



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

Corporate Governance and the Board's Locus of Control

Citation for published version:

Main, B 2010, 'Corporate Governance and the Board's Locus of Control: the case of the ABI's treatment of footprints' Corporate Board: Role, Duties and Composition, vol 6, no. 3, pp. 60.

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Author final version (often known as postprint)

Published In:

Corporate Board: Role, Duties and Composition

Publisher Rights Statement:

© Main, B. (2010). Corporate Governance and the Board's Locus of Control: the case of the ABI's treatment of footprints. Corporate Board: Role, Duties and Composition, 6(3), 60.

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



**Corporate Governance and the Board's Locus of Control – the case of the ABI's
treatment of footprints.**

Brian G M Main

Edinburgh University Business School

Corresponding author:

Professor Brian G M Main
University of Edinburgh Business School,
The University of Edinburgh,
50 George Square,
Edinburgh EH8 9JY

Tel: 0131-650-8360
Email: Brian.Main@ed.ac.uk

December 2010

Corporate Governance and the Board's Locus of Control – the case of the ABI's treatment of footprints.

Brian G M Main

Abstract

This paper discusses the degree to which codes of corporate governance and the guidelines that develop around them tend to shift the locus of control away from the board of directors. It is argued that even in principles-based codes of governance such outcomes are an unavoidable consequence and that policy makers should weigh such consequences carefully before promulgating codes and guidelines. The case of the treatment of footprints (incentive plan performance averaging periods) by the UK's Association of British Insurers (ABI) is analysed to illustrate the problem.

Keywords – Corporate governance; Board process; Executive remuneration; Remuneration committee.

1. Introduction

By their very nature, externally imposed codes of corporate governance represent an attempt to wrest some control away from the executives and board of a company. This is generally done to protect the interests of the shareholders as a whole or some sub-group of shareholders (e.g., minority shareholders versus majority shareholders). The basic logic is that by imposing structure on governance arrangements an improvement in performance will result (Gompers et al., 2003; Eisner and Schenig, 2005). Although governance arrangements themselves are endogenous (Demsetz and Lehn, 1985; Adams et al., 2008), before-and-after studies of the introduction of codes of corporate governance have found evidence of improvements in performance (Stiles and Taylor, 1993; Weir and Laing, 2000; Conyon et al., 2002; Dedman, 2002; and Dahya et al., 2002; Bebchuk et al., 2009). Aguilera and Cuervo-Cazurra (2004) report that, in the past 15 years or so, over 50 countries have adopted codes of corporate governance.

The positive effects of interventions such as published codes of corporate governance may, however, come at the price of unintentionally restricting the profit making opportunities of the enterprise through the constraints so imposed on the actions of the board. There is scope for refinement. While the widespread ‘comply or explain’ aspect in many codes aims to minimise such costs, there is no disguising the primary intent as being to guide the practices and procedures of the board to “mitigate hazards directly related to bounded rationality and opportunism” (Williamson 1996, p12) or “to make directors more focused on shareholder interests” (Bebchuk and Fried, 2004, p202) or, simply, to ensure “investors get the managers to give them back their money” (Shleifer and Vishny, 1997, p738). This paper uses the recent UK case of incentive plan performance averaging periods to argue in favour of placing more weight on broad disclosure rather than requiring specific compliance to code.

Codes of governance are generally characterised as adopting one of two main approaches – either a rules-based or a principles-based. In the former, as the label suggests, the intervention tends to be explicit and precise. Companies are left with little doubt as to what they should and should not be doing. The system in the USA,

most recently encapsulated in the Sarbanes-Oxley Act 2002, represents this approach. On the other hand, the principles-base approach concerns itself with describing standards of behaviour and expectations about how issues are to be approached. The UK adopts this latter approach with its essentially self-regulatory system, as summarised in the Financial Reporting Council's *Corporate Governance Code* (2010) (formerly known as the *Combined Code*). However, even a principles-base approach, which appears to permit more scope to the individual board, can be constraining in practice. Companies, in striving for the legitimacy that code conformance brings, find themselves in a mimetic isomorphism of practice (DiMaggio and Powell, 1983; Scott, 1991, 2001), even where such restricted behaviour is not specifically required.

But the situation is not simply a case of being seen to adjust to the locally promulgated code of practice. As Seidl (2007) explains, a corporate governance code offers an observational schema through which the actions of the directors can be viewed. In all systems but particularly those that are principles based and permit a certain flexibility in terms of compliance, there is a need for an evaluation mechanism that facilitates the assessment of the extent of adherence to the code or the gravity of any explained departures from the code.

Steidl (2007) argues that corporate governance codes are generally incomplete in that they lack a mechanism to gauge the sufficiency of the disclosed information, or to evaluate the gravity of any deviations for recommended practice and the extent to which offered explanations mitigate such breaches. This lacuna is frequently filled by means of 'commentaries or guidelines to the code' (Steidl, 2007: 718). In the UK the Association of British Insurers Guidelines on executive remuneration (ABI, 1987, 1993, 1994, 2001, 2007, 2009) has emerged as a key factor in the governance of executive remuneration practice and policy. Alongside these guidelines, in recent years, a commercial evaluation mechanism (IVIS – Institutional Voting Information Service) offers a traffic-light system that evaluates a company's compliance. Thus a company will speak of being 'red-topped' or 'amber topped' if they have attracted a negative or qualified evaluation. Selvaggi and Upton (2008) find that the IVIS system predicts superior company performance. The National Association of Pension Schemes initiated a rival evaluation scheme known as RREV (Research Recommendations Electronic Voting), now run by Risk Metrics.

It is clear, however, that for the UK the ABI defines the dominant observation schema for matters pertaining to top executive remuneration. It is possible to trace out the development of remuneration policy through subsequent vintages of these guidelines. While it is possible to argue about whether the ABI was codifying de facto developments in opinion among institutional investors or actually leading that opinion, the move over the years to a near universal adoption of ABI-conforming executive remuneration arrangement is clear. The current prevalence in UK boardrooms is to award share-based incentive schemes based on relative performance, where there is no payment for below median performance, and where vesting start at a modest level and rises up to a maximum level of vesting only once ‘upper quartile’ performance has been achieved. All of this has been shaped through the interpreting framework of the ABI Guidelines.

One example of the poor boardroom practice that governance codes aim to tackle can be found in the backdating of executive share options in corporate USA, whereby executives were presented with share options with issue dates (and hence strike prices) chosen in retrospect and to the advantage of the executive. Thus, a recent low period in the company’s share performance would be identified and that date used for the effective date of granting share options – even though the award was truly being made at a later date (Bebchuk et al., 2007). On investigation, the practice was found to be widespread and several prosecutions were mounted (Lomax, 2008).

While concern was expressed that such behaviour might be widespread in countries other than the USA (Mallin, 2007, p. 496), little empirical evidence of such behaviour has come to light. Alerted to the general issue, however, attention in the UK has focused instead on the timing of the performance periods that are now commonly used to determine the extent of vesting of share-based incentive pay for executives. In recent versions of its influential guidelines on executive remuneration, the Association of British Insurers (ABI, 2007, 2009) requested that companies should avoid lengthy averaging periods.

This paper examines the role that such averaging periods play in determining the effective reward earned by executives and highlights how overly narrow interpretation of governance guidelines can deprive boards of valuable flexibility in designing

executive reward packages to suit their particular situation. There are several circumstances in which the board may find it highly desirable to utilise a radically different size of footprint (averaging period) than had previously been in use. Consider an externally appointed CEO or new top management team arriving at a company which had recently been experiencing serious underperformance. Either because of unavoidable legal and administrative delays in getting round to awarding long term incentives or because the market has anticipated an impending turnaround effect by bidding up the share price on the announcement of the new management team, the board may feel it fairer to use a footprint that extends further back than the current share price as a basis against which to judge subsequent performance. On the other hand, to always use a long footprint may not be appropriate. When a scandal or external shock suddenly drives down the price of a hitherto high performing company, the board may prefer to use, for any newly appointed executive, the recent low price of the share as a basis of comparison rather than some past average including the previously overpriced phase.

In fact the length of footprint being used is rarely disclosed and this reveals a lacuna in governance reporting requirements that leaves practice in this area largely hidden from shareholder scrutiny. While the move requested by the ABI would, in some ways, remedy this omission it would do so by imposing an unnecessary and restrictive homogeneity of practice in this important area of corporate governance. It is more information not a homogeneity in boardroom practice that is called for. By presenting evidence based on the experience over a ten year period of a FTSE-100 sample of companies, the paper argues that in imposing restrictions on the actions of the board in this area, codes of governance introduce inefficiencies in decision making while providing an imperfect regulation of behaviour. It would be better to allow for continued freedom of choice by boards and their remuneration committees - conditioned on a new obligation to report such detail to shareholders.

The following section presents a brief introduction to the academic literature in the area. This is followed by a section detailing the empirical analysis undertaken and the paper concludes with a discussion of the policy implication of the results.

2. Literature review

The practice of timing option awards came to light owing to a forensic investigation by Lie (2005) of the returns enjoyed by executives on their share options. These were seen to be too good to be true. Earlier identification of such effects by Yermack (1997) had put the outcome down to the timing of information release, whereby variously bad or good news was released respectively before or after the anticipated grant date of executive share options. Lie (2005) shows that the effect had actually strengthened since the Yermack study.

Lomax (2008) explains some of the institutional background to this practice and discusses the SEC reaction. Lie (2005) estimated that as many as 2000 companies may have engaged in these practices and the SEC decided to formally investigate some 200 companies. Recently one CEO received a custodial sentence consequent on these investigations, although the vast majority of cases have settled out of court. But Heron and Lie (2007) argue that despite new SEC regulations requiring the prompt announcement of option grants (hence limiting the scope for ‘timing’), the practice persists, albeit in a muted form.

None of these revelations has found any echo in UK boardroom practice. The system of corporate governance in the UK is different from that in the USA. In the USA governance practice in the area of executive pay is largely influenced by legislation (primarily in the form of Securities and Exchange Commission regulations). In the UK, on the other hand, a series of non-governmental committees of investigation such as Cadbury (1992), Greenbury (1995), Hampel (1998) and Higgs (2003) have led to a largely self-regulatory approach summarised under the rubric ‘comply or explain’. This is brought together under the Combined Code on Corporate Governance (1998, 2003, and 2006). The only government intervention has been in the form of the Directors’ Remuneration Regulations (DTI 2002, 2008) which, as the title suggests, mandate reporting of certain features of directors’ pay and also guarantee that at the AGM shareholders shall be allowed an advisory vote on the overall remuneration policy of the company.

But, in the UK, the dominant influence in the field, as the earlier list of reports suggests, has been through institutional pressure. This has resulted in arrangements on directors' reward that are markedly different from those customary in boardrooms in the USA. In the UK, there is a strong emphasis on tying reward to relative performance – in particular, performance relative to that of a peer group of companies or to a pertinent market index. Payments, or vesting, on long term incentives such as executive share options or performance shares are not expected to occur for performance judged to be below median. And, when vesting does occur, the expectation is that the extent of vesting will commence at a moderate level and increase with improved relative performance (ABI, 2009). In this sense, full vesting would generally not be expected to occur for anything less than upper-quartile performance. The directors are usually afforded only one opportunity to satisfy the performance conditions, as 're-testing' or re-visiting the performance targets at a later date is discouraged.

For over 20 years, the Association of British Insurers (ABI, 1987, 2009) through a series of 'Guidelines' has exerted a dominant influence on the precise administration and design of directors' reward in the UK. Most recently, the ABI has focused on the concept of a 'footprint', as used in the context of a performance share plan or executive share option scheme. This is an arrangement whereby the calculation of the start and the end values of the performance metric on which vesting of an award depends is done so as to average over a period of time, rather than being taken on a single start-day and single end-day. Recent ABI Guidelines have drawn attention to the length of such averaging periods or 'footprints':

“4.9 The calculation of starting and finishing values for TSR should be made by reference to average share prices over a short period of time at the beginning and end of the performance period. **Lengthy averaging periods should be avoided.**” [ABI, 2009, emphasis added]

Footprints, are utilised in order to 'smooth out' random fluctuations or non-company-specific noise affecting the performance measures in question. These performance measures can be free standing or, more usually, gauged against a comparator group or index. Among larger UK companies, the commonest footprint is one of three months in length, although it is also possible to find examples of one month, six months, or 12 months.

Work by Booker and Wright (2006) has demonstrated the significant difference to eventual vesting that a few days can make in the choice of the start date for a performance period, when vesting is contingent upon relative performance metrics. This observation reflects the general finding of Acker and Duck (2007) and Dimitrov and Govindaraj (2007) that the choice of a particular reference day from which to calculate monthly returns or variances can lead to substantial variation in estimates so derived. Acker and Duck (2007) point out that such sampling risk or ‘estimation risk’ can lead to significant differences in inferences made from market data, such as estimates of the market ‘beta’ of a firm. In the context of executive pay, the use of an averaging period or footprint can be seen as insuring the director and the company against such reference-day risk.

The assumption underlying the ABI advice discussed above is, clearly, that the executives of a company somehow stand to gain by utilising a longer rather than shorter footprint. This paper sets out to subject this assumption to empirical testing. In so doing, it reveals that there is no consistent advantage to be gained by choosing one length of footprint versus another. There is, therefore, no merit in the ABI guidelines insisting on short footprints. On the other hand, the analysis presented below does reveal a clear advantage to be had on the part of an executive from opportunistically switching the length of the footprint to be deployed at certain critical times. This calls for transparency and the need for board to report their chosen footprint lengths and to explain any changes being introduced.

So, while the statistical evidence presented below suggests that there is no good reason for inhibiting companies from choosing one length of footprint versus another, there seem to be very good reasons for requiring companies to fully disclose the length of footprint deployed in their various performance schemes and to justify any alteration in these lengths. At the moment, the length of the footprint utilised in any performance scheme is not a parameter that demands disclosure.

The next section of the paper introduces the method and data to be used in the estimations undertaken on the impact of the choice of footprint length on subsequent vesting of long-term incentive schemes. Section 4 discusses the results in some

detail, and the paper concludes with a summary of results and some policy recommendations.

3. Method

In order to study the impact of choice of footprint length on subsequent vesting levels, daily performance data are assembled for a 10-year period (1998-2007) on 100 companies selected by their membership of the FTSE100 (in January 2008). For those lacking a 10-year continuous share-price history, as the nearest replacement companies at that date, as judged by market capitalisation (Main et al., 2008). The performance measure used throughout is DataStream's daily 'RI' index of total shareholder return (TSR) – dividend yield plus share price appreciation.

It is necessary to reserve the first year of data for use in calculating initial footprints and the assumed three year vesting period requires the end three years of data to observe the final performance plan come to its completion. This means that for each company on each trading day between 1 January 1999 and 31 December 2004 it was possible to follow a three-year performance period as it starts and subsequently vests. The implications for vesting for each company performance share plan can then be calculated. This is done for each of five sizes of assumed footprint: (i) none (i.e., one day); (ii) one month; (iii) three months; (iv) six months; and (v) 12 months.

The standard performance share plan vesting arrangement focuses on the company's relative TSR as calculated over the three year performance or accrual period (BIS, 2010) :

RELATIVE RANK:

No vesting for below median (FTSE100)

Vesting on a sliding scale starting at 25%

Maximum vesting (100%) for upper quartile TSR performance.

Pro-rata vesting for performance between those points.

This scheme is designed to be generally representative (see, for example Kingfisher plc Annual Report and Accounts for 2006/07, p.44). An arithmetic average is used to

calculate each company's performance measure (the daily RI index from DataStream) in both the starting and ending footprint. The comparator group for each company is the remaining 99 of the 100 sample companies. In practice, the comparator group of companies is often smaller in number than the FTSE100, frequently being individually tailored to the focal company's area of activity. In order to keep a level of generality to the study, however, it has been assumed that each company uses the same 'FTSE100' comparator group.

For a given length of footprint and a given start date, the outcome under the vesting scheme in question can be calculated for each company by following the focal company and the peer group for the subsequent three years. Over the 6-year period in which performance share schemes can both start and terminate, this results in 1566 observations outcomes for each of the 100 companies under any averaging period.

4. Results

Due to the relative performance nature of the incentive scheme, the average level of vesting across the 100 companies is always 40.25%, and the lower performing half of companies receive zero while the top performing quarter receive 100%, and the remainder – those above-median but below upper-quartile performers - receiving between 30% and 100% of their shares. That expected outlook is unchanged no matter what length of footprint is chosen. From this perspective, then, there is no particular gain to the executive from one length of footprint (1-month, say) versus another (1-year, say).

But each individual company (and hence director) may see their fortunes change depending on the exact size of the averaging period that is used to make the performance calculations over any one three year period. In some circumstances the achieved vesting would be higher, in others it would be lower. Table 1 illustrates this variation by contrasting the experience over the 1566 comparator periods for each of the companies, comparing a 1-day comparison period with a variety of longer averaging periods. It can be seen that some companies do better and some worse.

Others, of course, have a performance record that is so poor (or so very good) that changing the reference periods makes little difference.

The scope for change clearly depends on the size of the change of footprint or averaging period. Consistently moving for a 1-day to a 1-month footprint makes very little difference on average – just over 1-percentage point worse off or 1-percentage point better off, at most. On the other hand, moving from a 1-day to a 12-month footprint can result at some companies of as much as 12% fewer shares vesting over the period to as much as an extra 10% in some cases. This is a 22% range and shows that being able to choose the footprint length ex-post could be highly advantageous to the executives concerned. Chart 1 illustrates the scope for change in moving between these two footprints (1-day versus 12-month). Chart 1 reports the impact on the average vesting experienced by each of the 100 companies over all schemes starting on each of the 1566 days under study (from the beginning of January 1999 through the end of December 2004). For each company, the average level of vesting achieved is computed and the difference under the two footprints is reported in Chart 1. Quite clearly, the lengthening the footprint does not always imply improved the vesting outcome at the company in question. For some companies, the 1-year footprint improves the average vesting experience, and for others it is worse.

In an effort to examine the scope available to directors to cynically increase their level of vesting by optimal choice of vesting period, each company is followed over the time period and the average vesting outcome experienced by consistently having a 1-day footprint is compared with the average outcome of being able to choose that footprint length that would yield the highest vesting available. In some cases, clearly, the company's prospects are either so dismal or so outstandingly good that footprint length is of little consequence. But in other situations (as Chart 2 demonstrates) there will be a measurable impact. Chart 2 ranks companies by their 1-day vesting experience and demonstrates the scope for increasing this by varying the footprint length optimally. By definition, a company cannot be worse off under the 'best available' situation. The average improvement is 8.5 percentage points (with a statistically significance of 0.001).

Chart 3 ranks companies by the size of the potential gain in vesting through always being able to choose ex-post the optimal footprint size. For almost all companies there is a potential upside in vesting from shifting the length of footprint at various times. The maximum is 19.5 percentage points and the average is an 8.5 percentage point increase in shares vesting. Of course, in the above simulations of behaviour the choice of footprint length is fully informed by the subsequent full performance history. In reality the choice, if any, would be made without the benefit of most of that information. Nevertheless, the adoption or withdrawal from a 1-year footprint would have the advantage of at least one year of observed company performance history.

5. Conclusion and Discussion

This paper has discussed the need for boards to guard against losing control on their decision making to governance codes and guidelines. It draws on one particular case, that of the ABI's attempt to control the abuse of the selection of reference dates (footprint) over which to calculate the performance of executives for the purpose of vesting of long term incentives. Using daily data on the performance of the FTSE100 companies over a period of some 10 years, it demonstrates that, while there is a potential for abuse, strict adherence to the ABI guideline needlessly robs the board of the ability to tailor the design of its long term executive incentives in an appropriate manner. The expected payout is the same under all footprints. The danger lies in opportunistic changes in the length of the footprint not in any particular length of footprint.

Rather than prescribing a length of footprint, a more efficacious approach would have been to require full disclosure of the footprints used and a full explanation and justification of any changes in these. There are times when a change of footprint may be justified. Say, the announcement of an incoming, externally recruited CEO has boosted what had been a faltering share price, then it might be argued that there was justification to change the footprint from a one-month (say) to a six-month length - particularly as it usually is a month or two after appointment before any performance

share awards are actually made. Such arguments should be explicitly made to shareholders and should appear in the Directors' Remuneration Report. To ensure all such changes are transparent, it should be a reporting requirement that the length of all footprints utilised in performance evaluation be clearly reported on an annual basis.

There is, of course, a point to the ABI's guideline. On revisiting any three year period of a company's history, it is easy, with the benefit of hindsight, to see that one particular length of averaging period or 'footprint' would have resulted in higher vesting of options or performance shares than alternatives. Thus, a company that just before the beginning of a performance period had suddenly stumbled and fallen behind others in its peer group would be better off with a short 'footprint', so that subsequent performance was more likely to look comparatively good. For example, a company hitherto operating on a one-year footprint which, having had a stunning recent 12 months (let us say by stealing a march on the competition and being an early adopter of some cost-saving technology), has recently seen performance falter as rivals catch up. To reduce the footprint on the next issue of performance shares would unambiguously (and undeservedly) advantage the incumbent top management team.

To avoid such possibilities, it may seem better to essentially remove any discretion, by encouraging all to use uniformly short averaging periods. But this is to place companies in an iron cage (DiMaggio and Powell, 1983) of isomorphic practice. Better to simply require full disclosure, thereby leaving the board in control of the incentive arrangements for its executive.

References:

Adams, Renée B., Hermalin, Benjamin E. and Weisbach, Michael S. (2008) 'The role of boards of directors in corporate governance: a conceptual framework and survey'. NBER Working Paper No. 14486 (November).

Aguilera, Ruth V. and Cuervo-Cazurra, Alvaro (2004) 'Codes of Good Governance Worldwide: What is the Trigger?' *Organization Studies* Vol. 25, No. 3, pp. 415-443.

Angel, James J., Douglas M. McCabe. (2008) The Ethics of Managerial Compensation: The Case of Executive Stock Options. *Journal of Business Ethics* Vol. 78, No. 1-2, pp. 225-235

Association of British Insurers (2009). *Executive Remuneration – ABI Guidelines on Policies and Practices*. ABI, 51 Gresham Street, London EC2V 7HQ.
<http://www.abi.org.uk/>

Association of British Insurers (2007). *Executive Remuneration – ABI Guidelines on Policies and Practices*. (3 December). ABI, 51 Gresham Street, London EC2V 7HQ.
<http://www.abi.org.uk/>

Association of British Insurers (2001). *Guidelines for Share Incentive Schemes*. (1 March). ABI, 51 Gresham Street, London EC2V 7HQ.

Association of British Insurers (1994). *Long Term Remuneration for Senior Executives*, (May). ABI, 51 Gresham Street, London EC2V 7HQ.

Association of British Insurers (1993). *Share Scheme Guidance. A joint statement from the investment committees of the ABI and NAPF*. ABI, 51 Gresham Street, London EC2V 7HQ.

Association of British Insurers (1987). *Share Option and Profit Sharing Incentive Schemes. Summary of Revision to Guidelines to Requirements of Insurance Offices as Investors*. ABI, 51 Gresham Street, London EC2V 7HQ (13 July, addendum 6 May 1988, and amended 14 August 1991).

Bebchuk, Lucian, Cohen, Alma, Ferrell, Allen (2009) What Matters in Corporate Governance? *Review of Financial Studies*. Vol. 22, No. 2, pp. 783-827.

Bebchuk, Lucian A, and Fried, Jesse M. (2004). *Pay without performance. The unfulfilled promise of executive compensation*. Cambridge, Mass.: Harvard University Press.

Bank of International Settlements (BIS) (2010). Range of Methodologies for Risk and Performance Alignment of remuneration. Consultative document by Basil Committee on Banking Supervision (October).

Blackwell, David W., Dudney, Donna M. and Farrell, Kathleen A. (2007) Changes in CEO compensation structure and the impact on firm performance following CEO turnover. *Review of Quantitative Finance and Accounting*, Vol. 29, No. 3, pp. 315-338.

Conyon, M.J, Mallin, Christine, Sadler, Graham (2002). 'The disclosure of directors' share option information in UK companies'. *Applied Financial Economics*, Vol. 12, pp. 95-103.

Dahya , Jay, McConnell, John J. and Travlos, Nickolaos G. (2002) 'The Cadbury Committee, Corporate Performance, and Top Management Turnover' *The Journal of Finance*, Vol. 57, pp. 461 – 483.

Dedman, Elisabeth (2002) 'The Cadbury Committee recommendations on corporate governance – a review of compliance and performance impacts'. *International Journal of Management Reviews*, Vol. 4, No. 4, pp. 335-352.

Demsetz, H and Lehn, K (1985). 'The structure of corporate ownership: causes and consequences', *Journal of Political Economy*, Vol. 93, No. 6, pp. 1155-1177.

DiMaggio, Paul J and Powell, Walter W (1983). 'The iron cage revisited: institutional isomorphism and collective rationality in organizational fields', *American Sociological Review*, Vol. 48, (April), pp. 147-160.

Filatotchev, Igor (2007). Corporate Governance and the Firm's Dynamics: Contingencies and Complementarities. *Journal of Management Studies*, Vol. 44, No. 6, pp.1041-1056.

Filatotchev, Igor (2008). Developing an organizational theory of corporate governance: comments on Henry L. Tosi, Jr. (2008) "Quo Vadis? Suggestions for future corporate governance research". *Journal of Management & Governance*, Vol. 12, No. 2, pp.171-178

Financial Reporting Council (2010). Corporate Governance Code (Combined Code). June 2010. London: Financial Reporting Council, (June).

Gompers, Paul, Ishii, Joy, and Metrick, Andrew (2003). "Corporate governance and equity prices". *Quarterly Journal of Economics*, Vol. 118, February, pp. 107-155.

Lin, Peng, Röell, Ailsa. (2008) Manipulation and Equity-Based Compensation. *American Economic Review*, Vol. 98, No.2, pp. 285-290

Main, Brian G.M, Berry, Gareth, Neate, Jeff and Wright, Vicky (2008). "The potential for backdating executive share options in the UK. The length of a footprint – does it matter?". University of Edinburgh Business School, Centre for Financial Markets Research Working Paper 08.01, (July).

Mallin Christine (2007) Corporate Governance Update. *Corporate Governance: An International Review*; Vol. 15, No. 3, pp. 494-497.

Peasnell, K.V., Pope, P. F., and Young, S. (2000) 'Accrual Management to Meet Earnings Targets: UK evidence Pre- and Post-Cadbury', *British Accounting Review*, Vol. 32, pp. 415-445.

Scott, Richard W. (2001). *Institutions and Organizations*. 2nd ed., Thousand Oaks, California: Sage Publications.

Scott, Richard W. (1991) 'Unpacking institutional arrangements'. In Walter W. Powell and Paul J. DiMaggio (eds.) *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago Press: pp. 164-182.

Seidl, David (2007) Standard setting and following in corporate governance: an observation-theoretical study of the effectiveness of governance code". *Organization*, Vol. 15 No. 5, pp. 705-727.

Selvaggi, Mariano and Upton, James (2008) "Governance and performance in corporate Britain: Evidence from the IVIS colour-coding system". ABI Research Paper 7, Association of British Insurers, London (February).

Shleifer, Andrei and Vishny, Robert W (1997). 'A survey of corporate governance', *Journal of Finance*, Vol. 52, No. 2 (June), pp. 737-783.

Stiles, Phillip and Taylor, Bernard (1993) 'Benchmarking Corporate Governance: The Impact of the Cadbury Code', *Long Range Planning*, Vol. 26, pp. 61-71.

Kin Wai Lee, Baruch Lev, Gillian Hian Heng Yeo. (2008) Executive pay dispersion, corporate governance, and firm performance. *Review of Quantitative Finance and Accounting*, Vol. 30, No.3, pp.315-338.

Weir, Charlie and Laing, David (2000) 'The Performance-Governance Relationship: The Effects of Cadbury Compliance on UK Quoted Companies' *Journal of Management and Governance*, Vol. 4, No. 4, pp. 1385-3457.

Williamson, Oliver E. (1996) *The Mechanisms of Governance*. New York: Oxford University Press, 1996.

Table 1

Distribution of each of the 100 companies' average vesting experience under various footprint lengths

	N	Range	Minimum	Maximum	Mean
DEL_1_month_mean	100	.03	-.01	.01	.0000
DEL_3_months_mean	100	.06	-.03	.03	.0000
DEL_6_months_mean	100	.12	-.07	.05	.0000
DEL_12_months_mean	100	.22	-.12	.10	.0000

KEY:

DEL_1_month_mean = difference in average vesting [1-month footprint – 1-day footprint]

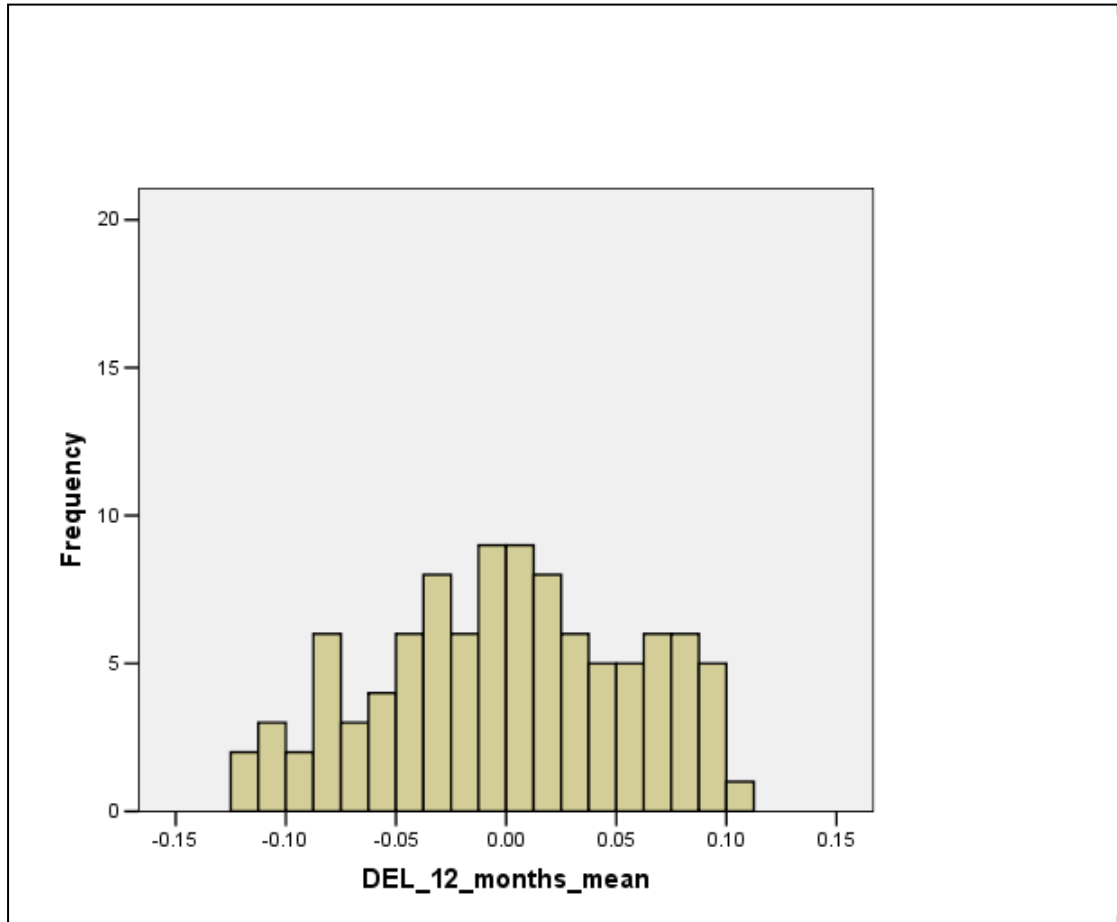
DEL_3_months_mean = difference in average vesting [3-month footprint – 1-day footprint]

DEL_6_months_mean = difference in average vesting [6-month footprint – 1-day footprint]

DEL_12_months_mean = difference in average vesting [1-year footprint – 1-day footprint]

Chart 1

Distribution of change in average vesting in moving to 1-year Footprint from 1-day Footprint (Rank-test vesting).



N = 100; Range = .22; Minimum = -.12; Maximum = .10; Mean = .0000; Std. Dev. = .05688

Chart 2

1-day Footprint versus Best Available (Relative-Rank test)

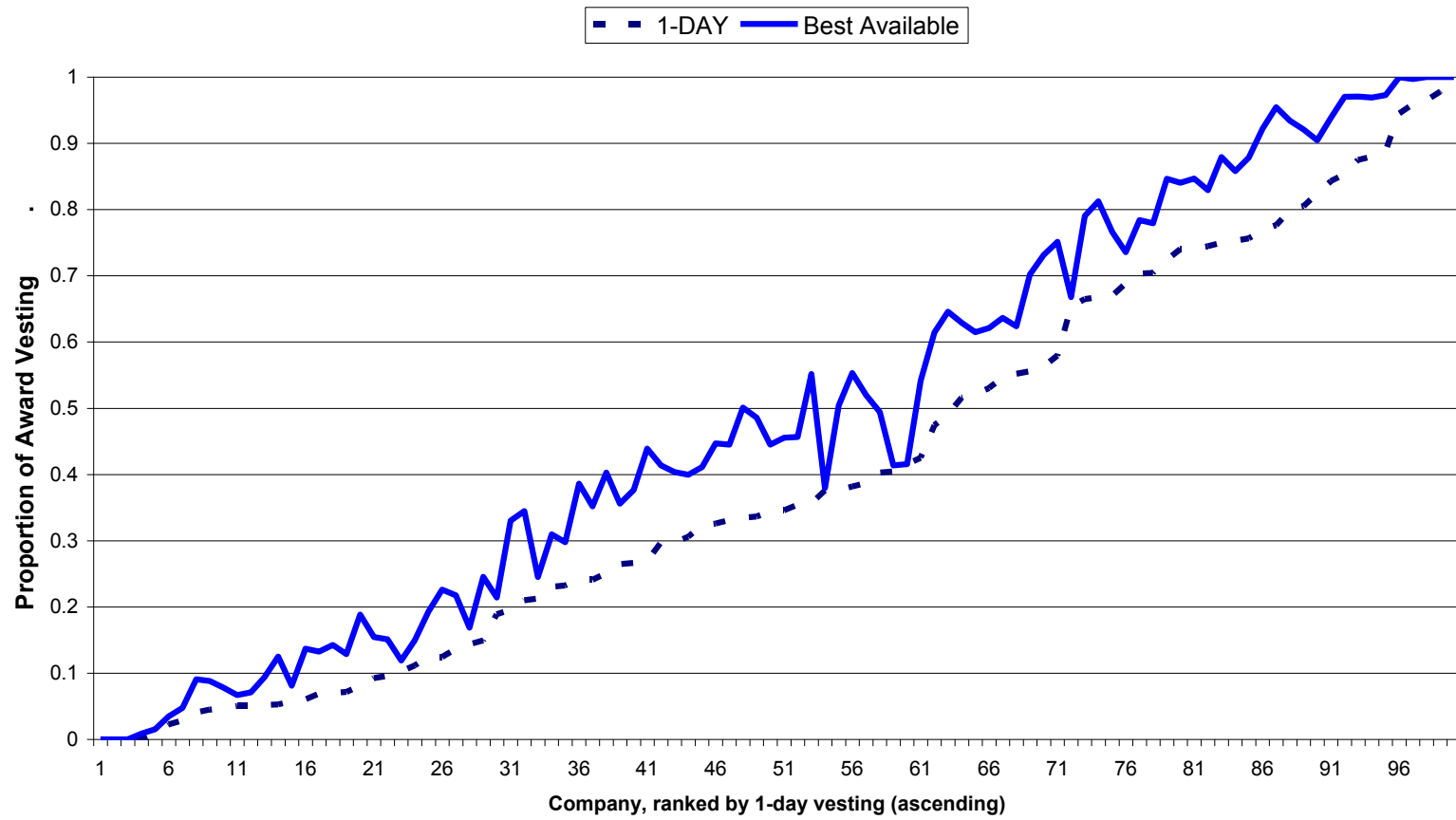


Chart 3

Maximum Potential Gain by Varying Footprint Length

