A GOVERNANCE PERSPECTIVE ON EXECUTIVE OPTIONS PLANS – REFLECTIONS ON SOME AUSTRALIAN EMPIRICAL EVIDENCE

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Abstract

The question of corporate governance has rarely if ever enjoyed greater prominence than that accorded to it at present. Significant changes to governance regulations and requirements have transpired within a comparatively brief time period. In Australia, ongoing reform to corporate law via the Corporate Law Economic Reform Program (CLERP), changes to ASX listing rules and the formation of the ASX Corporate Governance Council (as a sample of examples) have reflected developments internationally. These include the passage of the Sarbanes-Oxley Act of 2002 in the United States and the completion of the Higgs and Smith reports into governance in the United Kingdom. An element common to the refreshed focus on corporate governance in each of these jurisdictions is a close focus on accounting, financial reporting and auditing practices. Within the context of this sub-debate, the question of the most appropriate accounting and financial reporting treatment for executive options has received a great deal of publicity. In addition, a growing body of literature has presented findings in relation to the behavioural responses apparently evinced as a result of the growing tendency for executive compensation packages to include a material options based component. Many of these findings are disquieting, since they suggest that a tool widely believed to be a positive contributor to the resolution of classic principal agency tensions and thus to good corporate governance, the option, may in fact in many cases be producing the opposite effect. We explore these findings, and use them as a basis for theorising about and commenting on empirical data we report within this paper in relation options holdings and holdings concentrations in Australia. We find that the use of options as a component of executive remuneration in large listed corporations in Australia grew materially between 1997 and 2002 and that the growth in the award of options also coincided with a significant degree of concentration in the ownership of those options in the hands of a small cadre of board members and senior executives. We conclude that this phenomenon, to date essentially unexplored in the literature, has significant implications for the quality of governance outcomes within firms which use options as an element of their incentive and remuneration systems.

Keywords

Corporate Governance, Executive Options, Incentive Compatibility
1 Introduction

Three closely related phenomena have caught the imagination of capital market participants, commentators and regulators since the turn of the millennium. The umbrella concept of this trinity might be described as a growth in attentiveness to the desirability of effecting reforms to corporate governance practices (DiPiazza and Eccles, 2002). Nestled beneath lies a renewed attentiveness to creative and opaque financial accounting and reporting practices (Mulford and Cominskey, 2002; Rezaee, 2002; Schilit, 2002). The third element of fascination, a subset of the second, is the particular emphasis which has been placed in recent times on the reform of accounting and financial reporting practices relating to options granted to employees as part of their total compensation - executive options to use a convenient shorthand (Meulbroek, 2001; Coulton and Taylor, 2002).

In this paper, rather than focusing on the technical aspects of the question of appropriate accounting and financial reporting treatment for executive options, we examine the phenomenon from a governance standpoint. Specifically, we argue that though the award of options to executives and employees has been predicated on the tendency of this course of action to mitigate agency problems brought about by the divide between management and control which characterises modern diffusely held public corporations (Watts and Zimmerman, 1986), the adoption of large scale option based compensation potentially introduces a range of undesirable incentive compatibility problems to the firm governance equation.

To achieve this goal, the paper proceeds as follows. Section 2 examines aspects of recent changes to corporate governance frameworks in Australia and other
jurisdictions, and argues that executive options represent a specific form of governance problem which may to date have received inadequate attention. We underline this argument by presenting empirical data on the growth in both the number of large Australian listed corporations which had options plans in place between 1997 and 2002 and the magnitude of those plans.

Section 3 examines the growing body of evidence relating to incentive problems associated with the use of executive options plans by employer corporations as a means of highlighting the nature and magnitude of the governance problem. In section 4 of the paper we present empirical evidence on the concentration of options ownership by the senior executives and directors of a sample of large listed Australian companies. The data drawn upon is from the years 1997 through 2002 inclusive, and demonstrates a material level of concentration of ownership during the period under investigation.

In section 5 we discuss our contention that the type of incentive problems described in Section 3 of the paper are likely to be exacerbated in situations where holdings of executive options are concentrated into the hands of a small cabal of senior executives, a phenomenon we label the “high holdings concentration problem”. We suggest that where this problem exists, recipients of options have both the motive and the means to engage in gaming behaviour ultimately to the detriment of the majority of shareholders, and should therefore be treated as a distinct and serious governance question.
2 Executive Options and the Corporate Governance Landscape

The subject of corporate governance is presently enjoying great prominence. Poor governance practices appear to have become the lightning rod for blame in relation to a portfolio of high profile corporate collapses including the (now) usual suspects such as Enron, Worldcom, Global Crossing, HIH and more recently, Parmalat. It is therefore understandable that policy makers in Australia and elsewhere have reacted with considerable vigour (not necessarily to be equated to effectiveness or rationality) in an attempt to remedy ills ranging from board structure and relationship with management, to financial reporting and disclosure requirements to audit independence.

Whether these initiatives are shown by history to amount to attacks on systemic weaknesses or fail to adequately address this dimension, as some authors argue represents the best means of characterising policy responses to similar corporate collapses in earlier times (see for example: Clarke, Oliver & Dean, 1997), remains to be seen. Whatever verdict history returns, the present is certainly characterised by change. In Australia, the CLERP\(^1\) 9 program represents a key vehicle for reform of corporate law almost certainly inspired in large part as a means of addressing a range of practices perceived as unacceptable both locally and internationally over the past few years. The key principles behind CLERP are market freedom, investor protection, and quality disclosure to the market of relevant information. The most significant changes to be brought about by CLERP 9 are:

- mandatory audit committees for top-500 listed entities\(^2\);

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\(^2\) Proposal 8.
• audit committees will be responsible for managing auditor independence and the provision of non-audit services by external auditors³;
• external auditors will be required to report to ASIC any attempt to coerce, influence, manipulate or mislead them⁴;
• the Financial Reporting Council will oversee auditor independence requirements⁵;
• a former audit partner may not become a director of a client for 2 years⁶;
• directors will need to disclose directorships of other companies to shareholders⁷;
• whistleblowers will be protected against retaliation in employment⁸;
• the maximum civil penalty for breaching the continuous disclosure rules will increase from $200,000 to $1 million⁹;
• the Australian Securities and Investments Commission (ASIC) will be given the power to impose financial penalties and issue infringement notices for breaches of continuous disclosure rules¹⁰; and
• Australia will adopt International Accounting Standards for reporting periods after 1 January 2005¹¹.

In addition to CLERP 9, a range of other institutions and factors have influenced a changing environmental background for governance. One institution which has played a significant role in this transformation of the governance landscape is the Australian Stock Exchange (ASX). In August 2002 the ASX convened a Corporate Governance Council to develop recommendations that reflect international best practice. The Council is comprised of representatives of 21 groups from a variety of business backgrounds and perspectives, including:

³ Proposal 7.
⁴ Proposal 33.
⁵ Proposal 1.
⁶ Proposal 4.
⁷ Proposal 40.
⁸ Proposal 35.
⁹ Proposal 21.
¹⁰ Proposal 20.
¹¹ Proposal 14.
The size, complexity and operations of companies differ, and so flexibility must be allowed in the structures adopted to optimise individual performance.” (ASX 2003)

Unsurprisingly, the release of the Council’s guidelines was greeted with some controversy. In some quarters, the guidelines were criticised for being de facto laws, developed in secret, too restrictive, misleading, and lacking a cost/benefit analysis; while at the same time other commentators argued that there was no basis for this form of complaint given the relative ease with which compliance could be achieved (Buffini, 2003; Durie, 2003; Turnbull, 2003). The Council will periodically review the guidelines in future, to ensure that they stay in step with the commercial environment.

In addition to the foregoing, the ASX also influences governance, at least as practised by listed corporations, via the promulgation and enforcement of its listing rules. On 1
January 2003, a range of new Australian Stock Exchange Limited (ASX) Listing Rules became active, with the intention of enhancing and clarifying the continuous disclosure framework (ASX 2002: Para 1.1). The continuous disclosure framework is aimed at ensuring a fully informed market, and ensuring that there is no inequity in access to relevant information that could lead to disadvantage for some investors (ASX 2002: Para 2.1). The changes include a new rule giving ASX the power to determine that company information is no longer confidential\textsuperscript{12}, the requirement for companies to release information to correct or prevent false rumours\textsuperscript{13}, and a provision which enables ASX to publish correspondence between it and a company if necessary for an informed market\textsuperscript{14}.

A final recent influence on Australian corporate governance worthy of brief note is the HIH Royal Commission. On 16 April 2003, Justice Neville Owen tabled the final report of the Commission, whose brief it was to find out why the company collapsed and whether the actions of the company’s directors and senior executives had been at fault. The Commission made 52 adverse findings against individuals and companies, and recommended that legal action be taken against 13 executives of the HIH group. Part of the final report addressed corporate governance issues, and made two formal recommendations in relation to the regulatory framework:

- that the Corporations Act and the ASX Listing Rules be amended to force appropriate disclosure of executive remuneration\textsuperscript{15}; and
- that the duties of company officers should be clarified and extended\textsuperscript{16}.

\textsuperscript{12} Listing Rule 3.1A.
\textsuperscript{13} Listing Rule 3.1B.
\textsuperscript{14} Listing Rule 18.7A.
However, Justice Owen pointedly avoided making further recommendations given the ASX Corporate Governance Council’s concurrent role in putting forward best practice recommendations.

In other jurisdictions, interest in corporate governance and policy reform relating to this matter has also been high. Two influential reports, one focusing on the role and effectiveness of non-executive directors (the “Higgs Report”) and another focusing on the functions of audit committees (the “Smith Report”) have contributed significantly to recent corporate governance reforms in the United Kingdom (Higgs, 2003; Smith, 2003). Meanwhile, the most significant change in U.S. corporate law in many decades was effected via the passage, in 2002 of the Sarbanes-Oxley Act (Lawrence, 2003). Some of the most significant changes brought about by the passage of this Act into law include:

- listed companies must satisfy audit committee requirements, including the rule that the audit committee be comprised solely of independent directors\(^{17}\);
- a new Public Company Accounting Oversight Board will have investigative and enforcement powers in relation to its role as accounting profession watchdog\(^{18}\);
- registered public accounting firms will be prohibited from offering various non-audit services\(^{19}\);
- public companies must disclose “in plain English”, and “on a rapid and current basis” material changes in their financial condition and other significant company news\(^{20}\);
- new disclosure obligations in relation to a range of matters, including off-balance sheet transactions, pro forma financial information, management

\(^{17}\) Section 301.
\(^{18}\) Section 101.
\(^{19}\) Section 201.
\(^{20}\) Section 409.
assessment of internal accounting controls and the adoption of, or any change in, a code of ethics for senior financial officers\textsuperscript{21}, and

- certain corporate officers must reimburse the company for any bonus received in the event of accounting restatements due to failure to comply with financial reporting rules\textsuperscript{22}.

Though the Sarbanes-Oxley act is a piece of U.S. domestic legislation, its impact has by no means been restricted to that jurisdiction (Brewster 2003: 275 – 276). A recent example of the extraterritorial effect of the Act has been provided in the wake of the scandal surrounding unauthorised foreign currency options trading by a small group of traders at the National Australia Bank (NAB), resulting in losses totalling approximately AUD $360 million. During the enquiry process which followed hard on the heels of public acknowledgement by the bank of the unauthorised trading activity, it was revealed, inter alia, that a number of staff from its auditor, KPMG, had been working on secondment within the bank for extended periods over approximately three years. Though this took place in Australia, the NAB’s dealings with its auditors still falls foul of Sarbanes-Oxley prohibitions on the secondment of audit staff to client firms in either employee or management roles, the link between activity taking place in Australia and a U.S. legislative pronouncement being the NAB’s fundraising activities and listing status in U.S. capital markets (Oldfield and Cornell 2004).

Though the details of the responses made to perceived governance deficiencies in each of the three jurisdictions discussed above have differed, the similarities are striking, arguably for two main reasons. First, the de facto extra-territorial impact of

\textsuperscript{21} Section 409.
\textsuperscript{22} Section 304.
the highly prescriptive Sarbanes-Oxley discussed above means that there is likely to be a contagion effect of rule based modifications to governance structures and systems wherever there are significant concentrations of organisations tapping directly into U.S. public capital markets. Second, there seems no reason to believe that governance regulation in particular is any more immune to the forces of institutional isomorphism than in other fields of policy making (for example economic management policy, social welfare policy, health care policy and educational policy) where the phenomenon is well documented in both analytical and empirical literature (Meyer and Rowan, 1977; DiMaggio and Powell, 1983; Dolowitz and Marsh, 2000). Whereas the main thrust of the governance changes discussed above have had an essentially outward facing orientation (as exemplified by reconfigurations of auditor interactions with clients and former clients as well as changes to the financial reporting landscape), many key governance problems are almost exclusively internally rooted, and have thus received less attention. The use of options to remunerate executives provides a case in point. The governance debate relating to these instruments has focused squarely on the issue of financial reporting, an externally oriented governance question, but has remained relatively silent on the internally oriented governance questions.

Thus the heat and fire of the debate has focused on what is in many respects the relatively peripheral question of whether or not options granted to executives ought be expensed through the profit and loss statement, but essentially ignored matters ultimately more germane to the improvement of governance such as requirements for pre-vesting performance hurdles to accompany the grant of options (Clawson and Kline, 1997), quarantining market wide returns from rewards available to executives.
in receipt of options (Akhibe et al, 1996), restricting the capacity of option-holders to engage in third party derivatives contracts to modify or remove their risk exposure (Ali and Stapledon, 2000) and curtailing practices such as re-loading\textsuperscript{23} (Harper, 2002). It is because of the omission of policy initiatives on issues such as these that we earlier characterised the question of the governance aspects of executive options programs as having lacked adequate attention. Yet over recent periods, the use of executive options plans, both in terms of the number of organisations implementing them and the aggregate number of options over shares the subject of such plans has shown considerable growth. This is demonstrated by the data set out in Tables 1 and 2 below, collected from a sample of large capitalisation listed Australian corporations between 1997 and 2002.

\begin{table}[h]
\centering
\caption{Outstanding options by year, 1997-2002}
\begin{tabular}{|c|c|c|}
\hline
Year & No of companies in sample\textsuperscript{24} with plans & Total outstanding options at end of financial year \\
\hline
1997 & 52 & 441,919,000 \\
1998 & 58 & 573,101,000 \\
1999 & 59 & 627,698,000 \\
2000 & 61 & 772,103,000 \\
2001 & 62 & 821,366,000 \\
2002 & 62 & 967,029,000 \\
\hline
\end{tabular}
\end{table}

\textsuperscript{23} The practice of reloading involves the cancellation of pre-existing options issued to executives accompanied by simultaneous issue of an equivalent quantity of options with lower exercise prices, usually with the immediate effect of causing the recipient’s options to be brought back into the money. In general, the recipient pays no consideration (other than the tendering of the old options) for the benefit of this transaction.

\textsuperscript{24} Total sample size was 64 Australian publicly listed corporations drawn from the top 100 by market capitalisation.
Table 2
Number of companies in sample in which options held by Chair, CEO, Executive Directors and Senior Executives
1997-2002

<table>
<thead>
<tr>
<th>Year</th>
<th>No of companies in sample with options plans</th>
<th>No of companies in which options held by:</th>
</tr>
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<td>1997</td>
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<td>1998</td>
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<tr>
<td>2002</td>
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The data demonstrate growth in the application of options plans on several dimensions. The proportion of companies in our sample with options plans grew from 81.25% in the first year for which we collected data (1997), to 96.875% of our sample in the final year for which we collected data (2002). Similarly the period under examination saw growth in options outstanding under plans adopted by companies within our sample of 118%. At the commencement of the period under examination, non-board senior executives participated in some form of option-based remuneration in approximately 73% of the companies in our sample, but by the conclusion of the research period, this had grown to approximately 94%. Thus the data clearly reveals a significant increase in the scale and scope of the application of option packages as an element of executive remuneration in Australian listed
companies. However, while the scale of use of options as components of overall executive compensation packages has grown substantially, the dimensions of the consequences of this trend have not been systematically analysed from a governance perspective. We set out the results of some recent international research relating to the impact of options packages in use in section 3 below as a means of demonstrating the significance of options and their utilisation for the quality of corporate governance.

3 Executive Options and Incentive Problems

There is a strong link between the precepts of agency theory based models of conflicts between principals and agents, beginning with influential work such as that by Jensen & Meckling and Holstrom, and the justification of the use of options and other equity linked devices as a significant element of executive remuneration. From an agency theory perspective, managers whose wealth is not tied (or tied only to a limited extent) to the value of the firm by which they are employed, are likely to be motivated by a range of factors divergent from the interests of the owners of the firm.

The use of options, it is therefore argued, represents an effective means of overcoming many of these difficulties by directly tying managerial wealth outcomes to share price, and thus to the wealth outcomes of a firm’s body of shareholders at large. That at least, is the theory. However, there is growing evidence that share options schemes are associated with a range of dubious behaviour on the part of executives.

25 It has been estimated in some earlier literature, that the degree to which a CEO’s wealth is sensitive to changes in the market capitalisation of the firm by which they are employed, in the absence of strong equity holdings, or equity based exposures such as those created by options, is very low. For example, in a seminal article by Jensen & Murphy, the authors estimated that the sensitivity of a median CEO’s salary and bonus payments to a $1000 change in firm market capitalisation was 6.7 cents. See; Jensen & Murphy 1990.
Consider first the substantial volume of shares repurchased by companies. Yermack (2001) cites evidence that repurchase activity rises with the option holdings of managers. The repurchase of shares may increase firm value when acquired at prices that are below their true economic value, or when there are no alternative investment opportunities that would be expected to earn the firm’s cost of capital. Exactly why there should be a positive association between repurchase activity and option-based compensation schemes is uncertain.

One explanation often put forward is that firms wish to limit the dilution that would arise for existing shareholders when shares are issued to employees upon exercise of their options. Shares repurchases reduce the number of shares outstanding and act to offset shares issued to employees. If we are to believe that options create sufficiently strong incentives that employees are led to create value over and above that which would have been achieved had there been no options on offer, then we must question the basis of this explanation. Dilution will not be detrimental to existing shareholders if the value created by employees (arising directly from the stronger incentives offered by options) is matched by the value of option compensation realised by employees. Put differently, there is no need for management or shareholders to be concerned with dilution in earnings per share if the increase in shares associated with the exercise of employee options is matched by an increase in expected earnings, where the latter is created by the greater efforts of incentivised employees.

If the dilution argument does not hold, why else might there be an association between share repurchase activity and employee option schemes in firms? If
management possess information advantages not available to shareholders, a share repurchase may be timed to enable executives to achieve substantial gains on the exercise of their options. Specifically, announcements of a share repurchase typically result in an increase in share price. There are a number of possible reasons for this - perceptions that the firm is undervalued and management seek to return the firm to its ‘true net worth’, premiums offered to encourage sale or offset capital gains taxes, reduction in supply of shares outstanding – to name a few. If management time the repurchase of shares to coincide with the vesting of their options, any increase in share price arising from the transaction may result in a substantial increase in their remuneration. The issue at hand, however, is the degree of information asymmetry between management and shareholders regarding the motives of the repurchase and the sustainability of the increase in share price. Shareholders are unlikely to possess the same insight as managers into the opportunity cost associated with a share repurchase, this being the return on alternative investment opportunities. Any gain in share price arising from the repurchase of shares may be temporary, and indeed, the transaction may have negative consequences for long-term firm value if funds that could have been invested in valuable projects have been instead diverted to repurchasing shares. Share repurchases may represent a valuable tool for executives who wish to engineer an immediate gain in their option remuneration. This is supported by Aboody and Kasnick (2001), who attribute a significant association between the choice of cash payout policies and CEO stock option compensation to CEOs’ opportunistic behaviour in response to the structure of their compensation, rather than to a more general need to repurchase shares to support their firms’ stock option plans.
In an earlier paper, Aboody and Kasnick (2000) investigate whether CEOs manage the timing of their disclosures around stock option awards. Their findings suggest that CEOs make opportunistic voluntary disclosure decisions that maximise the value of their share option compensation. They find that CEOs manage shareholders’ expectations around award dates by delaying good news and rushing forward bad news. The result is that share prices fall prior to award dates, allowing at-the-money options to be awarded at lower exercise prices. Good news, however, is held off until just prior to vesting dates, allowing an immediate increase in option value, and ultimately, executive remuneration. The result is shareholders have been on a round ticket to nowhere, while executives have gained considerably in terms of the value of their compensation. The timing of voluntary disclosures thus affords the opportunity for management to expropriate higher remuneration from the firm without there necessarily being an increase in value for existing shareholders.

A further example of opportunistic behaviour on the part of management relates to the payment of dividends. Lambert, Lanen and Larcker (1989) examine changes in the cash dividend distributions of firms subsequent to the adoption of executive option plans, and find that the adoption of such plans induces top executives to reduce cash dividends relative to the expected level of dividends that would have prevailed in the absence of the plans. This finding is consistent with the notion that dividends negatively affect the value of stock options given executive stock options generally do not share in dividends paid by the firm. By reducing dividend payments, the underlying equity base of the company will increase, preserving the value of options held by executives. Aboody and Kasnick (2001) also suggest that CEO stock option compensation plans influence the composition of firm’s cash payouts in the form of
dividends and share repurchases, with executives selecting cash payout policies to avoid the adverse effect of cash dividends on stock option values.

Paying executives in the form of options also appears to increase their propensity to gamble the firm’s assets. Early researchers tended to view in a positive light the potential for high-powered incentive contracts to increase managerial risk-taking. Their premise was that executives possessed a self-serving incentive to decrease the volatility of the firm, arising from an inability to diversify personal income sources. Specifically, greater volatility in the performance of the firm increased the likelihood that the firm reach financial distress, with the consequence of shortened tenure for managers and executives. This contrasted with shareholders, who could relatively costlessly reduce their exposure to the total risk of the firm by diversifying their holdings across many firms, and who, as a consequence, would prefer greater risk-taking on the part of their managerial agents.

Manifestations of high risk-aversion on the part of managers might be via lower levels of leverage than considered optimal (given the cost and tax advantages of debt), overinvestment in low-risk projects and underinvestment in high risk, but positive-value projects. Given that share option grants offer executives the opportunity to participate in future firm upside, researchers hypothesised that managers earning some percentage of their income in the form of share options would be more likely to engage in risk-taking activities, thus better aligning their incentives with those of diversified shareholders.

In one study, Agrawal and Mandelker (1987) examined the variance in stock returns for firms that announced either capital investments or changes in financial leverage –
activities likely to influence the total risk of the firm - and compared this data with share option holdings among managers in these firms. They found that executive holdings of shares and share options were larger in firms in which the variance in returns increased in response to investment announcements, relative to those firms where the variance in returns decreased. Similarly, they found that share option holdings were larger in firms that engaged in leverage-increasing transactions. They conclude that their findings are consistent with the hypothesis that executive holdings of common stock and options in the firm encourage risk-taking and thus have a role in reducing managerial incentive problems.

The conclusion of these authors is not surprising, given the premise upon which their work is based. These studies see the incentive problem between principal and agent as high risk-aversion on the part of the agent (managers) and risk-neutrality on the part of the principal (shareholders). Share options are seen as the vehicle by which executives can be incentivised to take greater risk. But at what point is tangency reached between principal and agent with respect to risk preferences? As both the volume of stock option schemes and the concentration of options in the hands of senior executives have escalated (see sections 2 and 4), there must be a point where risk-taking on the part of executives becomes sub-optimal from the perspective of shareholders, precisely because executives have little to lose (fair value options are granted at no cost to executives) while shareholders can lose their entire investment if the company experiences severe financial distress. We believe the growing list of corporate casualties associated with high risk/overpriced acquisitions is testimony to this point.
It seems appropriate at this juncture to distinguish between risk aversion and loss aversion. If managers are risk averse they require suitable compensation for taking risk. Here share options may be an appropriate mechanism, given managers may participate in any unexpected upside arising from their investment decisions. If managers are remunerated in terms of a flat wage structure, the risk they face is a prolonged downturn in earnings, leading to potential dismissal from the firm (Milgrom and Roberts, 1992). If this is the case, then it may be loss aversion, not risk aversion that is at the heart of the principal/agent problem. The difference between loss aversion and risk aversion may appear subtle with respect to terminology, but the implications are significant from the perspective of risk taking in the firm. Loss aversion implies that managers become risk seeking when confronted with performance below hurdle.

When confronted with losses or below-target performance, managers exhibiting loss aversion are prepared to take large risks in order to improve the likelihood of achieving target (Schmidt and Zank, 2002). While share options allow the managers to participate in future gains in share price, they do not eliminate downside in the sense that risky activities that materially increase earnings volatility may still result in corporate distress and reduce management tenure. Indeed, if managers are loss averse, the potential gains from risky decisions are outweighed by the potential losses, and managers will have an incentive to increase the riskiness of the firm’s assets when performance is perceived to be falling below target. Existing shareholders, on the other hand, may not be compensated for changes in the risk profile of the firm’s assets.
The assumption of risk neutrality on the part of shareholders can also be challenged. The existence of market imperfections means shareholders may care more about total firm risk than suggested by the neoclassical framework, which has at its core the assumption that diversified shareholders care only about the systemic risk of their portfolios. Shapiro and Titman (1986), for example, show that financial distress costs and the existence of non-linear tax schedules result in an inverse relationship between the total risk of a firm and its expected cash flow. This makes reductions in total risk valuable even for perfectly diversified shareholders.

In a recent study, Chen (2002) examines the impact of stock options on the risk profile of projects undertaken by firms. He tests the ratio of post-option award volatility of return on investment to pre-option award volatility of return on investment, and finds that companies that grant executive stock options demonstrate greater volatility in investment returns compared to those who do not. This result should not be surprising given options are more valuable in volatile climates. Chen concludes that executives undertake more riskier projects after they are awarded stock options. The matters set out above are of even greater moment where the bulk of options held by employees within a firm rest in the hands of a small cabal of senior executives, the same group with the power to change financial and operating policies to suit their, but not necessarily the shareholders’ interests (Blasi et al, 2003).

In addition to these items of concern, it is not at all clear that the use of executive options has actually historically resulted in executives having as great a proportion of their wealth tied to the firms for which they work as might at first glance appear to be likely to be the case. Large sample empirical evidence gathered in the United States
suggests that, at least in that jurisdiction, when managers receive new options, they tend to reduce the risk exposure so created by selling shares in the firm that they already own.

Further, when executives exercise options, the US evidence suggests that they tend to sell nearly all stock so acquired (Ofek and Yermack, 1997). So, if one means to resolving the types of principal-agent conflicts which are argued by option protagonists to justify the award of significant quantities of these instruments to executives is to engineer an increase in overall exposure to employer firm equity by executives, the empirical record suggests that it is dubious whether the issue of options is in fact achieving this goal.

Even prior to the vesting date associated with options issued to employee executives, it is possible that individual executives may be engaging in a range of private contract based devices to either limit or remove the risk to which they might otherwise have been exposed as a result of their receipt of options. Over recent years, financial institutions have engineered a range of mechanisms effectively allowing managers to realise value from and or reconfigure the risk profile of their options holdings, including fences and zero cost collars (Ali and Stapledon, 2000; Bettis et al, 1999; Ellis, 1998).

It is not at all clear that issuing organisations in Australia have had sufficient presence of mind to either proscribe the use of such devices by executives, or at least to force them to disclose their use to the board and seek ratification. Indeed, it seems that under the present Corporations Act and ASX listing rules, there is no present means
to enforce external disclosure of the resort to such devices by executives (Carlin and Ford, 2003).

In addition to the foregoing, it should not be assumed that the risk profile of executives in receipt of options and that of shareholders is symmetric. In most cases, executives in receipt of options bear less risk in the context of poor performance than ordinary shareholders. If unsuccessful decision-making leads to declines in share prices, shareholders continue to lose until the decline ultimately reaches a conclusion. Executives in receipt of options on the other hand, face a limited downside, since beyond a certain level of decline in share price, their options are essentially worthless (though, they may rise phoenix like if they have sufficiently long time prior to expiry and the underlying share price rebounds).

Further, in many cases, executives will be given an opportunity to be issued with repriced options in lieu of their now worthless pre-existing instruments, in a process known as “reloading” (Harper, 2002). This in effect means cashing in old instruments with higher exercise prices as the only consideration paid for receiving new instruments with much lower exercise prices.

We take the view that repricing or “reloading” is like reducing the pass rate in a “fair” examination simply because the group performed poorly. As such, it represents a particularly invidious phenomenon, one which gives the lie to the rather naive argument that the grant of options to executives results in substantial alignment of their incentive and risk sets with that of the shareholders as a general body.
In all, holding aside the rhetoric, there is a great deal of room for improvement in the design of the contracts via which options are transmitted to executives, the disclosure requirements surrounding the issue and tenure of such instruments, and the governance arrangements set in place to ensure that the issue of options to executives does promote value creation rather than wealth transfers from the corporators as a whole to a select group of option owning insiders (Saiz, 2003). An additional factor which adds further dimension to the types of incentive and governance difficulties addressed above is the question of options ownership concentration. This phenomenon is discussed and analysed in section 4 below.

4 The Holding Concentration Problem – Data and Analysis

The term “holding concentration” refers to a measurement of the degree to which the ownership of options issued pursuant to an organisation’s executive options scheme is concentrated in the hands of a select group of senior actors, defined in this study to include the board (including executive and non executive members), the chief executive officer, and highest remunerated five non director executives employed by the firm. Thus holdings concentration represents the percentage of outstanding options issued by an organisations held by the group of senior actors defined above. On the basis of disclosures contained within the annual financial statements of listed public corporations, it is possible to gather data on options issuance and holdings to this level of detail.

We calculated concentration rates on the basis of data gathered from our sample of Australian top 100 listed corporations using two methodologies. In the first, we calculated the unweighted arithmetic average holding concentrations by summing the
concentration level we observed in each organisation during a particular year, and dividing by the number of organisations in the sample for that year. This data is set out in Table 3 below.

We also carried out a modified holdings concentration calculation, reported in Table 4 below, in which we adjusted the calculation by weighting those organisations with larger options plans more heavily than those with smaller options plans as measured by the absolute number of options outstanding under an organisation’s plan during a particular year. Arguably, the latter calculation provides a more useful measure of concentration since it scales for size (as measured by number of options outstanding at a particular organisation, though not for the value of those options), and thus lessens the risk that extreme concentrations in a number of organisations with small options plans distorts the interpretability of the overall dataset.

Table 3  
Concentration of option holdings among senior management  
(average holdings by company)  
1997-2002

<table>
<thead>
<tr>
<th>Year</th>
<th>Chairman</th>
<th>CEO</th>
<th>Executive Director</th>
<th>Non Executive Director</th>
<th>Board Senior Executive</th>
<th>Non Board Senior Executive</th>
<th>Total Senior Executives(^{26})</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>14%</td>
<td>31%</td>
<td>15%</td>
<td>12%</td>
<td>40%</td>
<td>7%</td>
<td>40%</td>
</tr>
<tr>
<td>1998</td>
<td>14%</td>
<td>26%</td>
<td>15%</td>
<td>10%</td>
<td>34%</td>
<td>12%</td>
<td>42%</td>
</tr>
<tr>
<td>1999</td>
<td>10%</td>
<td>20%</td>
<td>11%</td>
<td>8%</td>
<td>26%</td>
<td>11%</td>
<td>38%</td>
</tr>
<tr>
<td>2000</td>
<td>14%</td>
<td>19%</td>
<td>15%</td>
<td>11%</td>
<td>27%</td>
<td>10%</td>
<td>40%</td>
</tr>
<tr>
<td>2001</td>
<td>11%</td>
<td>20%</td>
<td>12%</td>
<td>9%</td>
<td>28%</td>
<td>12%</td>
<td>38%</td>
</tr>
<tr>
<td>2002</td>
<td>9%</td>
<td>17%</td>
<td>14%</td>
<td>10%</td>
<td>24%</td>
<td>17%</td>
<td>40%</td>
</tr>
</tbody>
</table>

\(^{26}\) This is the sum of all board option holdings (irrespective of position on board, executive or non executive status) as well as the holdings of the top 5 non board executives employed by the firm.
Table 4
Concentration of option holdings among senior management
(percentage of total outstanding options)
1997-2002

<table>
<thead>
<tr>
<th>Year</th>
<th>Chairman</th>
<th>CEO</th>
<th>Executive Director</th>
<th>Non Executive Director</th>
<th>Board Senior Executive</th>
<th>Non Board Senior Executive</th>
<th>Total Senior Executives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>2%</td>
<td>11%</td>
<td>7%</td>
<td>1%</td>
<td>20%</td>
<td>1%</td>
<td>21%</td>
</tr>
<tr>
<td>1998</td>
<td>1%</td>
<td>10%</td>
<td>7%</td>
<td>1%</td>
<td>20%</td>
<td>3%</td>
<td>23%</td>
</tr>
<tr>
<td>1999</td>
<td>1%</td>
<td>10%</td>
<td>3%</td>
<td>1%</td>
<td>15%</td>
<td>6%</td>
<td>21%</td>
</tr>
<tr>
<td>2000</td>
<td>4%</td>
<td>11%</td>
<td>8%</td>
<td>1%</td>
<td>23%</td>
<td>4%</td>
<td>28%</td>
</tr>
<tr>
<td>2001</td>
<td>4%</td>
<td>11%</td>
<td>8%</td>
<td>1%</td>
<td>23%</td>
<td>5%</td>
<td>27%</td>
</tr>
<tr>
<td>2002</td>
<td>3%</td>
<td>8%</td>
<td>8%</td>
<td>1%</td>
<td>21%</td>
<td>4%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Several observations in relation to the data seem pertinent. First, board holdings dominate those by non board senior executives. This phenomenon is particularly visible in table 4, which is based on weighted calculations of concentration, indicating that there is a particular tendency in organisations with larger options plans for the bulk of outstanding options held by the organisational elite to lie in the hands of those with board positions. For example, in our sample, more than 80% of holdings concentration at senior levels across the period of the study was explained by board holdings. At law it is the board of directors which is responsible for the preparation and sign off of annual financial statements and for the oversight of the firm’s compliance with listing requirements such as the ASX’s continuous disclosure regime. Given the research findings discussed in section 3 above, many of which dealt with matters (such as capital structure and market information flow choices) within the purview of board oversight if not direct control, this finding is interesting and has obvious consequences for the practice of corporate governance.
Similarly, the CEO’s dominance within the context of board holdings represents a signal as to the degree of authority conferred on CEOs in large listed corporations by boards, but also the strength of motivation, good and bad, to implement actions designed to maximise the value of options holdings. In our sample and period of research, approximately half the concentration attributable to directors is attributable to CEO holdings.

Given the focus on the role of non-executive directors in contemporary debates and regulatory initiatives relating to corporate governance, our data pertaining to options holdings by people in this role also seems worthy of note. While unweighted non-executive director holding concentration averaged 10% (around one quarter of total unweighted senior executive concentration for the period between 1997 and 2002), this fell to 1% on a weighted basis, or only around 4% of total weighted senior executive concentration. The data suggests that in general, as might be expected given the desire to reinforce their independent status, non-executive directors do not participate (or do so only marginally) in options based remuneration. However, the fact that the unweighted non-executive director holding concentration so far outweighs the weighted holding concentration suggests that this taboo is broken in a surprising number of cases. One alternative explanation for this pattern within the data is that although such directors might be labelled “non-executive”, a substance over form approach to classification might lead to another outcome or at very least

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27 The data in Table 2 shows that in 1997, of those companies in our sample with options plans, the non executive director participation rate was 21%. This had fallen to 14.5% by 2002, but still represents a surprisingly high level of participation for individuals whose raison d’etre is the exercise of an independent mind at board level.

28 A clear example of this comes from the case of Burns Philp & Co. The board deputy chair, Graeme Hart, owns a majority of the voting equity in the organisation, yet is listed as a non executive director.
give rise to serious questions as to the legitimacy of assuming that non executive status and independence are consonant concepts.

5 Conclusions

Our data suggests a significant degree of holdings concentration in large publicly listed Australian corporations. In the only other published research of which we are aware which touches on this issue, Blasi et al (2003, p. 190) suggest senior executive holding concentration in top 100 U.S. based firms at around 33%. It would therefore seem that at least in aggregate, the Australian experience is similar to that of the United States. To the extent that concentration has been associated with a greater tendency for firms to display shareholder value reducing (but option holder value increasing) behaviour along the lines discussed in section 3, the apparent similarity in concentration levels between the U.S. and Australia might also assist in the interpretation of the applicability of U.S. empirical research results for Australian conditions.

Our rationale for gathering the data reported within this paper and expressing concern about the holdings concentration problem has been based on an logical deduction rather than empirical analysis. Our case at this stage can be thought of as circumstantial rather than direct. We begin with the premise that the existence of options schemes as an element of executive remuneration brings with it the possibility of inducing incentives for behaviour which, while enriching the holder of the option, does nothing for or actually degrades shareholder wealth. Upon examining the literature which examines this possibility, it became clear to us that most of the mechanisms for achieving these unfortunate wealth transfers were within the grasp of only a very select group of actors within an organisation.
Altering capital structure mix, systematic alteration of firm risk profile, the management of information flows between the firm and capital markets, the timing of options issue and vesting and the execution of decisions to engage in reloads are all initiated by a very narrow but powerful constituency within a firm. Yet our data demonstrates that this same constituency stands to gain disproportionately from an inflation of option value. Our basic intuition may therefore be put as simply as suggesting that the narrow decision making constituency holding a disproportionate exposure to outstanding options has both the means and the motive necessary to give effect to actions which endanger shareholder wealth creation and therefore represent poor governance outcomes.

This capacity for action is brought into even sharper relief when considering our surprising findings about the extent to which even non-executive directors participate in options schemes in some of the organisations in our sample. Whether or not this capacity has been brought to bear is an empirical question with which we propose to engage in future research. However, irrespective of additional empirical enquiry, the results reported within this paper stand alone, and serve as a reminder that while the careful design of incentive contracts (for example options packages) represents an important element of governance oversight, so too does the maintenance of a careful watch on the dispersion or concentration of ownership of options issued by firms as part of overall remuneration policy.
References


