. *Quarterly Journal of Business & Economy*, 28(4), 100-118.



- Sarin, R. K., & Winkler, R. L. (1980). Performance-based incentive plans. *Management Science*, 26(11), 1131-1144.
- Sayer, A. (1992). *Method in social science: A realist approach*. London: Routledge.
- Schuler, R. S., & Huber, V. L. (1993). *Personnel and human resource management* (5th ed.). New York, NY: West Publishing Company.
- Shen, W. (2003). The dynamics of the CEO-Board relationship: An evolutionary perspective. *Academy of Management Review*, 28(3), 466-476.
- Short, H., & Keasey, K. (1997). Institutional shareholders and corporate governance in the United Kingdom. In K. Keasey, S. Thompson & M. Wright (Eds.), *Corporate governance - Economic, management and financial issues*. Oxford: Oxford University Press.
- Short, H., & Keasey, K. (1999). Managerial ownership and the performance of firms: Evidence from the UK. *Journal of Corporate Finance*, 5, 79-101.
- Skinner, D., Saunders, M. N. K., & Thornhill, A. (2002). Human resource management in a changing world. *Strategic Change*, 11(Nov), 341-345.
- Sloan, R. G. (1993). Accounting earnings and top executive compensation. *16*, 55-100.
- Smith, I. (1996). Reward management and HRM. In P. Blyton & P. Turnbull (Eds.), *Reassessing human resource management* (pp. 169-184). London: Sage Publications.
- Smith, P. K. (2000). Philosophy of science and its relevance for the social science. In D. Burton (Ed.), *Research training for social scientists* (pp. 5-20). London: Sage Publications Ltd.
- Smyth, R. C. (1959). Bonus plans for executives. *Harvard Business Review*, 37(4), 66-74.
- Sora, S. A., & Natale, S. M. (2004). The ethical dilemma of merging the roles of CEO and chairman of the board. *Corporate Governance*, 4(2), 64-68.
- Sridharan, U. V. (1996). CEO influence and executive compensation. *The Financial Review*, 31(1), 51-66.
- Steers, R. M., Mowday, R. T., & Shapiro, D. L. (2004). The future of work motivation theory. *Academy of Management Review*, 29(3), 379-387.
- Stinchcombe, A. L. (1983). *Economic sociology*. New York: Academic Press.
- Storey, J. (2001). Introduction: From personnel management to human resource management. In J. Storey (Ed.), *New perspectives on human resource management*. (pp. 1-19). London: International Thomson Publishing Company.
- Stroh, M. (2000). Qualitative interviewing. In D. Burton (Ed.), *Research training for social scientists* (pp. 196-214). London: Sage Publications Ltd.
- Sturman, M. C., & Short, J. C. (2000). Lump-sum bonus satisfaction: Testing the construct validity of new pay satisfaction dimension. *Personnel Psychology*, 53(3), 673-700.
- Sundaramurthy, C., & Lewis, M. (2003). Control and collaboration: Paradoxes of governance. *Academy of Management Review*, 28(3), 397-415.
- Taylor, A. (2005). Pay scheme reviews deemed inadequate. *Financial Times*, p. 4.
- Teather, D. (2005, August 04). United States: Executive pay goes off the scale. *The Guardian*, p. 17.
- Tevlin, S. (1996). CEO incentive contracts, monitoring costs and corporate performance. *New England Economic Review*(Jan/Feb), 39-50.

- The Combined Code. (2000). *The combined code - Principles of good corporate governance and code of best practice*. Retrieved 12 August, 2004, from [http://www.fsa.gov.uk/pubs/ukla/lr\\_comcode.pdf](http://www.fsa.gov.uk/pubs/ukla/lr_comcode.pdf)
- Thornhill, J. (2005, June 5). Pay protest is loud and clear. *The Mail on Sunday*, p. 13.
- Torrington, D., Hall, L., & Taylor, S. (2002). *Human resource management* (5th ed.). London: Prentice Hall.
- Tosi, H. L., & Gomez-Mejia, L. R. (1989). The decoupling of CEO pay and performance: An agency theory perspective. *Administrative Science Quarterly*, 34, 169-189.
- Tosi, H. L., Katz, J. P., & Gomez-Mejia, L. R. (1997). Disaggregating the agency contract: The effects of monitoring, incentive alignment and term in office on agent decision making. *Academy of Management Journal*, 40(3), 584-602.
- Tosi, H. L., Werner, S., Katz, J. P., & Gomez-Mejia, L. R. (2000). How much does CEO performance matter? A meta-analysis of CEO pay studies. *Journal of Management*, 26(2), 301-339.
- Veliyath, R. (1999). Top management compensation and shareholder returns: Unravelling different models of the relationship. *Journal of Management Studies*, 36(1), 123-143.
- Vogel, T. J., & McGinnis, J. D. (1999). Executive long-term performance contracts: An empirical analysis of market risk, investment opportunities and leverage in the post-adoption period. *Managerial Finance*, 25(101), 76-93.
- Vogt, M. F. (1995). Accelerating organisational performance through an employee bonus plan. *Management Quarterly*, 36(2), 20-23.
- Vroom, V. H. (1964). *Work and motivation*: Wiley.
- Wade, J., O'Reilly, C. A., & Chandratat, I. (1990). Golden parachutes: CEOs and the exercise of social influence. *Administrative Science Quarterly*, 35, 587-603.
- Walker, M., & Louvari, E. (2003). The determinants of voluntary disclosure of adjusted earnings per share measures by UK quoted companies. *Accounting & Business Research*, 33(4), 295-309.
- Wallace, J. S. (1997). Adopting residual income-based compensation plans: Do you get what you paid for? *Journal of Accounting & Economics*, 24, 275-300.
- Watkins, S. (2005, August 07). Fat cats rake in the riches as staff are squeezed. *Mail on Sunday*, p. 4.
- Weisbach, M. S. (1988). Outside directors and CEO turnover. *Journal of Financial Economics*, 20, 431-460.
- Werner, S., & Tosi, H. L. (1995). Other people's money: The effects of ownership on compensation strategy and managerial pay. *Academy of Management Journal*, 38(6), 1972-1691.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5, 171-180.
- Westphal, J. D., & Zajac, E. J. (1995). Who shall govern? CEO/board power, demographic similarity, and new director selection. *Administrative Science Quarterly*, 40, 60-83.
- Westphal, J. D., & Zajac, E. J. (1997). Defections from the inner circle: Social exchange, reciprocity, and the diffusion of board independence in US corporations. *Administrative Science Quarterly*, 42, 161-183.
- Williamson, O. E. (1985). *The economic institutions of capitalism*. New York, NY: Free Press.

- Williamson, O. E. (1988). Corporate finance and corporate governance. *Journal of Finance*, *XLIII*(3), 567-591.
- Wright, P., Dunford, B. B., & Snell, S. A. (2001). Human resources and the resource based view of the firm. *Journal of Management*, *27*(6), 701-721.
- Wright, P., & Kroll, M. (2002). Executive discretion and corporate performance as determinants of CEO compensation, contingent on external monitoring activities. *Journal of Management and Governance*, *6*, 189-214.
- Wright, P., Kroll, M., & Elenkov, D. (2002). Acquisition returns, increase in firm size, and chief executive officer compensation: The moderating role of monitoring. *Academy of Management Journal*, *45*(3), 599-608.
- Wright, P., & McMahan, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management*, *18*(2), 295-320.
- Wright, P., McMahan, G., & McWilliams, A. (1994). Human resources and sustained competitive advantage: A resource-based perspective. *International Journal of Human Resource Management*, *5*(2), 308-326.
- Yearta, S. K., Maitlis, S., & Briner, R. B. (1995). An exploratory study of goal setting in theory and practice: A motivational technique that works? *Journal of Occupational and Organisational Psychology*, *68*, 237-252.
- Zajac, E. J., & Kratz, M. S. (1993). A diametric forces model of strategic change: Assessing the antecedents and consequences of restructuring in the higher education industry. *Strategic Management Journal*, *14*, 83-102.
- Zajac, E. J., & Westphal, J. D. (1995). Accounting for explanations of CEO compensation: Substance and symbolism. *Administrative Science Quarterly*, *40*, 283-308.
- Zajac, E. J., & Westphal, J. D. (1996). Director reputation, CEO-Board power, and the dynamics of Board interlocks. *Administrative Science Quarterly*, *41*, 507-529.