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## A GOVERNANCE PERSPECTIVE ON EXECUTIVE OPTIONS PLANS — SOME AUSTRALIAN EMPIRICAL EVIDENCE

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 reforming corporate governance practices (DiPiazza and Eccles 2002). Nestled beneath lies a renewed attentiveness to creative and opaque financial accounting and reporting practices (Mulford and Cominsky 2002, Rezaee 2002, Schilit 2002). The third element, a subset of the second, is the particular emphasis on the reform of accounting and financial reporting practices relating to options granted to employees as part of their total compensation (Meulbroek 2001, Coulton and Taylor 2002).

In this paper, rather than focusing on the technical aspects of the accounting and financial reporting treatment for executive options, we examine the issue from a governance standpoint. We argue that although the award of options to executives and employees has been intended to mitigate agency problems brought about by the divide between management and control which characterises diffusely held public corporations (Watts and Zimmerman 1986), the adoption of large-scale option-based compensation potentially introduces a range of governance problems.

Poor governance practices appear to have become the lightning rod for blame in relation to a portfolio of high-profile corporate collapses including 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 with effectiveness or rationality) in an attempt to remedy ills ranging from board structure and relationship with management to disclosure requirements and audit independence.

Whether these initiatives are shown by history to amount to attacks on systemic weaknesses, or fail to adequately address this dimension, remains to be seen. Whatever verdict history returns, the present is

*The use of options as a component of executive remuneration in large listed corporations in Australia grew materially between 1997 and 2002.*

*This growth coincided with a significant degree of concentration of 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 in firms that use options in their incentive and remuneration systems.*

certainly characterised by change. In Australia, the CLERP<sup>1</sup> 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 brought about by CLERP 9 are:

- audit committees become mandatory for top-500 listed entities;
- audit committees will be responsible for managing auditor independence and the provision of non-audit services by external auditors;
- external auditors will be required to report to ASIC any attempt to coerce, influence, manipulate or mislead them;
- the Financial Reporting Council will oversee auditor independence requirements;
- a former audit partner may not become a director of a client for two years;
- directors will need to disclose directorships of other companies to shareholders;
- whistleblowers will be protected against retaliation in employment;
- the maximum civil penalty for breaching the continuous disclosure rules will increase from \$200,000 to \$1 million;
- 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 rules; and
- Australia adopts International Accounting Standards for reporting periods after 1 January 2005.

In addition to CLERP 9, a range of other institutions and factors have influenced a changing 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 comprises representatives of 21 groups including:

- Australian Institute of Company Directors;

- Australian Shareholders Association;
- Business Council of Australia;
- Association of Superannuation Funds of Australia;
- Law Council of Australia; and
- Group of 100 (representing CFOs of Australia's largest enterprises).

In March 2003 the council released its guidelines for corporate governance best practice. ASX-listed entities will have to comply with the guidelines or explain in their annual report why they have not complied. The principle behind having voluntary guidelines is that there is no single approach to corporate governance that suits all organisations. According to the Australian Stock Exchange: "The size, complexity and operations of companies differ, and so flexibility must be allowed in the structures adopted to optimise individual performance" (ASX 2003).

The guidelines were criticised in some quarters for being *de facto* laws, developed in secret, too restrictive, misleading, and lacking a cost-benefit analysis. 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, to ensure that they stay in step with the commercial environment.

The ASX also influences governance, at least as practised by listed corporations, through its listing rules. On 1 January 2003, a range of new 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 (Listing Rule 3.1A), the requirement for companies to release information to correct or prevent false rumours (Listing Rule 3.1B) and a provision which enables ASX to publish correspondence between it and a company if necessary for an informed market (Listing Rule 18.7A).

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A further noteworthy influence on Australian corporate governance 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:

- that the Corporations Act and the ASX listing rules be amended to force appropriate disclosure of executive remuneration; and
- that the duties of company officers should be clarified and extended.

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 US corporate law in many decades was the passage in 2002 of the Sarbanes-Oxley Act (Lawrence 2003). Changes brought about by this act include:

- listed companies must satisfy audit committee requirements, including the rule that the audit committee comprise solely independent directors;
- a new Public Company Accounting Oversight Board will have investigative and enforcement powers in its role as accounting profession watchdog;
- registered public accounting firms will be prohibited from offering various non-audit services;
- 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;
- new disclosure obligations in relation to a range of matters, including off-balance-sheet transactions, *pro forma* financial information, management assessment of internal accounting controls and the adoption of, or any change in, a code of ethics for senior financial officers; 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.

While Sarbanes-Oxley is a piece of US domestic legislation, its impact has not been restricted to that jurisdiction (Brewster 2003, pp. 275–6). A recent example

of the extra-territorial 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 \$A360 million. During the inquiry into the unauthorised trading activity, it was revealed that a number of staff from its auditor, KPMG, had been working on secondment in the bank for extended periods over approximately three years. Because of the NAB's fundraising activities and listing status in US capital markets, its dealings with its auditors falls foul of Sarbanes-Oxley prohibitions on the secondment of audit staff to client firms in either employee or management roles (Oldfield and Cornell 2004).

Although the details of the responses made to perceived governance deficiencies in Australia, the UK and the US have differed, the similarities are striking, arguably for two main reasons. First, the *de facto* extra-territorial impact of the highly prescriptive Sarbanes-Oxley 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 US 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 other fields of policy-making (for example, economic management, social welfare, healthcare and education) 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 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 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 debate has focused on the relatively peripheral question of whether 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<sup>2</sup> (Harper 2002). Despite the absence of pol-

icy initiatives on issues such as these, the number of organisations implementing executive options plans and the aggregate number of options involved in such plans have shown considerable growth. This is demonstrated by the data set out in Tables 1 and 2, collected from a sample of large-capitalisation listed Australian corporations between 1997 and 2002.

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 of 118% in options outstanding under plans adopted by companies in our sample. At the start of the period, non-board senior executives participated in some form of option-based remuneration in about 73% of the companies, but by 2002 this had grown to about 94%. However, while the use of options in executive compensation packages has grown substantially, the consequences of this trend have not been systematically analysed from a governance perspective.

## EXECUTIVE OPTIONS AND INCENTIVE PROBLEMS

There is a strong link between agency-theory-based models of conflict between principals and agents 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 is tied only to a limited extent) to the value of the employing firm are likely to be motivated by factors divergent from the interests of the firm's owners.

The use of options, it is argued, overcomes many of these difficulties by directly tying managerial wealth to share price, and thus to the wealth outcomes of the firm's shareholders.<sup>3</sup> However, there is growing evidence that share options schemes are associated with a range of dubious behaviour on the part of executives.

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 the shares are acquired at prices 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 on exercise of their options. Share repurchases reduce the number of shares outstanding and act to offset shares issued to employees. If we believe that options create incentives so strong that employees are led to create value over and above that which would have been achieved in the absence of options, then we must question this explanation. 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? If management possesses 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, the an-

**TABLE 1: OUTSTANDING OPTIONS BY YEAR, 1997-2002**

Year	No of companies in sample <sup>6</sup> with plans	Total outstanding options at end of financial year
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

**TABLE 2: NUMBER OF COMPANIES IN SAMPLE IN WHICH OPTIONS HELD BY CHAIRMAN, CEO, EXECUTIVE DIRECTORS AND SENIOR EXECUTIVES 1997-2002**

Year	No. of companies in sample with options plans	No. of companies in which options held by:				
		Chairman	CEO	Other executive directors	Non-executive directors	Senior executives
1997	52	12	36	29	11	47
1998	58	10	39	29	10	52
1999	59	9	44	28	9	56
2000	61	9	49	29	8	58
2001	62	9	45	28	10	58
2002	62	8	46	27	9	60

nouncement of a share repurchase typically results in an increase in share price. There are a number of possible reasons for this — perceptions that the firm is undervalued and management seeks 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 times 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 for 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 instead been 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 *et al* (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 re-

duce 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 firms’ 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 might 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 shareholdings 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 in lower levels of leverage than are considered optimal (given the cost and tax advantages of debt), over-investment in low-risk projects and under-investment 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 on 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, 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 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 that managers may participate in any unexpected upside arising from their investment decisions. If managers are remunerated through 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, 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 below-hurdle performance.

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 is suggested by the ne-

oclassical 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 cashflow. 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, and finds that companies that grant executive stock options demonstrate greater volatility in investment returns than those who do not. This result should not be surprising, given that options are more valuable in volatile climates. Chen concludes that executives undertake riskier projects after they are awarded stock options. This is important where the bulk of options held by employees in a firm are 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 interests, but not necessarily those of the shareholders (Blasi *et al* 2003).

In addition to these concerns, it is not clear that the use of executive options has resulted in executives having as much of their wealth tied to the firms for which they work as might first appear likely. 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 of resolving the principal-agent conflicts which are said to justify the award of significant quantities of options is to engineer an increase in executives' overall exposure to employer firm equity, it seems dubious whether the issue of options is in fact achieving this goal.

Even before the vesting date for options issued to employee executives, it is possible that individual executives may use a range of devices to limit or remove the risk to which they might otherwise be exposed as a result of their receipt of options. Over recent years, financial institutions have engineered various mechanisms effectively enabling managers to realise value from, 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 clear that issuing organisations in Australia have had sufficient presence of mind to prohibit 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 way to enforce such external disclosure (Carlin and Ford 2003).



## THE HOLDING CONCENTRATION PROBLEM

In most cases, executives in receipt of options bear less risk in the context of poor performance than ordinary shareholders. If share prices decline, shareholders continue to lose until the decline ends. Executives receiving options, on the other hand, face a limited downside, since beyond a certain level of decline in share price, their options are essentially worthless.

Further, in many cases, executives are given an opportunity to be issued with repriced options in a process known as "reloading" (Harper 2002). This 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. It is 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 those of the shareholders in general.

There is much room for improvement in the design of the contracts by which options are transmitted to executives, the disclosure requirements surrounding the issue and tenure of such instruments, and the governance arrangements to ensure that the issue of options to executives promotes value creation rather than transferring wealth from the shareholders as a whole to a select group of option-owning insiders (Saiz 2003).

The term "holding concentration" refers to a measurement of the degree to which the ownership of options issued in 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 members (executive and non-executive), the chief executive officer and the five highest-remunerated non-director executives. From disclosures in listed firms' annual financial statements, it is possible to gather data on options issuance and holdings to this level of detail.

We calculated concentration rates for a 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 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.

We also carried out a modified holdings concentration calculation, reported in Table 4, in which we weighted organisations with larger options plans more heavily than those with smaller plans, measured by the absolute number of options outstanding 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

**TABLE 3: CONCENTRATION OF OPTION HOLDINGS AMONG SENIOR MANAGEMENT (AVERAGE HOLDINGS BY COMPANY) 1997-2002**

Year	Chairman	CEO	Executive director	Non-executive director	Board senior executive	Non-board senior executive	Total senior executives <sup>7</sup>
1997	14%	31%	15%	12%	40%	7%	40%
1998	14%	26%	15%	10%	34%	12%	42%
1999	10%	20%	11%	8%	26%	11%	38%
2000	14%	19%	15%	11%	27%	10%	40%
2001	11%	20%	12%	9%	28%	12%	38%
2002	9%	17%	14%	10%	24%	17%	40%

**TABLE 4: CONCENTRATION OF OPTION HOLDINGS AMONG SENIOR MANAGEMENT (PERCENTAGE OF TOTAL OUTSTANDING OPTIONS) 1997-2002**

Year	Chairman	CEO	Executive director	Non-executive director	Board senior executive	Non-board senior executive	Total senior executives
1997	2%	11%	7%	1%	20%	1%	21%
1998	1%	10%	7%	1%	20%	3%	23%
1999	1%	10%	3%	1%	15%	6%	21%
2000	4%	11%	8%	1%	23%	4%	28%
2001	4%	11%	8%	1%	23%	5%	27%
2002	3%	8%	8%	1%	21%	4%	25%

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.

Several observations seem pertinent. First, board holdings dominate those by non-board senior executives. This is apparent in Table 4, which is based on weighted calculations of concentration, indicating a tendency in organisations with larger options plans for the bulk of outstanding options held by the organisational elite to be in the hands of board members. In our sample, more than 80% of holdings concentration at senior levels during the period of the study was explained by board holdings. Similarly, the CEO's dominance in the context of board holdings signals not only the degree of authority conferred on CEOs in large corporations, but also the strength of motivation, good and bad, to maximise the value of options holdings. In our sample, about half of the concentration in the hands of directors is attributable to CEO holdings.

Given the focus on the role of non-executive directors in contemporary debates and regulatory initiatives on corporate governance, our findings on their options holdings is interesting. 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. This suggests that, as might be expected given the desire to reinforce their independent status, non-executive directors generally 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.<sup>4</sup> An explanation for this pattern is that although such directors might be labelled "non-executive", a substance-over-form approach to classification might lead to another outcome<sup>5</sup> or at least give rise to questions about assumptions that non-executive status equates to independence.

## CONCLUSIONS

Our study suggests a significant degree of holdings concentration in large publicly listed Australian corporations. In the only other published research of which we are aware on this issue, Blasi *et al* (2003, p. 190) suggest senior executive holding concentration in top-100 US-based firms of around 33%. It would seem therefore that, at least in aggregate, the Australian experience is similar to that of the US.

This study, and our expressions of concern about the holdings concentration problem, are based on logical deduction rather than empirical analysis. Our case at this stage can be thought of as circumstantial. We begin with the premise that options schemes as an element of executive remuneration may bring incen-

tives for behaviour which, while enriching the holder of the option, does nothing for, or actually degrades, shareholder wealth. The literature makes it clear that most of the mechanisms for achieving these unfortunate wealth transfers are within the grasp of only a very select group 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 decisions to engage in reloads are all initiated by a narrow but powerful constituency within a firm. Yet this same constituency stands to gain disproportionately from an inflation of option value. Our basic intuition is that this constituency has both the means and the motive to give effect to actions which endanger shareholder wealth creation and therefore represent poor governance.

This capacity for action is brought into even sharper relief when considering the extent to which even non-executive directors participate in some options schemes. We propose to undertake further research on this issue. However, irrespective of additional empirical inquiry, the results reported in this paper serve as a reminder that while the careful design of incentive contracts such as options packages is an important element of governance oversight, so too is a careful watch on the dispersion or concentration of ownership of options issued by firms as part of overall remuneration policy.

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## NOTES

- 1 Corporate Law Economic Reform Program. This is documented in "Corporate Disclosure — Strengthening the Financial Reporting Framework", Issues Paper No. 9, Commonwealth Government Printing Service, Canberra.
- 2 The practice of reloading involves the cancellation of existing options issued to executives and the 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.
- 3 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, Jensen and Murphy (1990) es-



- timated that the sensitivity of a median CEO's salary and bonus payments to a \$1,000 change in firm market capitalisation was 6.7 cents.
- 4 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'être* is the exercise of an independent mind at board level.
  - 5 A clear example of this comes from the case of Burns Philp and Co. The board deputy chairman, Graeme Hart, owns a majority of the voting equity in the organisation, yet is listed as a non-executive director.
  - 6 Total sample size was 64 Australian publicly listed corporations drawn from the top 100 by market capitalisation.
  - 7 This is the sum of all board option holdings (executive and non-executive directors) and holdings of the top five non-board executives employed by the firm.

## REFERENCES

- Aboody, D., and R. Kasnik, 2000, "CEO Stock Option Awards and the Timing of Corporate Voluntary Disclosures", *Journal of Accounting and Economics* 29: 73–100.
- Aboody, D., and R. Kasnik, 2001, "Executive Stock Option Compensation and Corporate Cash Payout Policy", working paper, Graduate School of Business, Stanford University.
- Ali, P., and G. Stapledon, 2000, "Having Your Options and Eating Them Too: Fences, Zero-Cost Collars and Executive Share Options", *Company and Securities Law Journal* 18. 4: 277–82.
- Australian Stock Exchange (ASX), 2002, "Response Document: Enhanced Disclosure Listing Rule Amendments 1 January 2003".
- Australian Stock Exchange (ASX), 2003, "Principles of Good Corporate Governance and Best Practice Principles".
- Bettis, J., J. Bizjak and M. Lemmon, 1999, "Insider Trading in Derivative Securities: An Empirical Examination of the Use of Zero Cost Collars and Equity Swaps by Corporate Insiders", working paper, Arizona State University.
- Blasi, J., D. Kruse and A. Bernstein, 2003, *In the Company of Owners — The Truth About Stock Options and Why Every Employee Should Have Them*, Basic Books, New York.
- Buffini, F., 2003, "Directors Slam New ASX Rules", *Australian Financial Review*, 7 April: 1.
- Carlin, T., and G. Ford, 2003, "Opinions on Options: Discordant Incentives and Desultory Disclosure", *Journal of Law and Financial Management* 2: 7–13.
- Chen, Y., 2002, "Executive Stock Options and Managerial Risk Taking", working paper, University of Houston.
- Commonwealth Treasury, 2002, "Corporate Disclosure — Strengthening the Financial Reporting Framework", Issues Paper No. 9, 18 September.
- Coulton, J., and S. Taylor, 2002, "Accounting for Executive Stock Options: A Case Study in Avoiding Tough Decisions", *Australian Accounting Review* 12, 2: 3–10.
- DiMaggio, P., and W. Powell, 1983, "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organisational Fields", *American Sociological Review* 48: 147–60.
- Dolowitz, D., and D. Marsh, 2000, "Learning from Abroad: The Role of Policy Transfer in Contemporary Policy Making", *Governance: An International Journal of Policy and Administration* 13, 1: 5–24.
- Durie, J., 2003, "Stop Complaining Guys — It Couldn't Be Easier", *Australian Financial Review*, 5 April: 24.
- Ellis, R., 1998, "Equity Derivatives, Executive Compensation and Agency Costs", *Houston Law Review* 35: 399–425.
- Harper, N., 2002, "Stock Options — The Right Debate", *McKinsey on Finance*, Summer: 18–20.
- Higgs, D., 2003, "Review of the Role and Effectiveness of Non-Executive Directors", Department of Trade and Industry (UK), HM Government Printer, London.
- Holstrom, B., 1979, "Moral Hazard and Observability", *Bell Journal of Economics* 10: 74–91.
- Jensen, M., and W. Meckling, 1976, "Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure", *Journal of Financial Economics* 3: 305–60.
- Jensen, M., and K. Murphy, 1990, "CEO Incentives: It's Not How Much You Pay — But How", *Harvard Business Review* 3: 138–53.
- Lambert, R., W. Lanen and D. Larker, 1989, "Executive Stock Option Plans and Corporate Dividend Policies", *Journal of Financial and Quantitative Analysis* 24: 409–25.
- Lawrence, J., 2003, "United States Auditor Oversight Board: Securities Regulation and the Accounting Profession", *Company and Securities Law Journal* 21, 2: 139–43.
- Mulford, C., and E. Cominskey, 2002, *The Financial Numbers Game — Detecting Creative Accounting Practices*, Wiley, New York.
- Meulbroek, L., 2001, "The Efficiency of Equity Linked Compensation: Understanding the Full Cost of Awarding Executive Stock Options", *Financial Management* 30: 5–44.
- Myer, J., and B. Rowan, 1977, "Institutionalised Organisations: Formal Structure as Myth and

Ceremony”, *American Journal of Sociology* 83: 340–63.

Ofek, E., and D. Yermack, 1997, “Taking Stock: Does Equity Based Compensation Increase Managers’ Ownership?”, working paper, Stern School of Business, New York University.

Oldfield, S., and A. Cornell, 2004, “NAB Caught in Auditing Crackdown”, *Australian Financial Review*, 27 February: 1.

Owen, N., 2003, “Final Report of the HIH Royal Commission”, April.

Rezaee, Z., 2002, *Financial Statement Fraud — Prevention and Detection*, Wiley, New York.

Saiz, J., 2003, “Expensing the Cost of Executive Options Schemes: Case Studies in the Australian Healthcare Industry”, *Journal of Law and Financial Management*: 2: 15–28.

Schilit, H., 2002, *Financial Shenanigans — How To Detect Accounting Gimmicks and Fraud in Financial Reports*, 2nd edn, McGraw Hill, New York.

Smith, R., 2003, “Audit Committees — Combined Code Guidance: A Report and Proposed Guidance by an FRC-Appointed Group Chaired by Sir Robert Smith”, Financial Reporting Council (UK), London.

Turnbull, S., 2003, “ASX Guidelines Are Misleading and, Worse, Distracting”, *The Age*, 1 April: 27.

Watts, R., and J. Zimmerman, 1986, *Positive Accounting Theory*, Prentice Hall, New Jersey.

Yermack, D., 2001, “Executive Stock Options: Puzzles, Problems and Mysteries”, working paper, Stern School of Business, New York University.