

The Relationship between Family Firms and Corporate Governance

Simon Bartholomeusz & George A. Tanewski

Corresponding Author: George A. Tanewski
Department of Accounting & Finance
Faculty of Business and Economics
Monash University
PO Box 197, Caulfield East
Victoria 3145
AUSTRALIA
Tel: +61 3 9903 2388
Fax: +61 3 9903 2422
Email: george.tanewski@buseco.monash.edu.au

Abstract

Contributing to the agency theory literature, this identifies relations between family control and corporate governance structure. Although the sub-set of theory that specifically relates to family control is in its infancy, emerging literature supports the notion that family control creates a number of strong incentives that have potentially competing influences on the manner in, and extent to, which internal corporate governance mechanisms are utilised. A sample of 100 listed companies (evenly divided between family and non-family firms) is used to test the hypotheses that corporate governance structures are different between family and non-family firms; and that family firms adopt optimal corporate governance structures. This paper finds evidence suggesting that family firms do utilise substantially different corporate governance structures from non-family firms. Some further evidence is provided to support the notion that these differences do lead to performance differentials. Indeed, the results suggest that family control creates, rather than negates, agency costs. Future research may be well rewarded by pursuing this latter notion further.

Introduction

New research on family controlled firms provides a novel method for re-examining a maturing economic paradigm: agency theory. The progeny of Jensen and Mecklings' (1976) ambitious attempt to expose the inner machinery of the black box called the firm, agency theory has been used by myriad theorists to explain how the misalignment of interests between the firm's participants is brought into equilibrium throughout a diverse range of contexts. One context that has been represented in the literature with relative paucity is family control. The purpose of this paper is to contribute to the small but emerging body of literature that seeks to resolve the dearth of family firm literature; providing a new and powerful perspective on the agency theoretic. While prior research has focused on the manner in which the different incentives faced by family members impact on outcomes such as performance, a purpose of this paper is to examine the relation between family control and other potentially substitute or reinforcing internal control mechanisms (i.e. corporate governance). The combined effect of any interaction will then be regressed on performance within a simultaneous equations framework to establish if family firms adopt a wealth-maximising set of corporate governance mechanisms.

It has been posited in previous papers (e.g., James, 1999) that family blockholders in family controlled companies have different incentives to atomised shareholders in widely-held companies. However, the question of whether family ownership provides incentives to reduce agency costs (through a better alignment of shareholder and managerial interests) or create agency costs (by providing opportunities for family members to expropriate the wealth of outside shareholders) remains a reasonably open empirical issue. The strongest evidence in emerging literature would tend to corroborate the former (Anderson & Reeb, 2003; Anderson, Mansi &

Reeb, 2002), however, research by Schulze et. al. (2001), conducted in the context of proprietary companies, would support the alternative. The manner in which family members respond to alternative incentives will be reflected in the extent to which other internal corporate governance mechanisms are utilised. In this sense, research that extends the family firm literature to include a discussion of corporate governance will be both an end in itself (in that relationships will either be evidenced or remain uncorroborated) and a means to other ends by further illuminating the nature of the incentives faced by the firm's participants.

The first purpose of this paper is to examine the nature of the relationship between family control and individual corporate governance variables using a similar set of variables to that used by Anderson, Bates, Bizjak and Lemmon (1998), a study of corporate governance in the context of firm diversification, rather than family control. Agency theory suggests that family owners experience different incentives to diversified, atomised shareholders; these differences should manifest themselves through differences in the utilisation of other control mechanisms; this paper produces evidence to support this notion. As the focus of the agency argument relates to the incentives of the firm's internal participants, it follows that it is reasonable to restrict the discussion to internally set controls (i.e. corporate governance mechanisms). The influence of external control mechanisms (eg. the takeover market, the labour market, etc.) is assumed to be fairly uniform across all observations in the sample.

The second purpose of this paper is to examine the degree to which family firms adopt wealth-maximising internal controls. The shift in focus between the first purpose and the second is an attempt to go beyond developing isolated relationships - to identify the extent to which the

matrix of control mechanisms operate in unison in resolving competing incentives (the incentive to reduce agency costs as opposed to the incentive to expropriate wealth and create agency costs). The second hypothesis is tested on a reduced sample (excluding non-family firms) within a simultaneous equations framework (analogous to the methodology used by Agrawal and Knoeber (1996). Evidence of significant results on individual coefficients indicates the use of sub-optimal corporate governance structures.

The remainder of this paper is partitioned as follows: section 2 is a review of the literature motivating the subject; section 3 amalgamates the various themes within the literature with a view to developing several testable hypotheses; section 4 reviews the data collection procedures; section 5 explains the empirical methods; section 6 details the results of the empirical tests; section 7 briefly considers other robustness and diagnostic issues; section 8 summarises the paper;

Literature Review: Motivation and Significance

Family Firms and Agency Theory - It was Adam Smith (1776) who first foresaw, with unprecedented prescience and insight, that managers of widely-held companies, being the managers of other people's money, cannot well be expected to watch over it with the same anxious vigilance as, say, the managers of a partnership. Smith's sentiments were developed in the pioneering work of Berle and Means (1932) and formalised by Jensen and Meckling (1976), creating the catalyst for a fruitful area of financial research: agency theory. Jensen and Meckling argued that traditional conceptions of firms as control structures are flawed. 'Firms', as such, are

merely legal fictions. Rather, a firm is actually a nexus between a series of complex contractual relationships between various stakeholders.

An important contractual relation is the relation between the owner and the manager. This relationship takes on the special character of being an agency relationship, a relationship that involves delegation of decisions. If both parties are rational utility maximisers, it follows that the contract may leave scope for the manager to make decisions that are not in the owner's interests. The costs of this divergence of interests, in combination with the costs of monitoring and bonding the manager to limit this divergence, are termed agency costs.

A great deal of the literature has been devoted to applying agency theory to the diffusely held corporation; that is, those firms where professional managers pursue the control function on behalf of a variety of diversified, atomised shareholders. However, the effect of agency costs in other ownership structures, in particular, the family founded, owned and controlled firm is covered by the academic literature with relative paucity. While important work has been directed towards developing an understanding of this unique ownership structure, when it is considered that family firms account for around 20% of the listed companies in Australia (Mroczkowski & Tanewski, 2004; Harijono, Tanewski & Ariff, 2004), and are represented similarly in the S&P 500 in the U.S. (Anderson, Mansi & Reeb, 2002), it would seem that the economic significance of family firms has been underrepresented by the academic literature.

Research on family firms provides an avenue for developing agency theory in a new and fundamentally different context. This is largely the result of the entirely different incentives that

motivate family shareholders in contrast to diversified shareholders. Consistent with Demsetz and Lehn (1985), Anderson and Reeb (2003) acknowledge two reasons why family firms have several incentives to reduce agency costs. Firstly, as family firms have concentrated shareholdings, they have an increased incentive to reduce agency costs because “the more concentrated is ownership, the greater the degree to which the benefits and costs are borne by the same owner” (Demsetz & Lehn, 1985, p 1156). However family ownership extends beyond concentration. As the wellbeing of the family is tied directly to the welfare of the company, families have further incentives to reduce agency costs that might impede performance. Additionally, a family’s special technical knowledge concerning a firm’s operations may put it in a better position to monitor the firm more effectively. Essentially, the special relationship between a family and a family firm provides incentives for the family to counteract the free rider problem that prevents atomised shareholders from bearing the costs of monitoring, ultimately reducing agency costs.

Secondly, it is maintained that family firms make decisions on much longer time horizons than non-family firms. It is suggested that family owners view the firm as an asset to be passed on to subsequent generations (Chami, 1999) leading to strict adherence to maximising the value of the firm (James, 1999). Contemplate the mindset of a new CEO who knows the average CEO tenure in Australia to be 4.4 years (Booz Allen, 2003), accepts that it is unlikely that he or she will outperform the average and therefore decides to manage the company over a short time frame with strict adherence to his or her own utility maximisation. Contrast that outlook against the mindset of a founding family CEO who intends to maximise the long term wealth of a family company that bears the family’s name, and with it carries the family’s reputation. Indeed,

Schulze, Lubatkin, Dino and Buchholtz (2001), as well as echoing the benefits of personal involvement, and special relationships, also acknowledge the altruistic benefits unique to family ownership. Altruism, the notion that self-interest is pursued through the welfare of others, promotes loyalty, facilitates communication and increases time horizons, ultimately reducing agency costs.

However, it has also been posited that family ownership leads to an increase in agency costs. Anderson and Reeb (2003) identify the possibility that family firms might use their concentrated blockholding to expropriate wealth from other shareholders through excessive compensation, related party transactions and special dividends. Anderson, Mansi and Reeb (2002) add the possibility of risk avoidance, that is, because of their undiversified exposure, family firms may use their control of a firm to avoid risks acceptable to the other, diversified, shareholders. Morck and Yeung (2003) note the potential for family business groups to organise into pyramidal control structures that facilitate the expropriation of wealth from non-family shareholders in family subsidiaries to family holding companies. It is asserted that agency costs in family business groups stem from either management not acting for the shareholders, or rather, acting only in the interests of family shareholders. Schulze, Lubatkin, Dino and Buchholtz (2001) elaborate on the potential for non-family shareholders to be held ransom to the mercy of family owners. While Jensen and Meckling (1976) acknowledge the potential for conflict to arise between owner's interests, these would be resolved efficiently by one of the owners selling their shares. However, this assertion is predicated on the assumption that capital markets are efficient, allowing the conceding owner to sell their stake in the firm at its full value. Schulze, Lubatkin, Dino and Buchholtz point to inefficiencies in the capital market that may put pressure on the

conceding owner to acquiesce. While the focus of their research is directed at proprietary companies (with illiquid capital markets), similar problems could affect public companies. In the spirit of Coase (1937), who acknowledged that activities will be included within the bounds of the firm when it is less expensive to do so than to go through external markets, Demsetz and Lehn (1985) were the first to directly acknowledge that, while concentrated ownership generally serves the interests of diffuse shareholders well, if the concentrated owner can achieve their consumption goals more effectively through the firm than privately, the welfare of the diffuse owners may be threatened.

Corporate Governance and Economic Significance - While new research on family firms would further develop a fledgling body of literature that provides a new perspective on an established academic paradigm, incorporating other aspects of corporate governance into the discussion would give original research an economic significance that would be valuable to a range of the market's participants. Research addressing the relationship between family firms and corporate governance would be of nontrivial value to professionals, policy makers, regulators and anyone else concerned with either sphere of interest.

While the concepts encompassed by corporate governance are as old as Adam Smith, the term itself has only really gained mainstream prominence since the corporate collapses of the 1980's. The Cadbury Commission report (1992, p 12) "... based on compliance with a voluntary code coupled with disclosure ..." was the progenitor of corporate governance discussion within the U.K.; the response to a number of high-profile collapses. Recommendations of the report related to non-executive directors, audit committees, disclosure of director's compensation, disclosure of accounting statements, internal control systems and the role of the auditor. The Commission's

sentiments were echoed locally by the Australian Investment Managers' Association (1999) in the 'Blue Book.' It is interesting that some ten years later, after the latest round of corporate collapses, the tenor of the arguments remains principally the same despite the lapse of time.

Corporate governance has become increasingly topical since the adoption of the Sarbanes-Oxley Act (2002) in the US, a legislative response to the excesses encompassed by the spectacular collapse of the 'dot-com' and 'telco' speculative bubbles of the late 1990's. Provoked by the collapse of Enron and Worldcom (Enron had used complex off-balance sheet vehicles to hide extraordinary losses leading to a write-down in shareholder funds of US\$1.2 billion; Worldcom had used accounting improprieties to inflate reported earnings and cash flows by US\$3.9 billion (Bartholomeusz, 2002), the SEC's response, while similar in theme to earlier reforms, differs fundamentally in that the requirements are mandatory. The implications for other regulators are unambiguous, for Australian regulators no less so: if Australian companies are to compete in international markets, their standards of corporate governance must be no less effective than those imposed in the largest capital market in the world. Even so, the attitudes of Australian as well as UK regulators have maintained their voluntary tone. The mandatory components of the Australian response involve those requirements proposed under the 9th redevelopment of CLERP, (Corporate Law Economic Reform Program (Audit Reform and Corporate Disclosure) Bill, 2003; Corporate Disclosure, 2002), relating to the role of the auditor, accounting standards, continuous disclosure, and enforcement issues. The voluntary component relates to changes in the ASX's listing rules in line with the ASX Corporate Governance Council Implementation Review Groups's (2004) principles on corporate governance. While the principles maintain the same character as those outlined in Sarbanes-Oxley; compliance with the listing rules is

voluntary; either companies comply or they don't but explain why. Motivated by the Higgs report (2003) and the Smith Report (2003), the approach in the UK has developed in a similar vein. While policy on corporate governance continues to be generated, it is unclear exactly how much is grounded upon firm empirical evidence rather than anecdotal accounts, or perhaps, politics. For example, the response in the US, the UK and Australia has largely focused on the role of independent directors. However, extant research has shown no compelling relationship between the proportion of outsider directors on the board and performance (Hermalin & Weisbach, 2003; Klein 1998). It would seem that normative policy is being advocated without the grounding of a firm positive understanding of how the misalignment of interests between various participants is actually brought into equilibrium. Convincing research on the role of corporate governance in family firms would allow policy makers to develop a regulatory framework that recognised the contingencies inherent in different ownership structures. Market efficiency would also be improved by information that allowed market participants to correctly value different ownership structures after taking into account the differences in value attributed to different corporate governance structures. Research relating to corporate governance and family firms would be of practical value to a myriad of interested parties, providing a positive basis for a consistent set of normative assertions.

Corporate Governance and Family Firms - While there are compelling reasons for pursuing research on family firms and corporate governance independently, there are further incentives to develop the relationship between the two. One incentive, in particular, is motivated by the emerging body of financial literature that focuses on rights as a determinant of corporate value. On a macro level, recent research by La Porta et. al (1998, 1999) has identified the relationship between variation in property rights and corporate value between different property rights

regimes. While the focus of La Porta and his colleagues' paper is directed across different firms in different nations, the essence of the argument operates at the firm level: the rights attached to a security affect the ability of the security holder to procure the security's value and hence, the value of the security itself. While, in a macro sense, the greatest source of variation in the rights of a security will relate to differences in legal regimes, within the same legal regime, the greatest source of variation in shareholder rights will relate to firm-specific corporate governance (that is to say, the Corporations Act (2002) operates fairly uniformly across all Australian firms). As corporate governance mechanisms are largely set by the internal participants within the firm, they should be consistent with wealth maximisation. That is, according to the 'optimal governance hypothesis' (Anderson et. al., 2003), firm participants will voluntarily adopt corporate governance mechanisms to the point where the marginal benefit of adopting further mechanisms (the reduction in agency costs) is just offset by the extra cost of implementation.

A purpose of this paper is to determine whether the optimal governance hypothesis holds true in the presence of family control. One stream of extant literature would suggest that family control is, potentially, an agency cost reducing mechanism in itself. Family firms are concentrated blockholders with a unique incentive to overcome the free rider problem that prevents atomised shareholders and, indeed, some other blockholders from effectively monitoring management (Tufano, 1996; Anderson & Reeb, 2003). Furthermore, as the wealth of the family is directly tied to the future of the company - and decision making in family firms is predicated on much longer time horizons than in non-family firms - family firms more strictly adhere to wealth maximisation than their counterparts (Chami, 1999; James 1999). These reasons, in combination with the ancillary benefits of altruism (Schulze et. al., 2001), would suggest that family control is

an agency cost reducing mechanism. When it is considered that family control is one of several potentially substitute or reinforcing mechanisms, it follows that the combination of corporate governance structures adopted by family firms will be different to the combination of structures used by non-family firms but no less consistent with wealth maximisation.

However, there is also a line of argument within the agency theoretic that would suggest that family control creates (rather than negates) agency costs. It has been suggested that family control provides family members with a unique opportunity (not available to other shareholders) to use their concentrated blockholding to expropriate the wealth of outside shareholders through excessive compensation, related party transactions, special dividends and risk avoidance (Anderson & Reeb, 2003; Anderson, Mansi & Reeb, 2002; Morck & Yeung, 2003). If family members use their control of the firm to expropriate the wealth of outside shareholders, it would be expected that corporate governance structures would be different between family and non-family firms and inconsistent with wealth maximisation. Furthermore, any differences in corporate governance variables between family firms and non-family firms are, ex ante, predictable: if the wealth of outside shareholders is being expropriated, managerial compensation should be higher in family than in non-family firms, the sensitivity of compensation to performance should be lower, board characteristics should portray inefficiencies and the CEO's personal characteristics should be consistent with entrenchment. The effects of inside ownership are more complex when it is considered that low levels of inside ownership facilitate the reduction of agency costs whereas high levels of inside ownership may create further entrenchment effects.

The following hypotheses (stated in the alternative) naturally follow:

H1: Family firms adopt different corporate governance structures to non-family firms.

H1A: Managerial compensation is different between family and non-family firms.

H1B: Managerial compensation differs in sensitivity to performance between family and non-family firms.

H1C: Board characteristics are different between family and non-family firms.

H1D: Ownership structure (excluding the family) is different between family and non-family firms.

H1E: The CEO's age and tenure are different between family and non-family firms.

H2: Family firms adopt optimal (wealth maximising) corporate governance structures.

Method

Sample Selection - The sample includes a cross-section of 100 firms, listed on the Australian Stock Exchange in 2002, with each having a common CEO (who is a board member) over 2001-2002 and a common reporting period (June 30). The constraint of a common CEO diminishes the effects of confounding noise on the compensation variables. It also increases the likelihood that randomly chosen non-family firms will have similar ownership characteristics to family firms (as family control, by definition, includes a CEO with a large shareholding). However, it does have the potential to introduce a survivorship bias (ie. more successful companies are less likely to have CEO turnover). Sampling proceeded on the basis that all family firms that met the above constraint were included in the sample (assuming data was available). After eliminating outliers, 50 family firms were present in the sample. A further 50 matched firms were chosen on the basis

of size (total assets) and ASX industry classification. Unfortunately, thin coverage over the ASX industry codes meant that companion firms could not be identified for about 10 companies. As a consequence, a further 10 companies were chosen at random to provide symmetry to the sample.

Firm-level data on corporate governance and accounting variables were collected for each firm as reported in corporate reports (available from Datastream). Share price information and some further accounting information were collected from Datastream. Data were collected solely for 2002 for all variables except those required in the compensation analysis (where data covering 2 years was collected). Corporate governance variables are reasonably static over time such that the absence of a time-series dimension to the analysis remains a limitation of the paper.

The adopted definition of family control will correspond with that used by Mroczkowski & Tanewski (2004), who define a family controlled firm as “an entity controlled by a private individual, directly or indirectly, in conjunction with close family members” (p 10). Inclusion is based upon the following criteria: the existence of a founding member involved in management with greater than 20% of voting shares; the shareholder is CEO or a key member of the board (i.e., chairperson); at least one other related party is a member of the board and; the original shareholder and the related parties hold greater than 40% of the voting shares of the company. The dummy variable FF will take on the value “1” for firms that satisfy the above criteria or “0” if otherwise.

Compensation- The measurement of compensation variables requires an analogous technique to that used by Anderson, Bates, Bizjak & Lemmon (1998). Fixed emoluments (salary, cash bonus, superannuation, allowances motor-vehicle expense etc.) are aggregated to form the fixed portion

of total income (C_FIXINC02 & C_FIXINC02). A second measure calculates the value of the CEO's option portfolio (C_OPTINC02 & C_OPTINC01). Details on each executive option package were manually collected from annual reports (exercise price, time to maturity and the number of options granted). Share price information on DataStream was used to calculate six-month historical volatilities. The ex-ante dividend yield was approximated by the ex-post 2 year average. Separate firm-level volatilities and dividend yields were calculated for each of the 2 sample years. The Australian 10 year bond yield (as of the two reporting dates) was used to proxy for the shadow risk-free rate. The value of the portfolio was calculated using the Black-Scholes (1973) model adjusted for continuously paid dividends.

Board of Directors - Board composition is determined using Weisbach's (1998) trichotomous classification scheme. A director who is a full-time employee of the company is classified as an inside directors. A director who is neither an employee nor has extensive dealings with the company is referred to as an outside director. All other directors, who are not full-time employees but have relationships with the company (eg. family relationships, consultants etc.) are designated as 'grey' directors. Director classification is determined by reading biographies in annual reports, analysing related party transactions and by inference from the definition of family firm.

Performance - Performance is measured using Tobin's Q ratios (Q). The adopted measure of Q is calculated by dividing the sum of the market value of equity by the book value.

Empirical Specification

The models used to test H1 are similar to those used in Anderson, Bates, Bizjak, and Lemmon (1998) in the context of diversification and corporate governance, whereas H2 involves an adaptation of the methodology used by Agrawal and Knoeber (1996) in their analysis of alternative control mechanisms. The first set of regressions is as follows:

$$Var_{ij} = \beta_{0j} + \beta_{1j}FamilyFirm_i + \beta_{2j}Size_i + \beta_{3j}Industry_i + \varepsilon_{ij}$$

where the subscript i denotes the firm-level observation for each variable in 2002 and Var_j represents each of the possible corporate governance variables that may be used as dependent variables. It is proposed that each of the ownership, board composition and compensation variables be substituted as the dependent variable. The second set of regressions, directed at testing the sensitivity of compensation to performance, take the following form:

$$\Delta Compensation_{ij} = \beta_{0j} + \beta_{1j}FamilyFirm_i + \beta_{2j}\Delta MVE_i + \beta_{3j}\Delta MVE_i * FF_i + \dots \\ \dots \beta_{4j}\Delta EBITDA_i + \beta_{5j}\Delta EBITDA_i * FF_i + \varepsilon_{ij}$$

where $\Delta Compensation$ is the first difference in any of the (j) compensation measures between 2002 and 2001. The compensation measures include the change in the level of fixed income, the change in the level of option income and the change in the aggregate of the two. The interaction terms test whether compensation is more (or less) sensitive to previous performance in family firms as opposed to non-family firms. Previous performance is measured by the change in the market value of equity (a stock performance measure) and the change in EBITDA (an accounting measure). If family firms adopt compensation policies that promote entrenchment, it is predicted that the direction of the interaction terms will be negative.

2SLS Regression Analysis - Tobins's Q is adopted as a measure of performance. However, extant literature highlights potential endogeneity problems surrounding regression analyses of corporate governance mechanisms and performance. For example consider the following equations:

$$(a) \text{ InsideOwnership}_i = \beta_0 + \beta_1 Q_i + \varepsilon_i$$

$$(b) Q_i = \delta_0 + \delta_1 \text{ InsideOwnership}_i + \delta_2 \text{ Size}_i + \delta_3 \text{ Industry}_i + \mu_i$$

Inside ownership is a function of performance (i.e., when firms perform well, insiders increase their holdings), however, performance is not exogenous. Performance is a function of inside ownership (i.e., inside ownership leads to a decrease in agency costs and an increase in performance) as well as other control variables. If ε and μ are correlated, Q (a function of μ) will be correlated with ε and β_1 in (a) will be biased. The simultaneous bias will occur as long as ε and μ are correlated and equation (a) is over-identified (this is so even if inside ownership is not a determinant of Q in (b) but Q is not exogenous).

Agrawal & Knoeber (1996) propose the use of 2SLS (two-stage least squares) regressions in the context of endogenously determined corporate governance mechanisms. The method involves, first, estimating OLS predictions for each endogenous regressor. Secondly, each of the predictions is regressed on Q (the ultimate dependent variable) together to determine consistent estimates for each endogenous regressor. This method allows for the interdependence and alternative use of all of the governance mechanisms.

To test the second hypothesis, an analogous method to that of Agrawal & Knoeber is applied to a restricted sub-sample that includes only the 50 family-firms. A 2SLS regression is estimated by regressing 6 endogenous corporate governance variables on Q. Predictions for each of the endogenous independent variables is estimated from the following equations:

$$\begin{aligned}
 (1) \quad P_CEO_i &= \beta_0 + \sum_{j \neq P_CEO} \beta_j Var_{ij} + \beta_7 STDEV_i + \beta_8 SIZE_i + \beta_9 IND_i + \varepsilon_{ij} \\
 (2) \quad P_OD_i &= \beta_0 + \sum_{j \neq P_OD} \beta_j Var_{ij} + \beta_7 STDEV_i + \beta_8 B_SIZE_i + \beta_9 SIZE_i + \beta_{10} IND_i + \varepsilon_{ij} \\
 (3) \quad P_BLOCK_i &= \beta_0 + \sum_{j \neq P_BLOCK} \beta_j Var_{ij} + \beta_7 INDEX_i + \beta_8 SIZE_i + \beta_9 IND_i + \varepsilon_{ij} \\
 (4) \quad B_PO_i &= \beta_0 + \sum_{j \neq B_PO} \beta_j Var_{ij} + \beta_7 SIZE_i + \beta_8 IND_i + \varepsilon_{ij} \\
 (5) \quad C_PEQ02_i &= \frac{C_OPTINC02_i}{C_OPTINC02_i + C_FIXINC02_i} = \beta_0 + \sum_{j \neq PEQ02} \beta_j Var_{ij} + \dots \\
 &\quad \beta_7 STK_RET_i + \beta_8 SIZE_i + \beta_9 IND_i + \varepsilon_{ij} \\
 (6) \quad DEBT_i &= \beta_0 + \sum_{j \neq DEBT} \beta_j Var_{ij} + \beta_7 CFR_i + \beta_8 SIZE_i + \beta_9 IND_i + \varepsilon_{ij}
 \end{aligned}$$

where Var_{ij} (firm 'i', variable 'j') is the observed value of each of the seven endogenous variables for each firm-observation in the restricted sample (Q is also endogenous). Control variables have been adopted in line with Agrawal and Knoeber. By estimating each of the above regressions, predictions for each endogenous regressor may be purged of simultaneous bias. Hence, the coefficients of the independent variables in the following regression should be consistent:

$$\begin{aligned}
 (7) \quad Q_i &= \beta_0 + \beta_1 \hat{P}_CEO_i + \beta_2 \hat{P}_CEO_i^2 + \beta_3 \hat{P}_OD_i + \beta_4 \hat{P}_BLOCK_i + \beta_5 \hat{B}_PO_i + \dots \\
 &\quad \beta_6 \hat{C}_PEQ02_i + \beta_7 \hat{DEBT}_i + \beta_8 SIZE_i + \beta_9 IND_i + \varepsilon_i
 \end{aligned}$$

where the first 7 independent variables (excluding the constant term) are the predicted values from regressions (1) through (6). If the coefficients in (7) are significant, the null in H2 will be rejected: there is evidence to suggest that family firms adopt sub-optimal corporate governance structures.

Results

Table 1 provides descriptive statistics on the ownership variables. Each variable seems to be consistent with both intuition and prior research. It should be noted at the outset that, because the incidence of family firms is greater in the sample (i.e., 50:50 family: non-family firms) than it probably is in the population (prior research cited earlier suggests a split of 20:80), it is possible that many of the summary statistics are a function of the overweighting of family firms in the sample.

Insert Table 1 about here

Table 2 (Panel A to Panel D) reports the results of 14 regressions. In each regression, a family control dummy variable and a firm size control variable (the natural logarithm of total assets) are regressed on each of the ownership variables. The results of regressions demonstrate that the CEO is likely to hold 13% (.001) more of the outstanding capital in family firms than in non-family firms. The CEO's direct shareholding in family firms is not significantly different from that of CEO's in non-family firms. Rather, their incentives are likely to be derived from indirect shareholdings: typically nominee companies where the beneficial interest is held jointly with other family members. Similarly, outside directors are likely to hold 12% (.003) less of the outstanding capital. Consistent with the notion of reduced external monitoring, outside blockholders are likely to hold 17% less of the issued capital in family firms than in non-family

firms. Given the parsimony of the models, the R-squared values (9%, 7% and 18%) suggest that family control is an economically significant determinant of ownership composition. The regressions provide clear evidence that family ownership displaces non-family owners. Large blockholders are less likely to be prevalent. Moreover, outside directors are likely to hold substantially fewer shares (and, consequently, have less of an incentive to monitor). In both instances the scope for external discipline of the CEO's actions is reduced.

Table 2 (Panel C) supports the differences in board composition and while the proportion of insider representation is not significantly different between family and non-family firms, family control is associated with 18% less outsider representation, compensated by 15% more representation by affiliates. This result is robust to the inclusion of a firm size dummy (which is significant in 2 of the 3 models). The R-squared terms for the B_PO (21%) and B_PG (20%) variables further stress the economic significance of family control as a determinant of board composition. Regressions (7) and (8) find no evidence of any variation in board size between family and non-family firms.

Regression (9) is a logistic regression relating the probability of the chairperson and CEO roles being occupied by the same person to family control. Taking e to the power of 1.34, regression (8) suggests that singularity of the chairperson and CEO positions is 3.82 times more likely for family firms than it is for non-family firms. This is statistically significant at the 5% level. The regressions add further validity to the notion that family control is typically characterised by large shareholdings concentrated in the hands of a few family members who occupy most of the seats on the board. Non-family shareholders are offered little chance for either direct

representation on the board, or alternatively, indirect protection through the presence of external monitoring (through either outsiders occupying board seats or the presence of institutional activists or other blockholders).

Table 2 (Panel D) reports the results of 6 regressions examining the relation between family control and the level of compensation in 2002¹. Firm size is significant in each of the 3 models. Interestingly, while the family firm dummy is not significant in either of the first two models (where family control is regressed on the fixed component and the equity component of income separately), the final model, that aggregates the two dependent variables of the previous models together, is significant at the 5% level for both specifications. Unfortunately, unlike the other corporate governance variables, which are fairly stable over time, the level of compensation is likely to vary considerably over time. Moreover, the sheer range in cross-sectional compensation levels isn't captured adequately by the small sample. There are many CEO's who are paid seven-figure salary's just as there are many who are paid five figure sums. A random sample of 100 firms will inevitably be thinly spread between the two extremes. It remains a limitation of this paper that the sampling constraints do not allow the notion of family firm compensation to be considered in greater detail. However, there would seem to be enough evidence to credibly prompt future research to examine the issue further with the luxury of a larger sample and, perhaps, a more detailed analysis.

Table 3 reports the results of the 2SLS regression on the sub-sample of 50 family firms. The first column includes 6 of the 7 endogenous regressors (Q is also endogenous). The suffix 'F' denotes

¹ 2001 data was not examined as data was not collected for various control variables used to test the robustness of the results.

that the regressor is the vector of predictions from the first stage. Agrawal and Knoeber (1996) suggest that, once the optimal determinants of each endogenous regressor are derived in the first stage, any significance that persists into the second stage is inconsistent with the notion of optimal use. That is, positive coefficients on independent variables suggest that increasing the use of the mechanism would improve performance, whereas, negative coefficients suggest that reducing the use of the mechanism would lead to performance improvements. If the mechanism is used optimally, the marginal benefits from increasing its use should be offset by the marginal costs, that is: it should not be significantly related to performance in the second stage. Tests of the first hypothesis rejected the null of no differences between the corporate governance structures of family and non-family firms. The analysis has now been redirected to determine whether these differences are consistent with optimal use.

The coefficient on P_CEO_AF suggests that, at low levels, family firms could benefit from performance improvements by increasing the level of the CEO's shareholdings. At high levels (captured by the quadratic term), inside ownership is consistent with optimal use. Together, these results are consistent with the notion that family ownership improves the alignment of incentives between shareholders and managers. If anything, those family firms where the CEO has a smaller personal stake in the equity of the company may improve the alignment of interests further by issuing more shares to the CEO. More interestingly, the negative coefficient on P_ODF suggests that family firms would derive benefits by reducing the proportion of shares held by non-family board members. It would seem that there is evidence to suggest that the presence of non-family shareholders on the board creates a tension that ultimately results in sub-optimal performance. Perhaps the long-term interests of family members compete with the

interests of non-family directors. In any event, the evidence would suggest that family firms would benefit by redistributing the shares of non-family board members to the CEO. It is not clear why this would remain in disequilibria.

The positive coefficient on P_BLOCKF suggests that family firms could benefit from further oversight from external shareholders with large blockholdings. Although marginally significant, there is some weak evidence to suggest that there wasn't enough external monitoring from unaffiliated shareholders in the sample. This is difficult to reconcile with the negative coefficient on P_ODF. Taken together, the two coefficients suggest that family firms have sub-optimally low levels of unaffiliated blockholdings and sub-optimally high levels of unaffiliated board-shareholdings. While the two aren't necessarily mutually exclusive (it is entirely possible that the monitoring incentives of shareholders on the board and external blockholders are completely different), the relation between performance and the former seems to be economically significant. The negative coefficient on B_POF would seem to give credibility to the former explanation. However; it lacks sufficient statistical significance to determine the issue conclusively. This should not be unexpected given the weak nature of tests that seek to explain the contribution of board structure to performance based solely on board composition. On the balance, it would seem that family firms would benefit by avoiding outside monitoring.

The insignificance of the coefficient on C_PEQ02F suggests that the fraction of equity based compensation is set at optimal levels. This is despite previous evidence suggesting that the proportion of the CEO's equity-based compensation is likely to be lower in family firms than in non-family firms. Interestingly, the coefficient on DLF suggests that family firms are sub-

optimally leveraged: family firms could benefit by increasing the amount of debt in their capital structure. Previous research has suggested that family firms experience a lower cost of debt capital (Anderson, Mansi & Reeb, 2003) than non-family firms. Moreover, Australian evidence has suggested that family firms are likely to be more highly leveraged than non-family firms (Harijono, Tanewski & Ariff, 2004). Despite this, the evidence suggests that family firms don't fully utilise this competitive advantage over family firms.

On balance, it seems that family firms utilise sub-optimal corporate governance structures. This is somewhat odd given that all the mechanisms examined should be determined endogenously by the firm's participants. While it is possible that the limited sampling period is insufficient to capture the market in equilibrium, evidence of suboptimal use of corporate governance mechanisms is consistent with the notion that family firms utilise different structures to non-family firms in a manner that ultimately affects performance. It is also possible that the 2SLS method is too crude a framework for correctly testing optimality.

Discussion and Implications

This paper began by outlining the literature on the agency implications of family control. Within this context, family control was posited to be one of several alternative substitute or ancillary internal control mechanisms, with the potential to either ameliorate or exacerbate the ultimate agency problem. This paper produces evidence that family control does interact with other control mechanisms. Family control displaces other owners: large blockholders are less likely to hold the capital of family firms and board members are less likely to hold shares. As a

consequence family firms are less likely to be subject to the discipline of disinterested monitoring (disinterested in the sense that the monitor is not a party to the family). This paper also produces evidence that family firms are likely to have a lower proportion of disinterested directors on their boards than non-family firms. Moreover, just as the proportion of outsiders on family boards decreases, so does the proportion of 'grey' directors increase, suggesting that family firms substitute outsiders monitoring with interested bystanders. Furthermore, family firms are considerably more likely than non-family firms to allow the CEO and the Chairperson roles to be occupied by the same person. Together, these findings suggest that families maintain a close locus of control with little opportunity for external discipline.

Further evidence was produced to suggest that the compensation of family firm CEO's is less sensitive to prior performance than non-family firm CEO's. In contrast, there was some weak evidence to suggest that family firm compensation might be lower than that of non-family firms. However, while this might be consistent with the notion that family CEO's derive utility from a broader set of sources than non-family CEO's, the absence of a time-series dimension constrains the ability to generalise. In aggregate, these inferences are consistent with the notion that family firms adopt a set of corporate governance structures that are consistent with the expropriation of outside shareholder wealth.

Tests of the second hypothesis sought to discriminate between this interpretation and the alternative possibility that the differences were not inconsistent with wealth maximisation. The results were somewhat anomalous. While the results from the two-stage regression suggested that family firms have sub-optimally low levels of outside blockholdings, the results also

suggested that non-family board members hold too many shares. The two results aren't necessarily mutually exclusive, however, they are difficult to reconcile. In addition, it was found that family firms with low levels of CEO ownership would benefit from issuing more shares to the CEO. It was also found that family firms are sub-optimally leveraged; it would seem that family firms would experience performance improvements by increasing the amount of leverage in their capital structures. Overall, the results from the tests of the second hypothesis are not completely consistent with entrenchment. If some of the mechanisms are prevented from reaching equilibrium - because of other extraneous factors not accounted for in the model, or simply because the short time horizon captures the market out of equilibrium - it follows that significant results may persist. This paper leaves the issue to be taken up by future researchers. Ultimately, this paper evidences significant differences in corporate governance structures. The nature of these differences hint at entrenchment (in the sense they are largely consistent with *ex-ante* predictions). However, it remains a reasonably open empirical question whether this is indeed the case.

Furthermore, this paper produced strong evidence to suggest that family CEO's aren't likely to hold more shares in their own name than non-family CEO's. This supports previous evidence in the literature that suggested that family CEO's are motivated by altruistic concerns (that is, pursuing their self-interest through the welfare of others) rather than their immediate self-interest. Research that sought to clarify the distinction between altruistic and other motivations would be well advised to do so within the context of family firms.

In summary, this paper finds that family firms adopt substantially different corporate governance structures to non-family firms. Some evidence has been produced to suggest that these differentials ultimately impact upon firm performance. However, further research is necessary to pursue this notion with a larger sample over a longer time-frame to determine the degree to which this paper's results may be generalised.

References

- 2002, Corporate Disclosure: Strengthening the financial reporting framework, (Commonwealth of Australia).
- 2003, Corporate Law Economic Reform Program (Audit Reform and Corporate Disclosure) Bill 2003.
- 2003, Principles of Good Corporate Governance and Best Practice Recommendations, (ASX Corporate Governance Council Implementation Review Group).
- Agrawal, Anup, and Charles R. Knoeber, 1996, Firm performance and mechanisms to control agency problems between managers and shareholders, *Journal of Financial and Quantitative Analysis* 31, 377-397.
- Anderson, Ronald C., Thomas W. Bates, John M. Bizjak, and Michael L. Lemmon, 1998, Corporate Governance and Firm Diversification, *Working Paper - American University - Kogod School of Business*.
- Anderson, Ronald C., Sattar A. Mansi, and David M. Reeb, 2003, Founding family ownership and the agency cost of debt, *Journal of Financial Economics* 68, 263-285.
- Anderson, Ronald C., and David M. Reeb, 2003, Founding-Family Ownership and Firm Performance: Evidence from the S&P 500, *The Journal of Finance* 58, 1301-1328.
- Bartholomeusz, Stephen M., 2002, After Enron: The New Reform Debate, *The University of New South Wales Law Journal* 25, 580-593.
- Berle, Adolf A., and Gardiner C. Means, 1933. *The Modern Corporation and Private Property* (Macmillan, New York).
- Black, Fischer, and Myron Scholes, 1973, The Pricing of Options and Corporate Liabilities, *Journal of Political Economy* 81, 399-418.

Booz Allen Hamilton, 2003, CEO Turnover in 2002: Trends, Causes and Lessons Learned.

Cadbury, Adrian, 1992, The Financial Aspects of Corporate Governance, (The committee on Financial Aspects of Corporate Governance).

Chami, Ralph, 1999, What's Different about Family Business?, *Working Paper Series, University of Notre Dame and the International Monetary Fund. Computer World, 1992.* 67-69.

Coase, Ronald H., 1937, The nature of the firm, *Economica* 4, 331-351.

Crawford, Anthony, John R. Ezzell, and James Miles, 1995, Bank CEO pay-performance regulations and the effects of deregulation, *Journal of Business* 68, 231-256.

Demsetz, Harold, and Kenneth Lehn, 1985, The Structure of Corporate Ownership: Causes and Consequences, *Journal of Political Economy* 93, 1155-1177.

Efron, 1993. An introduction to bootstrap (Chapman & Hill).

Harijono, Mohamed Ariff, and George A. Tanewski, 2004, The Impact of Family Control of Firms on Leverage: Australian Evidence, *Unpublished EMF Classification Code: 140*, 1-31.

Hermalin, Benjamin E., and Michael S. Weisbach, 2003, Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature, *Economic Policy Review - Federal Reserve Bank of New York* 9, 7-26.

Huber, P. J., 1981. Robust Statistics (Wiley).

Higgs, Derek, 2003, Review of the role and effectiveness of non-executive directors, (The Department of Trade and Industry, London).

Investment and Financial Services Association, first issued by the Australian Investment Managers' Association, 1999. *A Guide for Investment Managers and Corporations (the "Blue Book")*.

James, Harvey, 1999, Owner as Manager, Extended horizons and the family firm, *International Journal of the Economics of Business* 6, 41-56.

Jenson, Michael C., and William H. Meckling, 1976, Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure, *Journal of Financial Economics* 305-360.

Jenson, Michael C., and Kevin J. Murphy, 1990, Performance pay and -top-management incentives, *Journal of Political Economy* 98, 225-264.

Klein, April, 1998, Firm Performance and Board Committee Structure, *Journal of Law and Economics* April, 275-303.

- La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, 1998, Law and Finance, *Journal of Political Economy* 106, 1113-1155.
- La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, 1999, Corporate ownership around the world, *Journal of Finance* 54, 471-518.
- Loderer, Claudio, and Kenneth Martin, 1997, Executive stock ownership and performance: tracking faint traces, *Journal of Financial Economics* 45, 223-255.
- Morck, Randall, and Bernard Yeung, 2003, Agency Problems in Large Family Business Groups, *Entrepreneurship: Theory and Practice* Summer.
- Mroczkowski, Nicholas A., and George Tanewski, 2004, Family Firms and Initial Returns Performance: Australian Evidence, EAA Conference Paper Prague.
- Schulze, William S., Michael H. Lubatkin, Richard N. Dino, and Ann K. Bucholtz, 2001, Agency Relationships in Family Firms: Theory and Evidence, *Organization Science* 12, 99-116.
- Smith, Adam, 1937. *An Inquiry in to the Nature and Causes of the Wealth of Nations* (Modern Library, New York).
- Tufano, P., 1996, Who manages risk? An empirical examination of risk management practices in the gold mining industry., *Journal of Finance* 51, 1097-1137.
- Weisbach, Michael S., 1988, Outside Directors and CEO Turnover, *Journal of Financial Economics* 20, 431-460.
- White, Halbert, 1980, Heteroskedasticity-Consistent Covariance Matrix and a Direct Test for Heteroskedasticity, *Econometrica* 48, 817-838.

Table 2(A). Regression Analysis of Ownership and Board Composition

The odd-numbered Regressions are OLS regressions. Where White's (1981) test for homogeneity of variance is rejected, test statistics have been corrected using White's heteroskedastic-consistent variance-covariance matrix. Regression coefficients and p-values from the even-numbered regressions are derived through M-estimation using Huber's (1981) influence function.

Panel A						
	P_CEO_A		P_CEO_I		P_CEO_D	
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	0.2658 (0.166)	0.4251 (0.339)	0.2599 (0.132)	0.1775 (0.113)	0.0133 (0.933)	0.0214 (0.140)
FF	0.1252 (0.001)	0.0958 (0.003)	0.1119 (0.003)	0.0675 (0.003)	0.0059 (0.346)	0.0024 (0.405)
LN(TA)	-0.0102 (0.334)	-0.1251 (0.416)	-0.0112 (0.273)	-0.0079 (0.200)	0.0010 (0.792)	-0.0008 (0.999)
R-squared	0.0901		0.0976		0.0098	
F statistic	5.9041 (0.004)	(0.000)	5.2443 (0.007)		0.4798 (0.620)	

Panel B								
	P_OD_A		P_OD_I		P_OD_D		P_BLOCK	
	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Intercept	0.0961 (0.622)	0.0997 (0.624)	0.0891 (0.618)	0.0905 (0.013)	0.0070 (0.945)	0.0243 (0.137)	-0.0969 (0.608)	-1.1662 (0.007)
FF	-0.1179 (0.003)	-0.0729 (0.000)	-0.0628 (0.082)	-0.0281 (0.000)	-0.0551 (0.008)	-0.0118 (0.000)	-0.167 (0.000)	-0.1657 (0.000)
LN(TA)	0.0044 (0.683)	-0.0023 (0.974)	0.0010 (0.915)	-0.003 (0.133)	0.0033 (0.550)	-0.0004 (0.648)	0.022 (0.037)	0.4978 (0.001)
R-squared	0.0695		0.0311		0.0749		0.1842	
F statistic	4.6994 (0.011)		1.5580 (0.216)		3.9252 (0.023)		12.1733 (0.000)	(0.000)

Table 2. Regression Analysis of Ownership and Board Composition (Cont.)

Panel C. Regressions (1) ,(3), (5) & (7) are OLS regressions. Test statistics (t-statistics in curved brackets, p-values in square brackets) are reported below coefficient estimates. Where White's (1981) test of homogeneity of variance is rejected, test statistics have been calculated using White's heteroskedastic-consistent standard errors. Regression (8) is a logitistic regression (z-statistics in curved brackets, p-value in square brackets). R-squared is the adjusted R-squared except for in regression (9), in which case McFadden's R-squared has been reported. Regressions (2), (4), (6) & (8) are derived using Huber's (1981) M-estimator.

	B_PO		B_PI		B_PG		LN(B_SIZE)		B_DUAL
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Intercept	0.1958 (0.324)	-0.7424 (0.115)	0.6529 (0.000)	1.1392 (0.004)	0.1514 (0.300)	0.0000 (0.685)	-0.8244 (0.002)	-5.3310 (0.000)	3.9680 (0.180)
FF	-0.1857 (0.000)	-0.1747 (0.000)	0.0394 (0.268)	0.0361 (0.233)	0.1463 (0.000)	0.1429 (0.000)	0.0389 (0.458)	0.0459 (0.385)	1.3396 (0.035)
LN(TA)	0.0250 (0.023)	0.4885 (0.003)	-0.0176 (0.073)	-0.2828 (0.057)	-0.0075 (0.351)	0.0000 (0.693)	0.1369 (0.000)	2.4850 (0.000)	-0.3659 (0.032)
R-squared	0.2064		0.0255		0.1970		0.4752		0.1145
F statistic	13.8715 (0.000)		2.2949 (0.106)		13.1401 (0.000)		45.8283 (0.000)		10.0646 (0.007)

Panel D (Compensation level variables). Regressions (1), (3) & (5) are OLS regressions. Where White's (1981) test for homogeneity of variance is rejected, test statistics have been corrected using White's heteroskedastic-consistent variance-covariance matrix. Regression coefficients and p-values in (2), (4) & (6) are derived through M-estimation using Huber's (1981) influence function. N=99

	LN(C_FIXINC02)		LN(C_OPTINC02+1)		LN(C_TOTALINC02)	
	(1)	(2)	(3)	(4)	(5)	(6)
C	6.106 (0.000)	-4.9429 (0.004)	-4.2756 (0.492)	-24.4971 (0.151)	5.1835 (0.000)	-7.7581 (0.000)
FF	-0.1535 (0.185)	-0.1121 (0.340)	-1.8705 (0.119)	-1.8703 (0.119)	-0.3077 (0.029)	-0.2971 (0.037)
LN(TA)	0.3756 (0.000)	6.165 (0.000)	0.637 (0.068)	10.9829 (0.064)	0.4452 (0.000)	7.254 (0.000)
Adjusted R-squared	0.587		0.043		0.585	
F-statistic	70.6786 (0.000)		3.2253 (0.044)		69.9557 (0.000)	

Table 3. 2SLS Results – Corporate Governance and Firm Performance in Family Firms

In the first stage, predictions of 6 endogenous variables are modeled from the equations specified in section 5. The 6 variables are P_CEO_A, P_OD_A, P_BLOCK, B_POF, C_PEQ02 and DL. In the second stage the predictions are regressed on Q along with Q's specific control variables (Ln(TA) and industry dummies). For the sake of brevity, estimates relating to each of the 12 industry dummies (reflecting ASX industry codes) have been omitted from the table. 6 of the 12 dummies were significant in the final model (at the 10% level) despite thin coverage of the sample over ASX industry classifications. The tests reported in this table were conducted exclusively on family firms (N=50). The 'F' suffix in the first column denotes that the variable is the prediction from the model specified in section 5.

	Q (1)
C	-6.2132 (0.003)
P_CEO_AF	8.1719 (0.030)
P_CEO_AF^2	-1.4051 (0.739)
P_OD_AF	-14.7447 (0.001)
P_BLOCKF	5.5882 (0.094)
B_POF	-1.3909 (0.312)
C_PEQ02F	-1.9998 (0.138)
DLF	2.0690 (0.001)
LN(TA)	0.3447 (0.010)
Adj R-squared	0.919959
F	29.159
p-val	(0.000)