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ABSTRACT

This paper provides a descriptive analysis of the use of performance targets in executive remuneration plans and its difficulty and attainability relative to past, expected and realised performance. From 31 December 2002, UK firms are required under the Directors' Remuneration Report Regulations (DRRR) 2002 to disclose performance targets and benchmarks used in executive remuneration plans in the Remuneration Report. This study uses the first instance of the disclosure of the targets and benchmark from the financial year 2002/3 for a sample of 1269 plans from 440 largest UK firms. Results indicate that earnings per share (eps) and total shareholder return (TSR) are the two most popular performance measures used in long term remuneration plans, while most firms provide vague information regarding performance measures in short-term (annual bonus) plans. More firms are using long term incentive plans (LTIPs) in place of share option plans relative to observations made by Conyon et al (2000). Plans that use eps as a performance measure often benchmark against growth relative to the retail price index (RPI) while plans that use TSR often benchmark against a peer group. For a sub-sample of 291 plans using eps as a performance measure, target attainability is analysed relative to past, forecasted and realised eps growth. Results indicate that targets set in executive remuneration contracts are highly attainable, with targets being met six times out of ten. The use of lower and upper threshold targets help control attainability, but less than half of plans specify an upper threshold target.

1. Introduction

The use of performance targets in executive remuneration plans in the UK were first suggested by Greenbury (1995) in the Greenbury Report on Executive Remuneration, and has become a common feature of both share option and other share-based long term incentive plans (LTIPs). However, it was only since 2002, after the enforcement of the Directors' Remuneration Report Regulations (DRRR) (2002) that firms were required to disclose performance measures, targets and related benchmarks to their shareholders. Prior to its enforcement, performance levels against which executives were assessed as part of their remuneration payout was highly opaque (Bruce, Buck & Main, 2005). The introduction of the mandatory remuneration report in annual reports of firms has shed some light on the target setting process at the executive level of UK firms.

While Greenbury (1995) posited that performance targets would increase the sensitivity of pay to performance, this hinges on the targets being set at an appropriate level of difficulty. Targets that are difficult to attain may demotivate managers, where as targets that are highly attainable would reward managers for subpar performance, thereby allowing them to extract rent from the shareholders. Using data from the remuneration reports of a sample of 440 UK firms, I examine the level of attainability of targets set in executive remuneration plans during 2002 and 2003.

The key research question in this study is: How attainable are the targets set in executive remuneration plans? Halliwell Consulting (2004) report that while analysts predicted a median three-year EPS growth of 38% for FTSE 100 firms in 2004/2005, less than 2% of firms set targets that exceed this forecasted growth. I examine target attainability relative to past and predicted future performance. As part of my analysis, I also present descriptive evidence on current executive remuneration plans in use in UK firms, updating

the research by Conyon and Murphy (2000) and Conyon, Peck, Read and Sadler (2000) who studied UK executive remuneration plans in 1997. In particular I provide a descriptive analysis of the performance measures and targets used in executive remuneration plans. Pass, Robinson and Ward (2000) found accounting earnings based (e.g. earnings per share) and market returns based (e.g. total shareholder returns) measures to be the most common performance metrics employed in executive remuneration plans between 1994 and 1998. I extend their analysis by documenting both the performance measures used in remuneration plans in 2002 and the targets and benchmarks used in conjunction with these metrics.

Existing descriptive studies on the structure of executive remuneration contracts in the UK focus on two main issues: the level of executive remuneration (Conyon & Murphy, 2000; Conyon, Gregg & Machin, 1995) and the types of executive reward schemes used in remuneration packages for top executives (Conyon & Murphy, 2000; Conyon et al, 2000; Eicholtz, Kok & Otten, 2004).¹ These studies find that UK executives are rewarded using a mixture of base salary, short-term bonuses and long-term share-based rewards, and that remuneration practices vary by industry (Eicholtz et al, 2004; Stathouopoulos, Espenlaub & Walker, 2004) and firm size (Cordeiro & Veliyath, 2003). In contrast, there exists limited evidence concerning the detailed provisions of executive remuneration arrangements, including the performance measures employed, the performance targets set and the benchmarks against which actual performance is assessed.

My descriptive analysis is based on 1269 individual remuneration plans, consisting of annual bonus plans, share option plans, long-term incentive plans, and other plans such as deferred bonus plans for executive directors from 440 large UK firms. All data are manually collected from firms' remuneration reports published in the annual report to shareholders for

¹ Common examples of remuneration plans include annual bonus plans, long term incentive plans, share option schemes and deferred bonus schemes.

the fiscal year 2002/2003 (firms reporting on 31 December 2002 and onwards). I find that eps growth and total shareholder return are the two most popular performance measures employed in long-term executive remuneration plans. Earnings per share growth targets are typically expressed relative to growth in the retail price index (RPI) while total shareholder return (TSR) targets are typically benchmarked against the performance of a chosen peer group of companies. In contrast, for more short-term plans such as annual bonus plans, qualitatively expressed performance measures such as “strategic goals” and “pre-set targets” are often employed. Disclosures relating to these performance measures are often vague and unspecific, as the requirements of the DRRR (2002) do not extend to annual bonus plans.

In analysing target attainability, I focus on 291 plans that employ earnings per share (eps) growth as a performance measure benchmarked against RPI. Plan inception dates range between January 1994 and December 2002. I find median three-year eps growth targets are set at a rate that is lower than both past performance and forecasted performance (from I/B/E/S) at the plan inception date and in five of the seven years in which plans were introduced, average actual performance exceeded the lower target bound.² I also find that eps growth targets are set at similar levels in both share option plans and LTIPs, and across all plans, upper threshold targets are achieved for every six plans out of ten.

The remainder of this paper is structured as follows. The next section discusses the theoretical background of the paper, findings of prior research and the motivation behind this study. This is followed by the sample and data collection process and the descriptive analysis. Discussion of target attainability follows, and the final section concludes.

² Firms often set targets that consist of a lower bound (lower threshold) and an upper bound (upper threshold), with the former being the minimum achievement required to trigger rewards, and the latter being the maximum level of achievement that is rewarded.

2. Theory, Prior Research and Motivation

The separation of ownership and control observable in firms today requires remuneration contracts written in such a way to encourage executives to act in the best interest of the shareholders (Jensen and Meckling, 1976). To better link executive pay with firm performance, an increasing proportion of executive remuneration is being tied to the attainment of pre-specified targets based on agreed-upon performance measures (Canyon et al 2000; Eicholtz et al 2004; Pass et al, 2000). In this section, I discuss the theory behind setting performance targets, followed by an examination of existing evidence on performance measures and targets in executive remuneration contracts.

2.1 Performance measures and target setting

In choosing appropriate performance measures for executive remuneration plans, Miller (2004) suggests that performance measures should be linked to shareholder value creation; aligned with company strategy and reflects operating performance; emphasise objective and quantifiable measures, and balance growth and returns. To that end, financial measures are most commonly used as they are seen to be objective, quantifiable and have a direct link to shareholder value (Miller, 2004).

It is common practise to express performance measures in either accounting or market-based terms, and this practise is advocated in various discussions of executive remuneration best practise by Coyle (2005) and Reda, Reifler and Thatcher (2004). Empirically, Sloan (1993) argues for the primacy of accounting earnings over market-based measures in executive remuneration contracts, as accounting-based measures better shield executives from market noise. Firms tend to use share prices as a measure of firm performance against which executives are assessed, but Lambert and Larcker (1987) concede

that the use of only market-based measure is insufficient for performance evaluation purposes. It is common therefore to observe executive remuneration packages utilising both accounting- and market-based performance measures, as discussed by Coyle (2005) and Reda et al (2004), and as evidenced by Pass et al (2000).

Targets, meanwhile, are set at a level that best maximises their motivation potential to elicit the best performance from the executives. Summarising the literature on target setting, Bobko and Collella (1994) conclude that individuals who work towards difficult, specific targets perform better than those who work towards easy, vague goals. Defining ‘difficult’, however, is a subjective process. Stedry (1960) conducted experiments examining the impact of varying levels of goal difficulty on performance. He observed that goals that were set at ‘medium’ and ‘high’ difficulty levels induced better performance than goals that were set at the ‘loose’ level. Dunbar (1971) tried to find an optimal level of difficulty using the definitions of difficulty employed by Stedry and Kay (1966) and Stedry (1962), and proposed that targets be set at a level that is ‘difficult but attainable’. This is defined as targets that are achieved less than 40% of the time. Kenis (1979) corroborates Stedry (1960) in his study of 169 plant managers, finding that the motivation derived from budget targets increased and then decreased as the goal difficulty ranged from ‘about right’ to ‘tight but attainable’ to ‘too tight, with the optimal level of difficulty lying in the ‘tight but attainable range’.³

³ The main criticism of the above studies lies in the subjectivity of the metric used to measure difficulty. Merchant and Manzoni (1989) express concern at the issue of subjectivity when reviewing evidence of target difficulty levels set by firms. A multitude of factors could affect the employee’s perception of target difficulty. Moussa (1996) for instance, found that self-esteem affected how participants in his study viewed difficulty levels. He found that participants who had higher self-esteem would consistently choose more difficult targets under a piece-rate scheme than a flat rate performance scheme. Conversely, participants with low self-esteem did not have a preferred payment scheme, underlining the argument that monetary motivation has little impact on participants who view the task as unattainable (Lawler, 1973). However, Bobko and Colella (1994) argue that the perception of difficulty that matters belongs to the person upon whom the target is set, and therefore the metric used is appropriate as a target of 3% growth, for instance, could be ‘easy’ for one employees, but ‘tight but attainable’ to another.

Stedry and Kay (1966) found that goals perceived as challenging enhanced overall performance but this relation was constrained by individual commitment towards the goal. This meant that tight or more difficult goals were ineffective if the subject rejected them because of a perception that the goal was unattainable. Hofstede (1968) reached a similar conclusion based on evidence that budget targets in five large Dutch companies had no motivational effect unless they were accepted by the employees. To encourage employees to accept targets assigned to them, Kenis (1979) suggested increasing employee participation in target setting, which he found increased the likelihood of targets being met. Latham et al (1978) conducted an experiment involving a group of engineers and scientists to study the role of participation on goal setting, finding that individuals who were allowed to participate in the target setting process set higher goals than those who did not. Libby (1999) found that increased two-way communication between subordinates and their superiors also leads to improved performance.

Merchant and Manzoni (1989) however provided evidence that setting highly attainable targets may also benefit the firm. Through interviews conducted in fifty-four profit centers at twelve different firms, the authors found that ex-ante 87% of managers interviewed said they were at least 75% confident that their targets would be achieved; 53% expressed 90% or more confidence. Ex-post, 74% of the managers achieved or exceeded their budget targets, leading the authors to conclude that managers set themselves highly achievable budget targets. Follow-up interviews attributed employees' target setting behaviour to their fiscal needs (securing a higher bonus), their psychological needs (wanting to feel like winners) and their practical needs (to allow more operational flexibility and to increase autonomy). Their superiors approved of these targets because they believed that attainable targets would induce more commitment, and that over-optimistic targets would increase the

risk of over-consumption of resources, which in turn could impose significant costs on the firm. Also, they also argued that highly achievable targets improved commitment towards the goals set, thereby reducing the likelihood that managers would resort to gaming to ensure that the targets were achieved.

Similar evidence at the executive level is scant, although Indjejikian and Nanda (2002) studied 4576 executives from 397 US firms using data obtained from remuneration consultants for the years 1988-1995. The authors compared target bonus and actual bonus payments over two consecutive periods to infer how performance affected subsequent target setting.⁴ They found that executives who exceed target bonus in a particular year have a 72% chance of exceeding target bonus in the subsequent year, compared with only a 42% chance of doing so if they do not achieve target bonus in the first year. These findings suggest that performance standards do not fully adjust to reflect past performance, thereby making it easier for managers to achieve preset targets. However, a limitation of Indjejikian and Nanda (2002) is the unobservability of actual performance targets. The authors instead inferred the probabilities of achieving the targets based on targeted and actual bonuses.

Observations at the operational level are not automatically generalisable to the executive level of the organizational hierarchy. Agency problems between operational level employees and senior management differ from agency problems between top management and shareholders. Fama and Jensen (1983) suggest that decision processes that firms undertake involve four-stages: initiation, ratification, implementation and monitoring. They suggest that in order to minimise agency problems, firms should separate decision management functions (initiation and implementation) from decision control functions (ratification and monitoring). Within a setting where subordinates are answerable to a

⁴ Indjejikian and Nanda (2002) define target bonuses as the pre-specified bonus a manager earns for attaining a pre-set target. The bonuses may increase or decrease depending on whether actual performance is above or below the pre-set target.

superior in the organisational hierarchy, the demarcation of these two decision functions is clear. In a target setting context, when an employee sets his own target, the target is then subject to ratification by a manager or a superior at a higher level in the company. Once the target is implemented, management will then monitor the employee's performance. Accordingly, the employee does not set his or her own target but merely assists in suggesting a target level he or she is comfortable with, and which is subject to approval by a more senior manager. However, at the senior executive level of the management hierarchy, the ratification step is less distinct. Using the Fama and Jensen (1983) four-step process as a framework, the board of directors ratifies targets for senior executives. However, since senior management are also part of the board, decision management and decision control functions are no longer separate, providing an opportunity for managerial opportunism.⁵

Extant evidence suggests that even with adequate ratification and monitoring systems are in place at the operational level, targets are still set at a level that is highly attainable (Merchant and Manzoni, 1989). While senior executives are subject to monitoring by various stakeholders including non-executive directors, large shareholders, and institutional investors, the dynamics of the monitoring relationship differ from that of the subordinate-superior relationship observed at lower levels of the firms. Indjejikian and Nanda (2002) found past executive performance was discounted when setting new targets, making them more attainable, which suggests (at least empirically) that more lax ratification and monitoring systems at the executive level could lead to the setting of highly attainable targets. Other

⁵ Popular press provides evidence of opportunistic managerial behaviour while setting targets. Feisst (2006) reports on shareholders of Compass plc exhibiting their disapproval of management increasing executive pay without proportionately increasing target levels. Vodafone plc shareholders, meanwhile, expressed their intention to vote against a remuneration scheme that is lowering targets in order to make them more achievable (Wachman, 2006). Consulting firm Haliwell pointed out in their report that shareholder approval of executive remuneration plans is more of a rubber-stamping process than a rigorous exercise (Halliwell, 2004, pg 5).

evidence for executive level targets is limited, and this paper seeks to shed further light on this issue.

3.0 Sample and Research Design

3.1 Sample

The initial sample consists of 1857 executive remuneration plans from 440 large UK firms as at 1 January 2003. From this initial sample, I excluded remuneration plans that were designed for specific purposes (e.g. golden hello plans) and remuneration plans that were no longer active. To allow comparability and better analysis, I also excluded multi-tier plans, which are plans that have separate targets for every board member. A remainder of 1269 plans were employed for the descriptive analysis. A further subset of 291 plans which employed earnings per share (eps) as performance measures were used for the attainability analysis.

<TABLE 1 ABOUT HERE>

3.2 Plan Types and Data Collection

For the purpose of this study, I characterise executive remuneration plans into four groups. Plans that pay out a specified bonus on an annual basis, often (but not always) subject to the attainment of a pre-specified target are categorised as annual bonus plans, and this constitutes 34% of the sample. Plans that grant share options to executives, regardless of whether they are exercisable subject to attainment of a pre-specified target or not, are categorised as share option plans, and make up 38% of the sample. Plans that are grants of cash or shares with performance conditions that are evaluated over a period of greater than one year (but do not involve the award of options) are categorised as long term incentive plans (LTIPs), and they consist of 23% of the sample. For plans in the sample that were

labelled in the remuneration report as LTIPs but involve the award of share options, these were classified as share option plans for the purpose of this study. Plans that do not fit into any of the above categories are denoted as Other plans, and make up 5% of the sample. These include deferred bonus plans, share price improvement plans, warrants schemes and deferred short-term incentive plans.

For each of the above plans, the following information is obtained from the remuneration report. *Performance measures*, which are the specific criteria against which executives are assessed, are categorised into either accounting-based, market-based or other targets, which include targets that involve strategic goals or physical sales targets. Accounting measures are then further refined into earnings per share (eps), net asset value (NAV), or other measures, which include economic value added (EVA™), sales or return on equity. Market based measures are categorised as either share price, total shareholder return or other market measures, such as market capitalisation. *Performance targets* are goals based on the performance measures that executives have to achieve in order to gain the associated rewards. For some plans, performance targets are defined with thresholds, where a range of performance is specified. The lower (upper) threshold is the minimum (maximum) attainment that would trigger the lowest (highest) level of rewards. These targets are measured against certain standards, which are referred to as *benchmarks*. Benchmarks are classified into growth relative to RPI, peer group, budgeted performance, growth and other measures, which includes items such as option values, overall market performance, long term rates of return and internally generated formulas. *Performance periods* are specified as months or years over which the performance is assessed. This is typically one year for annual bonus plans, and tends to vary between three to seven years for other plans. *Rewards* are the payout executives receive on attainment of the target, and are categorised as either being cash based or share based. In addition to the above, any other relevant information was also collected. This

includes information such as caps on annual bonus plans, severance payments made to directors and penalties for non-performance.

4.0 Descriptive Evidence and Plan Structure

4.1 Plans

A total of 440 firms were analysed, and the mean (median) firm has 2.89 (3) plans. All firms operate at least one executive remuneration plan, and the maximum number of plans operated by a firm during 2002/2003 is seven (Chrysalis plc, which operates one annual bonus scheme, two operational share option schemes, two LTIPs and two other schemes for which minimal information is disclosed).

<TABLE 2 ABOUT HERE>

Panel A of Table 2 presents a frequency count of the number of active plans employed by firms. Of the 440 firms in the sample, thirteen (3%) do not operate an annual bonus plan, 422 (96%) operate a single annual bonus plan and five (1%) operate two annual bonus plans. For long-term plans, sixty two firms (14%) do not operate a share option plan, relative to 203 firms (46%) that do not operate LTIPs. Most firms operate at least one share option or LTIP plan, with 294 firms (67%) for share options and 186 firms (42%) for LTIPs. Eighty-four firms (19%) operate more than two share option plans, while the equivalent proportion for LTIPs is fifty-one firms (12%). As share option plans and LTIPs have a longer time frame of performance, I observe that firms operate two or more share option plans and / or LTIPs at the same time. In most cases, these are overlaps, where firms introduce new plans before the older plan has fully lapsed.

Panel B of Table 2 presents the number of plans employed by firms for the largest 200 firms in the sample and the smaller 240 firms, providing data that is on a similar scale to Conyon et al. (2000) for comparison purposes. Conyon et al. (2000) report that 99% of the 200 largest UK firms in 1997 operate share option schemes. In my sample, the percentage of firms that operate at least one share option plan is 86%, and 82% of the largest 200 UK firms in the sample. The decrease in the use of share option plans can be contrasted with the increase of the use in LTIPs, where the percentage of firms operating LTIPs in 1997 was 50%, and 54% of all firms and 66% of the top 200 firms in 2002. Whether LTIPs substitute for share option plans in the UK is an interesting question worthy of a longitudinal study. Conyon et al. (2000) find a substitution effect of LTIPs on share option plans, confirming Buck et al. (2003) who argue that LTIPs were often introduced as a replacement for unconditional share option plans.

4.2 Performance Measures and Benchmarks

<TABLE 3 ABOUT HERE>

Table 3 reports the number of performance measures used in executive remuneration plans. Despite strong recommendations from Greenbury (1995) and subsequently the Combined Code (2001) that performance measures be attached to executive remuneration plans, from Panel A I observe that eighty plans (6%) – one annual bonus plan, thirty-one share option plans, twenty-seven LTIPs and twenty-one Other Plans - do not use performance measures.⁶ A total of 993 plans (389 annual bonus plans, 387 share option plans, 192 LTIPs and thirty-four Other Plans) used one performance measure, while 122 plans (thirteen annual bonus plans, 48 share option plans, 56 LTIPs and five Other Plans).

⁶ The only annual bonus plan that does not employ a performance measure is a profit-sharing based annual bonus plan with no particular targets or measures in place, operated by Rathbone plc

It is particularly interesting to observe LTIPs with no performance measure, as the defining characteristic of LTIPs is that they are remuneration schemes with attached performance measures (in contrast to share option plans, which traditionally were not subject to performance measures in order to vest). Further investigation revealed that LTIPs with no performance conditions attached are share matching or restricted share plans. Both these plans are associated with other plans for which performance targets have already been achieved, and therefore no additional performance measures are attached to these plans.

<TABLE 4 ABOUT HERE>

Table 4 presents the different types of performance measures used in executive remuneration plans, by plan type. Results are based on 1,391 observations from 1,269 plans as some plans use more than one performance measure. The DRRR(2002) requires firms to disclose performance measures used in the Remuneration Report for all long term plans – annual bonus plans are exempt from this requirement although some firms still choose to disclose performance measures and / or targets for annual bonus plans. I observe seventy-four plans (6%) merely disclose the use of a performance measure, but either provide vague or no details pertaining to the nature of the measure used. Of these plans, twenty-nine are annual bonus plans, but the remaining forty-five are long term remuneration plans.

Accounting-based performance measures are most frequently employed with 53% of plans using such measures, relative to only 22% using market-based measures. Drawing upon Sloan (1993), this preference for accounting-based measures can be explained by the fact that they better shield executives from changes in firm value that they are unable to influence, thereby helping to ensure that they are not punished (or rewarded) for changes in value that are beyond their direct control. A more cynical explanation for the preference of accounting-based measures over market-based measures is that they are more easily manipulated by

management (Healy, 1985; Gaver, Gaven & Austin, 1995; Holthausen, Larcker & Sloan, 1995).

The type of plan and the time horizon related to the plans influence the type of performance measures used and the amount of information disclosed. For short-term plans, especially annual bonuses, firms prefer to use qualitative targets. The most popular targets are qualitative accounting related targets, such as cost reduction or business plan targets (24%) and profit and earnings targets (18%). However, little detail is provided beyond these vague statements. Of the firms in the sample, 61% also do not disclose benchmarks related to the targets in annual bonus plans. This may be related to the stipulations of the DRRR(2002) which does not require mandatory disclosure of performance benchmarks for short term plans.

<TABLE 5 ABOUT HERE>

For long term plans, eps (58%) was the most popular measure employed in share options plans while TSR (44%) was the most popular measure employed in LTIPs. This is consistent with the observation made by Conyon et al (2000) for 114 CEO share option plans, and Stathopoulos, Espenlaub and Walker (2004). Table 5 presents the performance benchmarks used in executive remuneration plans. For plans that use eps, the most common benchmark is growth relative to RPI (74%), while plans that use TSR are commonly benchmarked against a peer group (88%). Peer groups are also popular among plans that use net asset value (NAV) and share price as performance measures. In contrast, only 3% of plans that use eps as a performance measure benchmark against peer groups, and 1% of plans that use TSR as a performance measure benchmark against growth in RPI. Pass, Ward and Robinson (2000) document that most eps-based plans benchmark against growth relative to

the RPI while most TSR-based plans benchmark against peer groups, for a small sample of firms in 1997. Further analysis on the use of peer groups is provided in Section 4.3.

The explanation behind this casual causality may be rooted in practicality rather than theory. While Holmstrom (1979) suggests that firm performance is best measured relative to the performance of others, there is no clear theoretical motivation to suggest that plans which use eps as a performance measure should be measured relative to growth in RPI rather than against the performance of its peers. I propose three possible practical explanations behind the observations. First, this may be a result of ‘copycat’ practices, whereby with the availability of information on remuneration plans in the public domain, firms use other firms’ plan structures as a basis to construct and subsequently legitimise their own plans. Second, the use of outside advisors such as remuneration consultants may also be a contributory factor, as advisor may propose similar plans to its clients. Thirdly, suggestions made in corporate governance codes may also influence what firms believe to be best practise. For instance, Greenbury (1995) suggests that LTIPs (for which TSR is the most popular performance measure used) in particular be benchmarked against “a variable, or set of variables, reflecting the company’s objectives” (Greenbury, 1995: pp 43), specifically mentioning total shareholder return while alluding that other measures are also acceptable. Firms could be using TSR as the performance measure for LTIPs as a way to show they are complying with the Combine Code recommendations.

Comparing these observations with those of Conyon et al (2000), annual bonus plans, share option plans and LTIPs remain the most popular methods of linking executive pay to performance. I observe an increase in the popularity of LTIPs relative to 1997, and a decrease in the use of share option plans. As the use of these particular three plans are advocated in codes of best practise and guidance notes by the Association of British Insurers (ABI),

Institute of Chartered Secretaries and Administrators (ICSA) and the National Association of Pension Funds (NAPF), I do not expect the pattern to change.

4.3 Additional Evidence on Peer Groups

While the DRRR (2002) requires firms to disclose details of peer groups used as performance benchmarks, it provides no guidance or stipulations on peer group member choice. It is therefore the onus of individual firms to identify appropriate peer groups, and ultimately to shareholders to question how firms define who their peers are.

The use of peer groups is supported by theory and practise. Comparing performance relative to a group of peer firms strips out unwanted market noise and provides a cleaner measure of performance (Holmstrom, 1979). However, the choice of an appropriate peer group can be complex. If peer groups were bound geographically (so that they would all face similar economic conditions), this would cause problems for firms that operate in a specialised industry that do not have peers within its own stock markets, for instance. However, choosing a peer from firms that operate in a different country or listed on a different stock market may also cause problems due to different currencies, different regulations and stock exchange requirements, and different operating environments.

<TABLE 6 ABOUT HERE>

From Table 5, we see that 281 plans are benchmarked against peer groups: eleven annual bonus plans, 104 share option plans, 154 LTIP plans and 12 Other plans. Of these, 37% are benchmarked against a named list of peers. Panel B of Table 6 presents the different types of peer groups used by firms. Of all plans that use peer groups as benchmarks, 56% benchmark against the constituents of a recognised index, the FTSE indices being most

popular. Six plans (2%) that disclose the use of a named peer group (rather than an index) but do not actually provide details of the constituents of the peer group, making it hard to realistically assess their performance. A further fourteen (5%) only mention that peer groups are used, but provide no further details. Theories of relative performance evaluation suggest that peer groups eliminate, as much as possible, external noise to allow for cleaner performance measures. Whether named peer groups or indices eliminate noise better is an interesting issue for future research.

The complexity in choosing appropriate peers and the geographical dispersion of peers can be demonstrated using the peers for Anglo American plc as an example, presented in Panel A of Table 6. Anglo American plc is involved in the mining industry, and is listed on the London Stock Exchange and the Johannesburg Stock Exchange in South Africa. Of its twelve peers, only seven are involved in the mining industry, and only one company is listed on the same stock exchange as Anglo American. Five companies which are designated as peers belong to the same broad industry group, but operate in different core businesses, and in the case of two firms, are not listed on the same stock exchanges.

As information relating to peer groups was previously unavailable in earlier annual reports, comparisons to earlier periods cannot be made. However, the above analysis sheds some light on the usage of peer groups in remuneration contracts. Future research will be able to evaluate how these peer groups change over time, as well as being able to look at firm characteristics that explain choice of peer group elements and its effects on variable executive pay and firm performance.

5.0 Analysis of Target Difficulty

A further analysis of target difficulty and attainability is performed using plans that use eps as performance measures. Eps is chosen for two reasons. First, eps figures are an

objective measure of performance readily available in the public domain, compared to TSR targets which vary in definition and need to be manually calculated. Second, eps targets are more likely to have comparable benchmarks relative to TSR targets, as plans that use eps as a performance measure are typically benchmarked against growth in RPI, which is both objective and readily available. Other the other hand, TSR is typically benchmarked against peer group performance, which varies from firm to firm and is therefore harder to estimate.

5.1 Measuring Target Difficulty

As target difficulty is a subjective concept that differs from one firm to the next and is often relative (Bobko & Colella, 1994), I measure difficulty as attainability relative to past, forecasted and realised eps growth. Eps targets disclosed by firms in their remuneration reports are compared with past performance (past eps), analysts' forecasts (expected eps) and realised firm performance (realised eps). Past eps, expected eps and realised eps are obtained from I/B/E/S. I/B/E/S is used as its eps calculations strip out similar exceptional items to those excluded by firms when computing eps before transitory items (Choi, Lin, Walker & Young, 2007).

In order for meaningful inferences regarding target difficulty to be made all eps figures are measured relative to plan inception date, as this is the point where targets are initially set. Plan inception dates are manually identified. As remuneration plans are put to vote at the Annual General Meeting (AGM), I obtain AGM announcements from Thomson Analytical and analyse the resolutions relating to remuneration plans. The dates of the AGM where these resolutions are tabled are assumed to be plan inception dates. Eps figures from I/B/E/S are defined as follows:

Past eps : median eps growth over the preceding three years *prior* to plan inception

Forecasted eps: median analysts' forecasts of eps growth for the three years *from* plan inception date.

Realised eps: Actual eps growth achieved by the firm during the three-year period from inception date.

Detailed I/B/E/S forecasts are used, and in the event that more than one analyst provides a forecast, the median forecast is calculated. From the 339 plans that use eps as a performance measure and RPI as a benchmark, I omit plans for which past, forecasted and realised performance data are unavailable on I/B/E/S, resulting in a final sample of 291 plans for 208 firms.

As eps growth targets are disclosed in remuneration reports with varying time horizons, for the purpose of comparability all eps growth targets are expressed in their three-year equivalents. RPI growth figures are measured using raw RPI figures obtained from the National Statistics website.

5.2 Descriptive Statistics

<TABLE 7 ABOUT HERE>

Panel A of Table 7 presents the descriptive statistics of the eps growth targets in relation to past, forecasted and realised eps growth for the sample firms. Sample firms operate plans introduced between 1994 and 2003, of which 103 plans (35%) employ both lower and upper thresholds. Mean (median) past eps growth is -15.65% (18.87%) with a standard deviation of 5.8. Mean (median) for realised eps growth is 122.35% (22.25%) with a standard deviation of 14.6. Mean (median) forecasted eps growth is 37.96% (25.6%) with a standard deviation of 76.09. The large variance between mean and median indicates extreme

observations in the sample, and following from this, median observations are used for further analysis.

The median lower (upper) threshold target set by firms for all years in the sample is an eps growth of 15.53% (29.79%) over three years. When contrasted with the median past three-year and median forecasted three-year growth of firms in the sample, which are 18.87% and 25.6% respectively, it is clear that the median lower threshold is set below both past and forecasted eps growth, while the median upper threshold target is set above this.

Panel B of Table 7 presents a summary of the median eps growth targets and performance by year. Over the ten-years studied in the sample, lower threshold eps targets have overall increased from 15.3% to 17.48% after adjusting for RPI and have been gradually increasing from year to year with 1998 as an exception. No similar trend is observed for upper threshold targets, however. In seven years out of ten, the median lower threshold target was set lower than past median eps growth; lower than median expected growth in nine years out of ten and lower than median realised eps growth for every year realised eps growth was positive. The less challenging lower thresholds targets are tempered by more challenging upper threshold targets in the event that firms employ them, but this was not a common feature of the plans in the sample until 2000.

This descriptive evidence provides some insight on target difficulty depending on how firms structure their targets. Plans that have only one threshold can be said to be more attainable than plans that have lower and upper thresholds, as their targets are set lower than past and forecasted performance. Plans with both a lower and an upper target threshold also provide executives an extra incentive to perform above expectations to realise a higher bonus. It was also observed that the median actual eps growth is 22.25%, suggesting that lower

target thresholds were achieved, but not upper target thresholds. Therefore the use of upper target thresholds increases the difficulty of targets in performance plans.

Panel C of Table 7 presents the median target difficulty by plan. Lower threshold eps growth targets for both share option plans and LTIPs are approximately 15% and statistically there is no significant difference between the targets for both types of plans. Upper threshold targets in share option plans are slightly lower than those of LTIPs at 26% compared to 32% but this difference is also statistically insignificant.⁷ In all cases median lower threshold targets have been set lower than median past and forecasted eps growth for both types of plans, and median upper threshold targets are set higher than median past and forecasted eps growth for both plan types. Median realised performance for both plans lies between the lower and upper threshold targets. No particular plan type therefore appears to employ more highly attainable targets.

The budgeting literature suggests that in order to motivate or induce the best performance from employees, targets should be set at a level that is “tight but attainable” (Kenis, 1979). It has also been established that targets that are viewed as “too difficult” by those subject to it decreases incentives to perform (Stedry & Kay, 1966; Hofstede, 1968). Lower and upper threshold targets, if employed properly, could be effectively used to set targets that are “tight but attainable”, with a more attainable target to encourage performance at the lower threshold, and a tighter target at the upper threshold to reward exceptional achievement.

Target attainment can also be evaluated by looking at how targets have been achieved ex-post. The target difficulty findings are also consistent with evidence reported by Halliwell Consulting (2004). For UK FTSE 100 firms in 2004/2005, 79% of firms set three-year eps

⁷ For both upper and lower target thresholds, a non-parametric Mann-Whitney test was conducted to assess the difference in the medians.

growth targets of less than 20% (approximately an annual EPS growth of RPI + 3%). To put this into context, Halliwell Consulting (2004) find that analysts predict a median three-year EPS growth of 38% but less than 2% of firms in their report set targets that exceed this. Results of a similar comparison analysed in this paper is presented in Table 8, where the frequency with which lower and upper threshold targets exceeded past, forecasted and realised eps growth are reported. Lower (Upper) threshold targets are set below past performance 50% (43%) of the time, and lower than forecasted eps growth 71% (54%) of the time. This suggests that ex-ante, more than half of the plans examined in the sample have targets that are lower than what they have achieved in the preceding three years, and also lower than what analysts expect them to achieve.

<TABLE 8 ABOUT HERE>

When examining actual eps growth ex-post, it is observed that lower (upper) threshold targets are lower than realised performance 63% (66%) of the time, suggesting that targets are achieved approximately six times out of ten.⁸ Dunbar (1971) defines a target as difficult if they are attained only 40% of the time and by Merchant and Manzoni (1989) as targets that are achieved only 50% of the time. Framing the observations within this context, it is clear that targets set are highly attainable.

At the operational level targets are even more attainable, as evidenced by the findings of Merchant and Manzoni (1989) where managers at lower levels of the firm achieved budget targets 80% of the time. The difference between target attainment at the operational and executive level can be potentially explained by the visibility of executive targets to public scrutiny. Operational level targets are usually internal to the firm; whereas executive performance (and subsequent rewards post-attainment) covets wide media coverage. High

⁸ There is a difference between the attainment of lower and upper threshold targets as not all firms have upper threshold targets, where as all firms have lower threshold targets.

media visibility has been documented to possess a disciplining function (Wu, 2004; Anderson & Glazer, 1984; Core, Guay & Larcker, 2007) and therefore may be able to discourage managers from setting targets that are seen to be too attainable.

6. Conclusion

The aim of this study was two-fold: first to study target setting in an executive-level setting in a firm, and second, to present recent descriptive evidence on the structure of executive remuneration contracts in UK firms, with a particular emphasis on performance measures and targets, which have not yet been thoroughly discussed in the literature before. Changes in the UK disclosure requirements regarding executive remuneration have made additional data available through remuneration reports which are provided with the firms' annual reports.

I observe that EPS and TSR are the most popular performance measures used by firms in executive remuneration plans. EPS growth targets are commonly benchmarked against growth in RPI, while TSR are commonly measured relative to the performance of a chosen peer group. The analysis, which studies both short term and long term executive remuneration plans, also reveals the reluctance of firms to disclose extensive information regarding annual bonus plans, which they feel may contain commercially sensitive information. I also present evidence on the types of peer groups that firms use.

The descriptive analysis of peer groups presented here provides opportunity for future research. In particular, there is opportunity to examine why firms choose a particular type of peer group to measure themselves against, and what factors affect this. Also, future research could examine the companies firms declare as their peers, and how this compares to common perception of who a firm's peers are. The availability of actual peer groups would also enable

us to examine whether firms practise relative performance evaluation (RPE) without the need to use proxies as prior studies have employed.

Studying earnings per share growth targets, I find that on average, firms set themselves attainable lower-threshold targets, as targets were achieved during all years reporting positive growth, with actual performance outperforming lower-threshold targets by at least 20%. A selection of plans employs upper-threshold targets, which are not necessarily set at a higher level than past or expected performance. Of the seven years for which I have actual performance figures, three years recorded achievements that surpassed upper-threshold targets. The observations regarding target difficulty are consistent with the findings of Merchant and Manzoni (1989) and Indjejikian and Nanda (2002).

A key contribution of this paper is an examination of the target setting process at the executive level of the firm. Prior literature has primarily been focused on the budgeting process which is almost wholly focused on lower levels of the firm. These prior observations cannot be generalised to the executive setting, as there exist different organisational dynamics at the top and lower levels of the firm. While target-setting at the executive level is monitored to a certain extent by non-executive directors or large shareholders, this monitoring process is less direct compared to the superior-subordinate relationship at lower levels of the firm, and is subject to board-room dynamics that may affect the monitoring process in a different way (Hallock, 1997). For example, subordinates would meet their superiors quite often, whereas the board only convenes a few times a year and shareholders meet management once a year at the Annual General Meeting. In terms of participative goal setting processes, at the top level of the firm executives may have more control over their targets than employees at lower levels of the firm. However, these are merely conjectures as the target setting process at the executive level of the firm is opaque and unobservable. All

we see are the end results of the process in the remuneration report which was made mandatory only very recently. Until more light is shed on the dynamics of decision making and performance target setting at the executive level, generalisations made from observations in the budgeting literature risk being inaccurate and misleading. Actual executive target setting process in the boardroom is still very much a black box, and in order to better understand how executive targets are set, this opacity needs to be reduced tremendously.

APPENDIX A

Anatomy of a Performance Measure (based on the Classification System employed in the data collection process)

This is an example of a share option plan that belongs to Crest Nicholson plc.

The performance criteria requires that, for full vesting to occur, the Total Shareholder Return (TSR) of the Company when compared to the TSR of companies in a defined peer group, currently consisting of 14 companies in the construction section as set out on page 59, places the Company at or above the 75th percentile. If the Company is ranked below the 50th percentile no shares vest, with 40% of the shares vesting at the 50th percentile and pro-rata vesting if the Company is ranked in between the 50th and 75th percentiles. In addition there is an underlying performance criterion which requires the Company's earnings per share to grow by at least inflation plus 2% per annum over the four year performance period.

From: Crest Nicholson plc Annual Report 2003

If we were to break down this data into the format that was used to compile this dataset, this would be done as follows:

Plan Type:

Share Option, One Tier (applies to all members of the board), Current Plan

Performance Measure Type:

For Performance Measure 1: *Share Based , Total Shareholder Return*

For Performance Measure 2: *Accounting Based, Earnings Per Share*

Target:

For Performance Measure 1: *Lower threshold – 50th percentile, Upper threshold – 75th percentile*

For Performance Measure 2: *2% per annum*

Benchmark:

For Performance Measure 1: *Peer group (companies disclosed)*

For Performance Measure 2: *RPI / Inflation*

Period of plan: 4 years.

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Table 1

Sample Selection Filters

Panel A: Firms Omitted		
Initial Number of Firms		500
<i>less:</i>		
Non-ordinary shares listed	9	
Non-UK domicile	14	
Foreign Currency	10	
Mergers and Acquisitions / Restructuring	17	
Missing Annual Reports	9	
Non-unitary board structure	1	60
Final Sample		440
Panel B: Plans Omitted		
Initial Number of Plans		1857
<i>less:</i>		
Special purpose plans (golden hellos etc)	7	
Multi-tier plans	244	
Inactive plans	337	588
Final Sample		1269

The table presents a breakdown of the sample selection process. Panel A presents the filtering process for firms in the sample. The initial sample of firms consisted of 500 largest UK firms by market capitalisation as at 31 January 2003. Details of reasons for omission are presented, which leaves the final sample at 440 firms. Panel B presents a breakdown of the filtering process of plans. Special purpose plans are plans presented as golden hellos or for other recruitment purposes. Multi-tier plans are plans that consist of different reward schemes for different members of the board under the same plan. Inactive plans are plans that have expired or have yet to be activated, but were reported in the remuneration report.

Table 2

Performance Plan Used in Executive Remuneration Contracts.

Panel A: Number of plans employed by firms, by plan

	Annual Bonus	Share Options	LTIPs	Other
None	13	62	203	382
One Plan	422	294	186	51
Two Plans	5	68	43	5
More than Two	0	16	8	2
Total	440	440	440	440

Panel B: Number of plans employed by firms, by plan and firm size

	Annual Bonus		Share Options		LTIPs		Other	
	Large	Small	Large	Small	Large	Small	Large	Small
None	2	11	31	31	69	134	165	217
One Plan	194	228	138	156	97	89	32	19
Two Plans	4	1	26	42	28	15	2	3
More than Two	0	0	5	11	6	2	1	1
Total	200	240	200	240	200	240	200	240

The table presents the descriptive statistics of the number of plans used by firms the study. Executive remuneration plans of 440 firms were analysed. Panel A presents the summary statistics of plans used. Panel B presents the number of annual bonus plans, share option plans, LTIPs and other plans respectively employed by firms in the sample for the year 2002/2003. Panel C presents the the number of annual bonus plans, share option plans, LTIPs and other plans employed by firms in the sample, categorised based on firm size. Large firms are firms that are ranked 1-200 by market capitalisation, and small firms are firms that are ranked 201-440 by market capitalisation. All plan data were collected from remuneration reports published in the annual reports of the firms in the sample.

Table 3

Number of Performance Measures Used in Executive Remuneration Plans.

	Annual Bonus	Share Options	LTIPs	Other	Total
None	1	31	27	21	80
One	389	378	192	34	993
Two	13	48	56	5	122
Not disclosed	29	20	17	8	74
Total	432	477	292	68	1269

Panel A presents the number of performance measures used in plans in annual bonus plans, share option plans, LTIPs and Other Plans respectively. From the 440 firms, 1269 plans are analysed.

Table 4

Types of Performance Measures Used in Executive Remuneration Plans.

	No Perf Meas	EPS	Profit / Earnings	NAV	Qual	Othr (Accg)	TSR	Share Price	Othr (Mkt)	Oth PerfMeas	Not Disc	Total Schemes
Annual												
Bonus	1	37	78	4	106	6	4	1	1	178	29	445
Sh. Options	31	305	7	14	6	11	96	30	1	4	20	525
LTIPs	27	100	10	8	4	14	153	9	0	6	17	348
Other	21	14	3	1	0	3	11	5	1	6	8	73
Total	80	456	98	27	116	34	264	45	3	194	74	1391

Table 4 presents the performance measures used in the plans. *NoPerfMeas* is no performance measures, for plans that do not use performance measures. *EPS* is earnings per share. *Profit / earnings* are profit and / or earnings performance measures. *NAV* is net asset value. *Qual* are qualitatively expressed accounting objectives. *Oth(Accg)* are other accounting measures such as EVA or cash flow. *TSR* is total shareholder return. *Share Price* are performance measures based on share price. *Othr(Mkt)* are other market based measures such as equity returns. *Oth PerfMeas* is a catch-all category for performance measures that do not fit any of the other categories. *NotDisc* is not disclosed.

Table 5

Performance Benchmarks Used in Executive Remuneration Plans.

Panel A: Benchmarks Employed, by Plan Type								
	None	RPI	Peer	Budget	Growth	Other	Undisc.	Not Rel.
Annual Bonus	56	14	11	82	4	13	264	1
Share Options	2	270	104	31	36	9	43	30
LTIPs	1	75	154	32	19	8	32	27
Other	6	7	12	10	6	0	10	22

Panel B: Benchmarks Employed, by Performance Measure							
	None	RPI	Peer	Budget	Growth	Other	Undisc.
EPS	5	339	15	28	46	6	17
Profit / earnings	13	7	1	36	0	2	39
Net Asset Value	0	7	14	1	3	1	1
Qualitative	9	2	0	21	2	3	79
Other Accounting	1	2	1	18	3	3	6
TSR	0	3	233	7	4	3	14
Share Price	1	5	11	14	6	7	1
Other Market	0	0	1	2	0	0	0

Panel A presents benchmarks employed by firms, by plan type and Panel B presents benchmarks employed by firms by performance measure. *None* is plans that do not use benchmarks. *RPI* is the retail price index. *Peer* is peer groups. *Budget* are firm budgeted figures. *Growth* are firm specific growth benchmarks. *Other* is a catch all for benchmarks that do not fit any of the other categories. *Undisc* are plans that do not disclose benchmark information. *NotRel* is not relevant, for plans that do not have performance measures (hence no benchmarks).

Table 6

Analysis of Peer Groups Used as Benchmarks in Executive Remuneration Plans.

Panel A: Peer Group for Anglo American plc			
Company	Core Business	Stock Exchange Listing	Notes
BHP plc	Mining	London, Johannesburg	
Vale do Rio Doce	Mining	New York	
Freeport McMoran	Copper Mining	New York	
Rio Tinto	Mining	Australian, London, New York	
Teck Cominco	Mining	New York, Toronto	
WMC Resources	Mining	Australian	Taken over by BHP
Xstrata	Mining	London, Swiss	
M-Real	Paper and Pulp	Finnish	Taken over by Sappi Ltd
Sappi Ltd	Paper and Pulp	Johannesburg	
Svenska Cellulosa Aktiebolaget SCA	Paper and Pulp	OMX	
DS Smith	Packaging	London	
Hanson	Building Materials	London	Taken over by Heidelberg Cement in 2007

Panel B: Peer Group Type, By Plan

	Named	Index	Not Named	Not Disclosed	Total
Annual Bonus	2	6	0	3	11
Share Options	25	74	1	4	104
LTIPS	73	71	5	5	154
Others	3	7	0	2	12

Panel A presents the Peer Group for Anglo American plc for 2002/2003, as disclosed in their remuneration report. Additional information about companies were obtained from their respective corporate websites. Panel B presents the different type of peer groups used by firms in plans as benchmarks, categorised by plans. *Named* refers to a named list of peer firms. *Index* refers to an identified index, whether existing FTSE indices or constructed by the firm based on existing indices. *Not named* refers to situations where firms allude to the use of a peer group of firms, but decline to name the firms in the peer group. *Not disclosed* refers to firms that use a peer group but do not disclose what type of peer group is employed.

Table 7

Descriptive Statistics for Target and Performance Levels.

Panel A: Descriptive Statistics for Targets, All Plans						
	N	Mean	Std Deviation	First Quartile	Median	Third Quartile
tgtlwr	291	16.65%	7.70%	13.73%	15.53%	17.79%
tgtpur	103	32.55%	17.27%	21.46%	29.79%	38.79%
pastgr3	262	-15.65%	580.67%	-17.58%	18.87%	50.67%
actgr3	203	122.35%	1463.20%	-20.22%	22.25%	67.65%
expgr3	282	37.96%	76.09%	15.24%	25.60%	42.70%

Panel B: Median earnings per share growth targets and performance, by year

Year	No of plans*	tgtlwr	tgtpur	Range	pastgr3.	expgr3	actgr3
1994	5(1)	15.30%	11.00%	-	20.19%	16.10%	35.52%
1995	15(0)	15.26%	-	-	25.36%	13.43%	35.03%
1996	13(2)	14.32%	32.66%	18.34%	38.98%	20.00%	37.43%
1997	12(3)	14.13%	32.13%	18.00%	20.37%	16.57%	48.72%
1998	17(4)	11.38%	21.38%	10.00%	39.39%	22.41%	-2.93%
1999	33(7)	15.53%	30.53%	15.00%	19.30%	25.78%	22.68%
2000	48 (15)	15.46%	21.46%	6.00%	39.29%	38.20%	26.08%
2001	48(19)	16.73%	25.73%	9.00%	8.44%	28.79%	24.59%
2002	51(23)	17.79%	32.79%	15.00%	-1.06%	27.30%	47.21%
2003	50(29)	17.48%	38.48%	21.00%	-0.50%	26.13%	-

Panel C: Median earnings per share growth targets and performance, by plan

	No of plans*	<i>tgtlwr</i>	<i>tgtupr</i>	Range	<i>pastgr3</i>	<i>expgr3</i>	<i>actgr3</i>
Share Options	196(45)	15.53%	26.48%	10.95%	16.85%	25.32%	23.02%
LTIPs	77(47)	15.46%	32.13%	16.67%	20.09%	25.96%	22.25%

*Number of plans with upper thresholds in parantheses

Table 7 presents the descriptive statistics for plan targets and past, forecasted and realised performance for plans in the sample. Panel A presents the statistics for all plans. Panel B and C present the median earnings per share growth targets and performance, by year and by plan respectively. *tgtlwr* is the lower threshold target set in plans, obtained from the remuneration report. *tgtupr* is the upper threshold target set in plans, obtained from the remuneration report. *pastgr3* is the growth in eps for firms three years prior to plan introduction. *expgr3* is the three-year EPS growth forecast from the year the plan is introduced. *actgr3* is the realised eps growth three years after the plan is introduced. All past, forecasted and realised eps growth figures were obtained directly or adjusted from data from I/B/E/S.

Table 8

Target Attainability.

	<i>lwrpast</i>	<i>lwrtact</i>	<i>lwrfrtr</i>	<i>uprpast</i>	<i>upract</i>	<i>uprfrtr</i>
Plans where target is greater than	130	93	77	51	28	45
% (not including N/A)	49.62%	36.76%	28.52%	57.30%	33.73%	45.92%
Plans where target is lower than	132	160	193	38	55	53
% (not including N/A)	50.38%	63.24%	71.48%	42.70%	66.27%	54.08%
Not Available	29	38	13	202	208	195
Total	262	253	270	89	83	98

Table 8 presents the attainability of targets relative to past, realised and forecasted eps growth. Columns 2, 3 and 4 refer to lower threshold targets relative to past (*lwrpast*), realised (*lwrtact*) and forecasted (*lwrfrtr*) eps growth. Columns 5, 6 and 7 refer to the attainment of upper threshold targets relative to past (*uprpast*), realised (*upract*) and forecasted (*uprfrtr*) eps growth targets respectively. All past, forecasted and realised eps growth figures were obtained directly or adjusted from data from I/B/E/S.