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Corporate governance, accounting and finance: A review

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Abstract

We review accounting and finance research on corporate governance (CG). In the course of our review, we focus on a particularly vexing issue, namely endogeneity in the relationships between CG and other matters of concern to accounting and finance scholars, and suggest ways to deal with it. Given the advent of large commercial CG databases, we also stress the importance of how CG is measured and in particular, the construction of CG indices, which should be sensitive to local institutional arrangements, and the need to capture both internal and external aspects of governance. The 'stickiness' of CG characteristics provides an additional challenge to CG scholars. Better theory is required, for example, to explain whether various CG practices substitute for each other or are complements. While a multidisciplinary approach to developing better theory is never without its difficulties, it could enrich the current body of knowledge in CG. Despite the vastness of the existing CG literature, these issues do suggest a number of avenues for future research.

Key words: Corporate governance; Agency costs; Directors; Duality; Board committees; Ownership structure; Shareholder activism; Auditor independence; Accounting quality; Endogeneity

JEL classification: C30, C36, G30, G34, G38, K22, M48

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1. Introduction

On any criterion, the corporate governance (CG) literature is vast. To illustrate, in July 2010, Google Scholar returned about 287 000 hits using 'corporate governance' as keywords[1]; our own initial electronic troll through the literature revealed 50 016 published 'works' by early 2010, a count that includes editorials, some newspaper articles, works with no named authors and about 100 duplicates but excludes a large number of unpublished working papers available over the internet; and there are specialised journals and working paper series devoted exclusively to CG matters. A range of disciplines have contributed to the literature on CG, and many papers have explored linkages between CG and questions traditionally addressed by scholars in accounting and finance.[2] Appropriately for an accounting and finance association celebrating its 50th anniversary and to keep our review tractable, we confine it to some recurring governance themes in accounting and finance and do not delve into other areas of enquiry such as CG and the law, or CG and product development, marketing, management and organisational matters.

As one might expect when a body of literature expands so fast, our review is by no means the first. Indeed, Shleifer and Vishny's (1997) review may well be the most frequently cited paper in the CG literature.[3] Other reviews, all of which differ somewhat in their focus, include one of CG and financial accounting information (Bushman and Smith, 2001); CG in Asia (Claessens and Fan, 2002); CG primarily in countries other than the United States (Denis and McConnell, 2003); Gillan's (2006) overview of the then 'recent' research in CG, which was used to give context to other papers published in a special issue of *Corporate Governance: An International Review* (volume 17 issue 3); and a similar contextual paper by Bebchuk and Weisbach (2010) written to accompany seven papers in the March, 2010 issue of *The Review of Financial Studies*.

Our own review, of CG in accounting and finance, is structured as follows. In Section 2, we discuss the meaning of corporate governance, how it is typically measured and one feature of CG characteristics,[4] namely their 'stickiness'. We also discuss potentially the least understood challenge in CG archival research,

[1] As of July 2010.

[2] Google Scholar returned roughly the following number of hits (July 2010): 'CG + finance' 200 000; 'CG + law' 145 000; 'CG + accounting' 95 000; 'CG + marketing' 20 000; 'CG + management' 18 000; 'CG + organisation' (or 'CG + organization') 18 000.

[3] According to Google Scholar, Shleifer and Vishny (1997) had been cited about 6000 times by August 2010.

[4] We mostly use 'characteristics' or 'practices' to describe aspects or facets of a firm's CG. Other words may be used by others in a similar context, such as indicators, mechanisms, components, aspects, attributes and even measures. We use 'elements', 'items' and 'fields' to describe governance data that are not aggregated.

namely how best to deal with endogeneity. In Section 3, we briefly consider factors that help explain the spread of CG innovations across countries. Section 4 identifies several key characteristics of CG, both internal and external to the firm. Internal characteristics include the structure of the board of directors and its committees, internal control systems, managerial incentives and the firm's ownership structure[5]; external characteristics include the influence of blockholders, financial analysts, auditors, regulators and competition in the market for corporate control.

Corporate governance outcomes are reviewed in Sections 5 and 6. Section 5 focuses on the association between CG characteristics and the firm's performance, its cost of equity capital, the combined role of CG and the firm's payout policy in mitigating agency costs, its reliance on debt relative to equity and the cost of debt. Section 6 discusses relationships between the firm's CG and aspects of its information environment, including its disclosure policies, properties of analysts' forecasts of the firm's earnings, and the 'quality' of the firm's accounting numbers and financial statements. Section 7 contains a brief statement of our main conclusions.

2. Meaning and measurement of corporate governance

2.1. Ambit of corporate governance

Corporate governance is about the governance of corporations, which may not be a particularly revealing statement from a definitional point of view but it does remind us that CG is to do with corporations and it is also to do with determining the activities in which they are properly engaged. The Cadbury Committee (Cadbury Report, 1992, para. 2.5) put it this way: 'Corporate governance is the system by which companies are directed and controlled'.[6] The Committee went on to elaborate on the respective roles of the board, the shareholders and the auditor: 'Boards of directors are responsible for the governance of their companies. The shareholders' role in governance is to appoint the directors and the auditors and to satisfy themselves that an appropriate governance structure is in place (para. 2.5) …The role of the auditors is to provide the shareholders with an external and objective check on the directors' financial statements (para. 2.7)'.

In April 2010, the Australian Government's Corporations and Markets Advisory Committee (CAMAC, 2010) issued a report, 'Guidance for Directors', which implicitly backs (p. 7) the Cadbury Committee's view. Subsequently, the CAMAC report quotes (p. 17) the HIH Royal Commission report, *The Failure of HIH*

[5] Ownership structure is also an external characteristic, to the extent it is not within the powers of the firm's controllers.

[6] The literature we discuss is focused on listed public companies, which we mostly describe simply as 'firms'.

Insurance (2003) Volume 1, pp. 101–102, as follows: 'At its broadest, the governance of corporate entities comprehends the framework of rules, relationships, systems and processes within and by which authority is exercised and controlled in corporations'. It is worth noting that, on this view, CG is confined to matters that are, or ought to be, within the control of the shareholders and the board. Perhaps that explains why authoritative 'principles' statements typically deal with matters which the shareholders and the board can decide and implement.

Because of its breadth, research in CG is characterised by the lack of a unifying theory. The lack of theory is evident in the nature of the questions asked, how they are framed, the core ideas and the reasoning processes that underpin hypotheses, how models are specified, how the dependent and explanatory variables are defined and measured, which estimators are used and how tests are applied, and the manner in which conclusions are reached. This state of affairs is an inevitable reflection of the range of perspectives academics have taken when thinking about CG matters. Suppose we take the typical view in the finance literature, as described by Shleifer and Vishny (1997, p. 737): 'corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment'. While this is hardly a rigorous definition of CG, it does nonetheless capture the essence of the common concern in the finance literature with agency costs and their resolution. Examples are the board's usage of corporate payout policy in combination with CG structures to curb over-investment, or of a combination of governance structures and incentive contracts to align managers' interests with those of shareholders or lenders. But as we shall see, the finance literature also contemplates actions being taken by external parties, such as substantial shareholders or financial institutions, to address agency costs that can arise when the firm's 'controllers' pursue their own interests to the disadvantage of others with legitimate claims. Clearly, the finance view would be seen by some as too narrow (it does not contemplate appointing board members primarily because of the resources they can contribute) and by others as too broad (corporate law and accounting standards also have a role in addressing agency conflicts, e.g. with respect to self-dealing and the disclosure of related party transactions).

In this review, like others (e.g. Gillan, 2006), for convenience we distinguish between internal and external governance characteristics. This distinction can be blurred as it is contingent upon the firm and its circumstances. By internal governance characteristics we mean the CG structures and processes that are within the control of the firm's shareholders and the board of directors. There are also exogenous factors which have a bearing on the extent of agency conflicts and their costs. Typically they include the underlying nature of the firm's business and its future investment opportunities, its resources and technology, the legal system and the laws of the land, financial accounting standards and their enforcement, capital markets and their operating rules and protocols, and so forth. Subject to exogenous factors and depending on the firm's constitution, the shareholders and the board will either separately or collectively take various CG actions, including e.g. changing the constitution (perhaps to increase the board's

size), electing directors, establishing various board committees and appointing their members, appointing the CEO and agreeing their compensation package, and appointing the auditor. Once the board is itself appointed, it will in turn elect a chairperson and appoint the CEO and delegate powers and responsibilities to various functionaries as considered appropriate. It is worth noting that while many of these actions are to a large extent discretionary, they typically are taken against a backdrop of common practice, or practices recommended in codes of 'best' CG.[7]

Some aspects of governance that have a bearing on agency costs are the result of decisions by external parties. Examples are decisions by blockholders, financial institutions or hedge funds to invest in a firm with a view to influencing its financial policies and the payoffs to shareholders. Other examples are the ways in which the firm's financial advisors or auditors discharge their responsibilities, and how market operators, corporate regulators or security analysts influence disclosures and accounting policies and practices. These relationships are complex and involve actions and reactions, not necessarily sequential and in many cases endogenously determined.

2.2. Measuring corporate governance

The lack of clarity about the boundaries of CG is reflected in the structures of CG databases. Most databases focus on choices made by the firm's shareholders and directors but there are exceptions. An example is the Japanese CG database, Nikkei Economic Electronic Databank System's Corporate Governance Evaluation System, which rates firms according to internal and external CG practices as well as by what we later describe as CG outcomes.

Most databases contain annual data but again there are exceptions. Databases maintained by Institutional Shareholders Services (ISS) have daily records of CG items for thousands of firms in the United States and in other countries. However, most CG items remain unchanged for long periods of time. We refer to this property as 'stickiness'. Databases can contain many items, which raises the question of the dimensionality of the data. We comment in this section on the dimensionality of CG data as well.

2.2.1. Stickiness

It is not uncommon for researchers to note a degree of stickiness in CG variables—after all, the board of the average firm for example is not revamped that often.

[7] The criterion on which a set of CG practices are held to be best practice is not always clear. Similarly, researchers often refer to the 'quality' of a firm's CG as 'better' or 'higher', as shorthand for the firm's CG characteristics being scored more highly according to some measurement rule.

Initial Public Offerings (IPOs) are one setting where the shareholders historically have had an almost clean slate when it comes to deciding the structure and composition of their boards. Interestingly, da Silva Rosa *et al.* (2004) report that, before the Australian Securities Exchange's (ASX's) best practice recommendations were released (ASX Corporate Governance Council, 2003),[8] small Australian IPO firms without lengthy operating histories had previously established boards with characteristics substantially different from the recommendations, which led the authors to question whether the ASX recommendations may have been too prescriptive and costly for small firms.

For established firms, the board's structure and membership, and the performance of the directors, are increasingly subject to ongoing review, especially when there is a major legislative change or when codes of best practice are proposed or issued. Cicero *et al.* (2010) present evidence that US firms pursue target board structures, and that they do so at economically meaningful rates. Using a broad panel of changes to board structure over the period 1991–2003, they find that these changes are frequent, with approximately two-thirds of firms changing either board size or independence during a 2-year period. They predict a target board structure for each firm-year based on existing theory and find that firms close about 45 per cent of the gap between their actual and predicted target board size, and 63 per cent of the gap between their actual and predicted target board independence over the 2-year period. The rate of change is positively associated with the benefits of implementing effective boards and negatively associated with measures of CEO influence. Observed changes in both board independence and size in either direction are consistent with the pursuit of an economically efficient target, suggesting that pressures to adopt boards with prescribed characteristics may reduce efficiency. We are not aware of any similar study in Australasia.

To obtain an indication of the extent of stickiness in the CG of major Australasian firms, we calculated Pearson's rank order coefficient of correlation between the rankings in adjacent years of the CG practices of the largest 250 Australian firms, using rankings contained in the Horwath/University of Newcastle reports for 2002–2009.[9] This correlation has consistently exceeded 0.86 since 2005–2006. The maximum correlation is 0.89 for 2008–2009; the minimum is 0.72 for 2003–2004, which reflects changes made by firms to their CG following the release of the ASX recommendations. As another indication, we analysed the rate of change in each of the 166 individual CG items with useful data for all non-US firms in the ISS database between 23 October 2003 and 30 June 2010.

[8] Henry (2008) also documents corporate governance characteristics of Australian firms before 2003. He focuses on the association between firms' corporate governance and their valuation.

[9] We are indebted to Jim Psaros for providing the Horwath/University of Newcastle data and to ISS for its data.

For Australian firms, there were only 13 371 changes in more than 40 million firm-item-days; for New Zealand firms, there were 2584 changes in more than 4 million firm-item-days.[10]

Clearly, stickiness is an issue of concern as it results in loss of statistical power in CG research and may well require considerable care in experimental design.

2.2.2. How many CG dimensions are there?

Many early studies of CG focus upon one particular governance component, such as the proportion of non-executive directors or duality (duality is where the roles of CEO and board chairperson are filled by the same individual). More recently, with the advent of large corporate governance databases such as those provided by ISS and Investor Responsibility Research Center (IRRC), composite measures are increasingly employed in the literature. They condense the information contained in a large number of individual governance items into a single (yet seemingly informative) measure, the suggestion being that, because it is unlikely a single characteristic can measure the overall quality of a firm's CG, a composite measure would do better. Although the creation and use of composite governance scores has intensified among researchers, this practice has mostly not been accompanied by a systematic and careful comparative study of, and reflection on, its merits. The plethora of CG measures can make it well-nigh impossible to explain conflicting results.

The widely used G-index (Gompers *et al.*, 2003) is a composite measure. It is computed from data compiled by IRRC as the equally weighted sum of 24 individual shareholder rights practices across five characteristics (regulations that delay a takeover, protect management, limit what shareholders can vote on, or limit a takeover; and state laws). The G-index adds one point for every practice that reduces shareholder rights, so firms with a lower G-index have stronger shareholder rights. Another example of a composite measure is Gov-Score (Brown and Caylor, 2006). It is the equally weighted sum of 51 governance practices compiled by ISS, and it reflects both internal and external governance characteristics. Assigning equal weight to each individual practice presumes that the governance elements are equally valuable and are complements rather than substitutes.

Others create normalised scores of various governance characteristics, which are then summed to achieve an overall score (Bertrand and Mullainathan, 2001).

[10] These numbers, as low as they are, may overstate the rate of change to some degree because of the manner in which ISS codes the database. For example, in the version of the database we analysed, five separate fields (items) are used to code Board size: <6, 6–8, 9–12, 13–15 and >15. A sixth field is used to indicate cases where the Board size is unknown. They may also understate it, for example, when an independent director retires and is immediately replaced by another with different skills—in which case the number of independent directors is unchanged although the board dynamics may become quite different.

Some studies (Brown and Caylor, 2006; Bebchuk *et al*., 2009) find parsimonious indices are more effective than those that include all available characteristics. For example, in recognising that some anti-takeover devices may be more important and others may be highly correlated, Bebchuk *et al*. (2009) put forward an entrenchment index (E-index) in which just six practices underlying the G-index are given weight. Further, Brown and Caylor (2006) propose a parsimonious composite governance score (Gov7) where just seven governance 'provisions' underlying the 51 practices in Gov-Score are given weight. Of the seven provisions, two represent external governance (no staggered board and no poison pill) and are part of Bebchuk *et al*.'s (2009) E-index. The remaining five represent internal governance characteristics.

Rather than constructing indices themselves, some researchers rely upon proprietary indices created by firms that rate firms' CG. These indices include Audit Integrity's Accounting and Governance Risk (AGR), the Corporate Governance Quotient (CGQ) from ISS, the CG rating from Governance Metrics International (GMI), the rating from the Corporate Library (TCL), the Standard & Poor's Corporate Governance Score (CGS) and in Australia, the annual Horwath/University of Newcastle reports. The GMI-index is based on 500 governance elements across six characteristics (board accountability, corporate social responsibility, executive remuneration, financial disclosure and internal controls, takeover controls and ownership base and shareholder rights). Each characteristic is weighted according to shareholder interest. An asymmetric geometric algorithm is used, which magnifies outliers so that firms with the best practices are rewarded more, while those with the worst practices are penalised accordingly. The AGR-index is a direct measure of the likelihood of fraud and is based on nearly 350 elements across various governance (board independence, executive qualifications and remuneration practices) and accounting characteristics (corporate reporting, corporate actions and oversight issues), all of which are derived from a firm's publicly filed information over a 15-year time span. The weight assigned to each element in the index is the coefficient indicating its relative predictive power in identifying a fraudulent accounting condition in a firm. The TCL-index is based on a quantitative formula that goes beyond the industry's typical reliance on 'tick-the-box' best practice compliance. It employs a variety of governance characteristics statistically found to be significant measures of value and risk: board composition and succession planning, CEO remuneration practices, takeover defences and board level accounting concerns. Four governance characteristics contribute to Standard & Poor's CGS, which varies from 1 to 10. They are ownership structure and influence, financial stakeholder rights and relations, financial transparency and information disclosure, and board structure and process. The CGQ ratings are relative and are reported on a percentile basis ranging from 0 to 100. They are based on 61 governance elements across eight characteristics: board of directors, audit, charter and bylaw provisions, anti-takeover provisions, executive and director compensation, progressive practices, ownership, and director education. Finally, the Horwath/University of

Newcastle report ranks firms according to a proprietary procedure, which is reported to be based on global best practice. Governance characteristics taken into account include external auditor independence, statements of codes of conduct, audit and remuneration committee structures, and the presence of independent directors.

As exemplified previously, the trouble with the construction of governance indices is that the methods employed are largely arbitrary, being hampered by the fact that we do not have an agreed theory of CG to guide variable construction or to indicate which aspects should receive greater weighting. So it is hardly surprising that Bhagat *et al*. (2008) find no consistent relation between a variety of governance indices (identified from prior research and proprietary data) and firm performance. Similar findings are reported by Daines *et al*. (2010), who note that the most commonly cited proprietary indices have virtually no predictive power. They also note that there is surprisingly little cross-sectional correlation among the proprietary indices, suggesting either the indices are measuring different CG constructs or there is a high degree of measurement error (i.e. the scores are unreliable) in the rating process.

Larcker *et al*. (2007) employ Principal Components Analysis (PCA) and Recursive Partitioning to investigate the construct of CG. They collect data from various sources on 39 CG characteristics (they include indicator, count and continuous variables) for a sample of US firms. PCA of the 39 characteristics yields 14 governance factors. The factors are positively associated with operating performance and excess stock returns, but not with abnormal accounting accruals in a consistent way, and appear to have little relationship with accounting restatements. Recursive partitioning yields similar results. Beekes *et al*. (2010) note that the correlations among the variables to which PCA is applied are unbiased provided all of the variables are continuous, but the inclusion of count or indicator variables can affect the results substantially. The use of discrete PCA to derive CG components can correct for bias in the correlation matrix when count and indicator variables are included. Discrete PCA (proposed by Kolenikov and Angeles, 2004) involves modifying the correlation matrix to take into account the nature of the underlying variables. For a sample of 760 US firms, Beekes *et al*. (2010) employ discrete PCA on 17 governance variables collected from different sources and identify 7 governance components. When these components are used in a fashion comparable to Larcker *et al*. (2007), they do not obtain the same results.

As a final comment, Bebchuk and Hamdani (2009) make an important point: different firms may have different ways of mitigating agency problems and they are not conveniently summarised by a single number.[11] Such firms may not need to comply with best practices across all governance characteristics. They also

[11] This comment would apply a fortiori to studies that compare the 'quality' of corporate governance across firms in different countries, using the same CG items.

argue ownership structure should be taken into account when constructing a composite governance score (p. 263): 'measures that protect outside investors in a firm without a controlling shareholder are often irrelevant or even harmful when it comes to investor protection in companies with a controlling shareholder and vice versa'. Hence, governance scores that do not incorporate ownership structure may well miss the mark.

2.3. Addressing endogeneity

Besides difficulties in the measurement of CG quality, researchers face challenges in the econometric analysis of the data when explaining the causes and effects of CG and financial and accounting policy decisions.[12]

In earlier studies, researchers typically based their inferences on the estimated parameters from reduced-form cross-sectional Ordinary Least Squares (OLS) regressions of financial decisions on CG (see for example Morck *et al.*, 1988; Jensen and Murphy, 1990; Yermack, 1996; Vafeas, 1999). Implicitly, they treat CG as an exogenous variable in their models. To illustrate, having found a positive relationship between say firm performance (the Y variable) and CG (the X variable), researchers often profess that any move by the firm towards better CG causes firm performance to improve. However, causality may run in both directions, labelled 'simultaneous causality', i.e. it runs from X to Y and from Y to X. The researcher's model may also suffer from 'unobserved heterogeneity', where the identified relationships are symptoms of some unobservable factor(s) that drive both X and Y.[13] Because in both of these cases the explanatory variable(s) will be endogenous and correlated with the residuals ε in the regression model ($E[X' \varepsilon] \neq 0$), OLS is biased and inconsistent. It follows that any study that unreasonably ignores the possibility of endogeneity, but makes a causal argument that, say, better CG leads to better firm performance, is at the very least incomplete. More significantly, it could lead to erroneous calls for the establishment of more prescriptive legislation, mandating specific governance practices or fuel support for the so-called 'one-size fits all' viewpoint held by legal experts and authorities advocating globally desirable CG characteristics (Coffee, 1999; Bebchuk and Hamdani, 2009).

Because the problem of endogeneity is a real and serious one in much of the CG literature, with most studies merely mentioning the possibility of endogeneity, we briefly elaborate on ways in which researchers can address this problem.[14] We focus on two commonly used methods, fixed-effects estimation and an

[12] Larcker and Rusticus (2010) discuss endogeneity issues found in the accounting literature. Our example reflects the literature in finance.

[13] Other common forms of endogeneity are measurement error and selection bias.

[14] See Larcker and Rusticus (2010) for further guidance on the treatment of endogeneity in accounting and finance research.

instrumental variables (IV) approach. To illustrate, we look at a frequently examined question where endogeneity is almost certain to be an issue: Does better CG improve firm performance?

Let us assume, hypothetically, a decision has been made to measure the firm's performance by its return on equity (ROE) and to measure the quality of its CG by a widely reported composite index. The main OLS regression to explain the effects of CG on firm performance is,

$$\mathrm{ROE}_i = \beta_0 + \beta_1 \mathrm{CG}_i + \beta_2 W_i + \varepsilon_i, \tag{1}$$

where W_i is a set of relevant exogenous control variables (e.g. firm size, as measured by the log of market capitalisation) and β_1 measures the return to CG. We assume that this model suffers from endogeneity, causing CG and ε to be correlated.

To eliminate endogeneity resulting from unobserved heterogeneity, we take advantage of the longitudinal design (we have both cross-sectional and time-series data) and employ panel data OLS regression with firm fixed-effects (e.g. Himmelberg *et al.*, 1999; Cremers and Ferrell, 2010). To see how this works, we decompose the residual term into a firm-specific effect $[\![(\mu]\!]_i)$ that captures *all* time-invariant variables (including omitted variables) that affect Y, and the remainder $[\![(\eta]\!]_{i,t})$ that varies cross-sectionally and over time, $\varepsilon_{i,t} = \mu_i + \eta_{i,t}$.

To continue with our example, this model can be estimated using N dummy variables $[\![(D]\!]_i)$, one for each firm i:

$$\mathrm{ROE}_{i,t} = \beta_1 \mathrm{CG}_{i,t} + \beta_2 W_{i,t} + \sum_{i=1}^{N} \mu_i D_i + \eta_{i,t}, \tag{2}$$

where D_1 takes the value of 1 for all observations of the first firm and zero otherwise and thus assigns a fixed-effect for firm i. To test whether the panel approach is necessary, we could employ a Chow test which involves incorporating the restriction that all the intercept dummy variables have the same coefficient $(H_\downarrow 0 : \mu_\downarrow 1 = \mu_\downarrow 2 = \cdots = \mu_\downarrow N)$. If this null is not rejected, the data can be pooled together and OLS employed. If the null is rejected, we cannot assume the intercepts are the same over the cross-sectional units and a panel data approach should be used. To avoid estimating so many dummy variable parameters, the regression may also be run on the first differenced values. In this case, the influence of time-invariant unobservable variables cancels out and any relation that remains cannot be attributable to endogeneity that arises from such an effect. A major drawback of the fixed-effects approach and first differences is that it relies solely on within-firm variation to drive the results. Clearly, this is impractical in most CG research because of CG stickiness (Hermalin and Weisbach, 1991; Zhou, 2001).

The most popular way of dealing with both unobserved heterogeneity and simultaneous causality is to identify a set of valid instruments Z for CG and estimate the model consistently using two-stage least squares (2SLS). Generally,

2SLS requires at least as many instruments as there are suspect endogenous variables to identify the parameters in the model. When there are multiple endogenous variables, some additional attention should be given to ensure the parameters in the model are identified (Murray, 2006). As an aside, squares and cross-products of endogenous variables should be treated with separate instruments.

Back to our example, in the first stage, CG is regressed against the instruments Z and *all* other *e*xogenous variables,

$$\mathrm{CG}_i = \alpha_0 + \alpha_1 Z_i + v_i. \tag{3}$$

There are two important characteristics that Z must have to be a valid instrument. First, it should be sufficiently correlated with CG, so we expect $\alpha_1 \neq 0$. Second, Z should be uncorrelated with ε, in other words, $E[Z, \varepsilon] = 0$. The insight here is that Z should not have its own direct influence on ROE and therefore not be an omitted variable in Equation (1). Any relation that Z has with ROE should only be through its influence on CG, which then influences ROE. In essence, we use the exogenous shocks in Z to decompose CG into its predictable part ($\widehat{\mathrm{CG}}_i = \hat{\alpha_0} + \hat{\alpha_1} Z_i + \hat{\alpha_2} W_i$), which is exogenous to ROE; and its problem part (v), which is potentially endogenous to ROE and thus correlated with ε.

In the second stage, 2SLS estimates are obtained by regressing ROE on the predicted values of CG, computed using the parameters from the first-stage regression,

$$\mathrm{ROE}_i = \beta_0 + \beta_1 \widehat{\mathrm{CG}}_i + \beta_2 W_i + \varepsilon_i. \tag{4}$$

Because in the second-stage regression we omit the part of CG that is endogenous to firm performance (v), the parameters will now be consistently estimated. In the same manner we should carry out 2SLS regressions where CG is the Y variable and Z^* is a set of valid instruments for ROE (the X variable). As an alternative, the system of equations can be estimated simultaneously using three-stage least squares (3SLS), which improves efficiency provided all equations in the system are correctly specified. Generalised method of moments (GMM) estimation may provide further efficiency gains in dynamic panel data models (Arellano and Bover, 1995).

Before reporting 2SLS regression results, it is important to find out whether it is necessary to use an IV approach, i.e. whether the parameters obtained by OLS are consistent or not. This can be tested using the Hausman (1978) F-statistic. Under the null hypothesis, both of the estimators are consistent, but OLS is more efficient because 2SLS uses only part of the variation in the suspect endogenous variable. Under the alternative hypothesis, OLS is not consistent. Hence, failure to reject the null implies the IV approach is not valid. Alternatively, Davidson and MacKinnon (1993) suggest a Durban-Wu-Hausman test where the residuals μ from the first stage are added to the second-stage regression,

$$\mathrm{ROE}_i = \beta_0 + \beta_1 \widehat{\mathrm{CG}}_i + \beta_2 W_i + \delta\mu_i + \varepsilon_i. \quad (5)$$

The null hypothesis is for exogeneity, i.e. $\delta = 0$. If CG is uncorrelated with ε, and we have assumed Z is uncorrelated with ε, then any explanatory power of this added variable indicates $E[v' \varepsilon] \neq 0$. In other words, if δ is significantly different from zero, then OLS is inconsistent and we should employ IV estimation.

The sting in the tail of the IV approach is that of weak instruments or weak identification. That is, the set of instruments chosen must be relevant ($E[Z' x] \neq 0$) and sufficiently correlated with the suspect endogenous variable. If the instruments are weak, IV estimation can produce far worse results than OLS, yielding not only large standard errors but also a bias in IV towards OLS as the explanatory power of the instruments approaches zero (Bound *et al*., 1995; Larcker and Rusticus, 2010). Moreover, the IV estimator will have a non-normal sampling distribution, even in very large samples. In such a case, 2SLS may be worse than OLS (Larcker and Rusticus, 2010). Therefore, we should always check the combined strength of the proposed instruments in the first stage before running the second-stage regression. The strength of the instruments is supported by high first-stage *F*-statistics. Based on a desired maximal bias of the IV estimator relative to OLS, Stock and Yogo (2005) develop critical values for the *F*-statistic against the null hypothesis that the excluded set of instruments is weak. Looking at table 1 in Stock and Yogo (2005), using three instruments for X and restricting the bias of IV estimator to 5 per cent of the bias in the OLS estimator, the critical value of the first-stage *F*-statistic is 13.9. An *F*-statistic below this threshold suggests weak instruments.

The importance of choosing valid IVs merits some additional remarks. Because of the lack of data availability, underlying theories, or pure assumptions, researchers often simply resort to using the lagged (by one or more periods) suspect endogenous variable as the instrument in an attempt to reduce the correlation of X with ε. The justification is that although current values of the suspect variable may be endogenous to Y, it is unlikely that past values are subject to the same problem. Here, the choice of the lag-length is imperative: older instruments are more likely to be exogenous but, unfortunately, they also are more likely to be weaker (irrelevant) than more recent ones. Although the argument for using lagged variables is intuitively appealing, this approach is unlikely to be credible in most CG research because of the stickiness of CG characteristics. In that case, lagged instruments are likely to suffer as much from endogeneity as do the contemporaneous suspect variables.

Surveying the use of IVs in accounting research, Larcker and Rusticus (2010, p. 189) comment that 'In general, there is little attempt [in the typical accounting study] to develop a model that explicitly identifies and justifies the endogenous (or choice) variables and the exogenous and instrumental variables …' Yet, the amount of credibility that anyone can bestow upon the IV approach critically depends on the reported level of scrutiny (whether intuitive, empirical, or

theoretical) of the instrument's validity. Getting similar estimation results from alternative instruments will further enhance the reliability of the results.

While recognising the problem of finding valid instruments that help explain CG quality and yet are unrelated to performance, Knyazeva (2007) proposes state or federal laws, such as takeover laws or the Sarbanes-Oxley Act (SOX), and governance at the industry level (industry median levels of CG and CG premium, defined as the difference in market-to-book ratio of firms with high and low quality of corporate governance based on industry median quality anti-takeover provisions, institutional ownership and the internal governance index) as exogenous sources of variation in a firm's CG. Her argument is that weak corporate control may lead firms to implement better CG standards. Further, industry practices offer a benchmark of governance quality which firms may seek out, while the firm cannot directly change this index. The corporate governance premium proxies for the market demand for CG, which evokes shareholder pressure for corporate governance reform if it is particularly important for firm valuation. At the same time, it does not have direct links to the bottom line or firm behaviour apart from firm governance because the premium reflects the value the market places on better governance. Bhagat and Bolton (2008) propose the percentage of board directors who are CEOs as an instrument for CG on the supposed role of networks among CEOs who serve on boards, and the reported adverse impact on the CG of such firms. Black *et al.* (2006) propose an asset size dummy variable as the instrument for CG of Korean firms because many important Korean CG rules apply only to firms over 2 trillion won.

In sum, in CG research, the IV approach does not directly solve the estimation problem but rather refocuses discussion from the possibility of endogeneity of CG to the validity of Z as a set of feasible instruments for CG. Because the latter is prone to be ambiguous, unless there is better theory, the effectiveness of the IVs approach is likely to remain contentious. Nonetheless, editors of leading journals now expect CG researchers to identify and address any suspect endogeneity problems inherent in the research question, when they are likely to arise, to rationalise any IVs used and to report IV estimations (including first- and second-stage results) as a complement to OLS. In the absence of valid IVs, the researcher should report how big the endogeneity problem has to be in order to change the OLS results (Larcker and Rusticus, 2010).

3. The spread of corporate governance codes internationally

There is an increasing interest in the diffusion of CG codes across countries, with the literature showing that this process is strongly influenced by political, cultural and economic forces (Aguilera and Cuervo-Cazurra, 2004; Haxhi and van Ees, 2010). It is commonly accepted that the globalisation and liberalisation of financial markets is a key contributor to the worldwide implementation of codes of CG as listed firms compete for funds (Nestor and Thompson, 2000; Khanna and Palepu, 2004; Yoshikawa and Rasheed, 2009). However,

Cuervo-Cazurra and Aguilera (2004) find that openness to foreign trade has a negative influence on the speed of development of codes of good governance. Instead, they find that the speed of development of the first code of good governance depends on local understanding of foreign knowledge, willingness to use foreign knowledge and exposure to it.

Aguilera and Cuervo-Cazurra (2004) argue that the diffusion of governance codes is in response to a combination of endogenous and exogenous pressures to solve deficiencies in a country's CG system. Internal pressures aim to increase efficiency in the system, and exogenous pressures seek to acquire legitimation in capital markets. They use probit models and Poisson regression to analyse the determinants of the adoption of codes of good governance, where the dependent variable is constructed as both a binary variable (existence of at least one code per country) and a count variable (number of codes per country). They operationalise efficiency needs in terms of the characteristics of shareholder protection and legitimation pressures in terms of the degree of government liberalisation, economic integration in the global economy and presence of foreign institutional investors. Based on a sample of 49 countries, they find codes of good governance are more likely to occur when a country lacks strong shareholder protection rights, i.e. where the legal system has fewer protections for shareholders from board misconduct. Moreover, exogenous institutional pressures influence the development of codes. Specifically, codes of good governance are more likely to be issued in countries where there is high government liberalisation and a strong presence of foreign institutional investors. Further, countries with more effective governance systems in terms of the overall legal system, i.e. a common-law legal system, are more likely to continue improving their system and to refine their codes. This suggests that CG is a dynamic process in which CG practices are revised and enhanced contingent on new corporate realities. In a similar vein, Zattoni and Cuomo (2008) find the issuance of codes in civil law countries is prompted more by legitimacy reasons than by efficiency reasons.

Globalisation has prompted considerable discussion on the transferability of best practices and to speculation on whether CG practices across countries will converge. As global market competition intensifies, countries may feel compelled to update their governance codes more frequently and in line with a recognised set of high-quality CG standards, such as those stipulated by the World Bank and the OECD.[15] The assumption is that a cohesive common law governance model will form the point of convergence (Hill, 2007). Others have remarked on the difficulty in bringing about convergence because of the various forms of path dependence (Bebchuk and Roe, 1999; Coffee, 1999; Guillén, 2000; Gilson, 2001; Bebchuk and Hamdani, 2009).

[15] The *OECD Principles of Corporate Governance* (OECD, 2004) were first endorsed by OECD Ministers in 1999 and have since become an international reference point for corporate governance in both OECD and non-OECD countries.

In defining convergence, Gilson (2001) distinguishes between 'convergence in form' and 'convergence in function', where the former relates to increasing similarity in legal framework and institutions. In contrast, convergence in function suggests different countries may have different rules and institutions but may still be able to perform the same function, such as ensuring fair disclosure or accountability by managers. Khanna *et al*. (2006) distinguish between *de jure* convergence, when two countries adopt similar CG laws, and *de facto* convergence, when actual practices are implemented and converge.[16] They find robust evidence of *de jure* convergence in form at the country level but virtually no evidence of *de facto* convergence in CG in form or function in a battery of estimations at country, industry and firm levels. Afsharipour (2009) reports that India's reform efforts demonstrate CG rules may converge on a formal level with Anglo-American norms, but local characteristics tend to prevent reforms from being more than a formality. India's inability to effectively implement and enforce its extensive new rules corroborates the argument that comprehensive convergence is limited and that the transmission of ideas from one socio-economic system to another is highly complex and difficult and requires political, social and institutional changes that cannot be made easily.

Summarising the empirical literature on convergence of CG, Yoshikawa and Rasheed (2009) conclude (p. 388) that '(d)espite the vigorous intellectual position of the proponents of convergence, there is only limited evidence to indicate that such convergence is actually occurring. Even when there is ostensible convergence, much of it is convergence in form rather than substance, and governance convergence is not a context-free phenomenon'. Thus, local forces such as institutional embeddedness and politics can delay governance changes or create hybrid practices. Because institutional change is a slow process, convergence of CG practices is likely to unfold over relatively long periods of time, making it necessary to undertake longitudinal studies to demonstrate CG convergence (Yoshikawa and Rasheed, 2009). While a cross-sectional study can identify similarities between countries, the existence of such similarities does not constitute definitive evidence of convergence, in the absence of knowledge about prior states. By implication, it is difficult to compare the quality of CG across nations.

4. Characteristics of corporate governance

In this section, we elaborate on various CG characteristics and, for convenience, classify them as either internal or external to the firm. Recall that internal characteristics are those that result from the decisions and actions of the shareholders and the board, such as the constitution and membership of the board of

[16] The same terminology was used much earlier in the accounting literature in relation to the harmonisation of accounting standards across countries (Van der Tas, 1988).

directors and its committees, the structure of share ownership, financing arrangements, and the form of executive compensation. External characteristics include monitoring by outside parties such as blockholders and institutional investors, activists and external auditors.

4.1. Internal characteristics

4.1.1. The board of directors and its committees

Responsibility for setting objectives and monitoring and controlling the firm's activities rests with the board of directors, which is central to decision-making within the firm and was highlighted by Fama and Jensen (1983). The board's size and composition influence its ability to function effectively. Smaller boards have generally been considered to be more effective in decision-making (Yermack, 1996) and to promote better decision-making, governance codes often specify that the board should not be too large. Linck *et al.* (2008) show that board structure tends to reflect the firm's industry, the need for monitoring of activities given the available growth opportunities and the transparency of the firm's earnings. Board meeting frequency may indicate the level of board activity; following poor performance, more frequent meetings are often associated with better future operating performance (Vafeas, 1999). Boards usually appoint executive committees as well as specialised committees to assist with appointments (nomination committee), internal control and reviewing financial reporting quality (audit committee) and remuneration decisions (remuneration committee). Some firms have committees for governance and risk but governance codes tend to focus on the importance of the nomination, audit and remuneration committees in assisting the board to carry out its tasks effectively.

The board of directors comprises executive (inside) and non-executive (outside) directors. Executive directors provide overall strategic guidance and are experts in their field. Non-executive directors commonly are professional directors with experience in an unrelated business and substantial reputations to protect. Among other things, they monitor the board's activities and financial reporting quality. As such, there should be an appropriate balance between executive and non-executive directors on the board. In the absence of governance codes, which may recommend varying proportions of non-executive directors, this balance may be determined endogenously (Hermalin and Weisbach, 1988).

The independence of non-executive directors is crucial if they are to be effective monitors. Guidance is provided in governance codes for determining who is and who is not an independent director. The definition of an independent director has become stricter over time and takes into account the background, experience and length of tenure of the individual. The existence of interlocking boards also has an impact on board independence and decision making in the firm. Hallock (1997) documents greater CEO compensation in the presence of interlocks, and

Devos *et al.* (2009) show interlocks are more likely to be associated with poor firm performance. Thus, appointment of interlocking directors to the board tends to be viewed negatively by the share market.

The roles of chief executive officer and chairperson are fundamental. The chairperson's role includes ensuring the board's activities are carried out with due diligence and information is provided to directors on a timely basis. The CEO is responsible to the board for overall strategy and investment, and for managing day-to-day affairs. These roles clearly differ in their nature and emphasis and governance codes typically recommend that they be assumed by different individuals (see, e.g. Cadbury Report, 1992).

4.1.2. The audit committee, internal control and internal audit

It is generally considered imperative that the audit committee be confined to non-executive directors if it is to carry out its duties effectively. The independence of the audit committee members is important as the monitoring they provide affects earnings quality (discussed later), audit quality (Abbott and Parker, 2000) and auditor independence (Abbott *et al*., 2003). Independent audit committees are associated with higher disclosure quality (Karamanou and Vafeas, 2005) and a lower cost of debt finance (Anderson *et al*., 2004). Bronson *et al*. (2009) find the benefits of audit committees are limited unless the committee comprises independent directors only.

Firms subject to SOX must disclose whether the audit committee includes a person with financial expertise. Increased litigation risk associated with being designated a financial expert on the committee may result in a lack of willing appointees, especially in industries with opaque earnings. The evidence to date is that US firms have tended to disclose there was no financial expert on the audit committee. Even where the audit committee was reported to include a member with financial expertise, the disclosure was not always comprehensive (Carcello *et al*., 2006). Recommendations similar to SOX have been adopted in other countries. For example, guidelines for audit committees were issued by the New Zealand Securities Commission in 2004 (Securities Commission, New Zealand, 2004). However, the effect of these particular guidelines on audit committee effectiveness is questionable. Rainsbury *et al*. (2009) find little evidence that audit committee 'quality' is related either to financial reporting quality or to the level of audit fee paid.

The firm's internal control system is important to ensure the integrity of financial reporting and to check systems are appropriate to monitor and manage risk. The board has primary responsibility for internal control, although it is often delegated to its audit committee. In this circumstance, the firm's internal auditor evaluates internal controls and reports directly to the audit committee. In an effort to improve financial literacy of audit committee members, a former audit partner has sometimes been employed, which has a positive effect on internal control systems (Naiker and Sharma, 2009).

Some firms maintain the internal audit function 'in house', while others prefer to outsource it or to use some combination of the two. An in-house internal audit function is likely to be more effective given greater familiarity with the systems in place: it can identify weakness in the internal control system and ensure remedial action is taken, and it is more likely to detect and report on fraud (Coram *et al*., 2008). The amount of resources dedicated to internal audit is related to a firm's size, business risk and the ability to pay for monitoring (Carcello *et al*., 2005a). At times of increased scrutiny (such as occurred in the US following the Enron and WorldCom debacles), greater emphasis is typically placed on internal audit and additional resources are made available for this purpose (Carcello *et al*., 2005b).

4.1.3. Ownership structure

In common law countries, firms' shareholdings are generally widely dispersed and there are strong investor protection laws to safeguard the interests of minority shareholders (La Porta *et al*., 1998). Code law countries are characterised by more concentrated shareholdings, complex ownership arrangements and less effective investor protection laws. Where ownership is concentrated and there is a difference between the cash-flow rights and voting rights of shares, owning a relatively small proportion of the share capital can be enough to control the firm. Although the existence of one or more concentrated shareholdings is usually a source of agency concerns, it may be the case in some countries that such ownership arrangements are a substitute for an under-developed institutional framework. So it is possible for the minority shareholders to be better off when the firm's shares are closely held.

In East Asian countries, cross-shareholdings and controlling shareholders are commonplace and have a big influence on CG. A feature of the Japanese economy, for example, is the business grouping (known as keiretsu) and shareholdings by a main bank. The main bank also lends money to other firms in the group, making it both a major shareholder and a debt-holder. This arrangement should promote incentive alignment with other shareholders and reduce agency costs. A member firm's board of directors may include a representative of the main bank, resulting in lower information asymmetry between the bank and the firm. Firms in a keiretsu are further linked by complex cross-shareholdings and by business transactions with each other, providing incentives to retain information within the group. Research shows that the main bank may discipline other firms in the keiretsu by placing directors on their board when the firm performs poorly (Kaplan and Minton, 1994). However, the monitoring effect of the main bank has been found to depend on the size of the bank's financial interest in the firm (Hwang and Kim, 1998). Moreover, the presence of a keiretsu arrangement is associated with managerial entrenchment (Kang and Shivdasani, 1995) and greater agency costs, as evidenced by reduced investment in research and development (Hwang and Kim, 1998).

In Korea, business groupings can similarly have a big influence on a firm's CG and performance outcomes. Conglomerates, known as chaebols, often have complex shareholding arrangements, resulting in a very small strategic shareholding being sufficient to control a firm. Controlling shareholders in chaebols can use their position to expropriate wealth at the expense of other shareholders (Kim *et al.*, 2005) and may reduce earnings quality as well as depress the firm's performance.

4.2. External governance characteristics

In broad terms, external governance characteristics are beyond the control of the shareholders and the board. On one view, they complement internal characteristics, on another they substitute for them. On both views, external governance characteristics will influence overall outcomes.

4.2.1. Monitoring by blockholders and analysts

Large blockholders have the ability to force managers to take actions to improve the firm's value, by virtue of the size of their holdings. Blockholders typically target poorly performing firms (Bethel *et al.*, 1998) in the expectation that their costs will be recovered by enhancing the value of their investment. Some investors are particularly active in encouraging firms to adopt their viewpoint. The California Public Employees' Retirement Scheme (CalPERS) has a high profile as an activist shareholder. For a blockholder to be an effective monitor of the firm's activities, they should have no business ties with it (Borokhovich *et al.*, 2006).

Financial analysts can be effective monitors of the firm's actions. Many analysts are industry specialists. They collect data from various sources and produce reports on individual firm performance, including short-term forecasts of earnings, dividends or cash flows and long-term forecasts of growth. Analysts' information is demanded by parties external to the firm to assist them in monitoring and valuing the firm's activities, but greater inside ownership may be associated with more secrecy and less transparency, thereby frustrating the analysts. Consistent with this view, Bhushan (1989) finds the demand for analyst services in the United States decreases with the proportion of inside ownership, but increases with institutional shareholdings. In a multi-country study, Lang *et al.* (2004) find analysts are less likely to track firms with family or concentrated insider control, especially in countries with weak investor protection.

4.2.2. External auditors

External auditors play a valuable role in the governance of firms. The necessity for an independent external audit of the financial statements is widely acknowledged and provides reassurance to investors of managers' stewardship

of the firm's resources (Watts and Zimmerman, 1983). Firms with boards that are more independent may pay higher audit fees, suggesting independent directors demand greater diligence on the part of the auditor (Carcello *et al*., 2002).

Audit quality is itself not directly observable so proxies are used for it, such as the size of the audit firm. Large audit firms have a more valuable reputation to protect (DeAngelo, 1981) and are a bigger target for litigation (DeAngelo, 1981; Dye, 1993), which provides them with an incentive to be more conservative and more diligent, hence the historical association of higher audit quality with larger audit firms (DeAngelo, 1981; Palmrose, 1988; Lennox, 1999a). Large audit firms have more resources available to them and their 'deeper pockets' (Lennox, 1999b) may also contribute to their greater litigation risk. For these reasons, clients may have believed larger audit firms offer greater assurance on financial statements prepared for external parties and consequently they may have appointed a larger audit firm to signal their own quality. However, the presumption that large audit firms conduct higher-quality audits has been questioned since the high-profile audit failures in 2001–2002 (Chaney and Philipich, 2002). The lack of differential audit quality associated with large audit firms after 2001 has been offered as a reason for the apparent disappearance of the lower cost of equity capital for Australian firms with a Big 4 auditor (Azizkhani *et al*., 2010).

More recently, there has been increased emphasis and regulatory attention on the need for independence on the part of the external auditor, with a focus on the level of consultancy services and other non-audit services (NAS) offered to audit clients and on the length of auditor tenure. Frankel *et al*. (2002) report a positive association between NAS and discretionary accruals, as do Larcker and Richardson (2004), but Defond *et al*. (2002) find no significant association between auditor's independence (proxied by the issuing of going concern opinions) and NAS. Nonetheless, the provision of NAS to an audit client is either prohibited or severely restricted in some jurisdictions.

Longer audit tenure may reduce information asymmetry between the auditor and the client; and rather than being detrimental to audit quality, longer tenure may be associated with higher audit quality and a lower likelihood of audit failure. For instance, Myers *et al*. (2003) find evidence of lower dispersion in discretionary accruals for firms with longer audit firm tenure, consistent with the view that management discretion is constrained by longer-term relationships with auditors, and Chen *et al*. (2008b) find evidence of lower discretionary accruals for Taiwanese firms with longer audit firm tenure, after controlling for partner tenure. In contrast, Carey and Simnett (2006) find among Australian firms that longer audit partner tenure is associated with lower audit quality. Their evidence predominantly relates to clients of audit firms other than the Big 6.

Audit fees are associated with client size and complexity, and the risk is associated with the audit (Hay *et al*., 2006). To determine the appropriate audit fee,

auditors assess the risk associated with the client and plan their work accordingly (Bell *et al*., 2001; Bedard and Johnstone, 2004). As a result, firms with greater income-increasing discretionary accruals tend to pay a higher audit fee (Abbott *et al*., 2006), whereas firms with higher-quality CG and a financial expert on the audit committee pay less (Krishnan and Visvanathan, 2009).

4.2.3. Competition and takeovers

Firms may be led to change their CG to keep up with the competition. In addition, the market for corporate control can discipline firms into taking actions which are in their shareholders' best interests. Senior management may resist a takeover when they believe they will be replaced after the finalisation of the takeover, although there may be no substitute for superior management: Bugeja *et al*. (2009) find fewer directors are replaced where the target's performance was better. The likelihood of senior executive turnover following a successful takeover has led to the use of 'golden parachutes' to encourage managers to negotiate and follow through with takeovers that are in shareholders' best interests. However, firms may adopt provisions that restrict the takeover of the firm. These provisions are generally seen as promoting managerial entrenchment and inconsistent with good governance (Gompers *et al*., 2003).

4.2.4. Regulation and enforcement

Since La Porta *et al*. (1998) published their study on the effects of legal origin on shareholder protection and capital market development, the broader issue of legal protection of minority shareholders has received considerable attention in cross-country studies. Employing their anti-director rights index, La Porta *et al*. (1998) find support for their legal origin hypothesis: countries whose legal system is grounded in common law have a higher level of minority shareholder protection than civil law countries. Numerous studies since 1998 have used the legal origin dummy to proxy for shareholder protection.

Critics reject La Porta *et al*.'s (1998) legal origin hypothesis and the construction of their anti-director rights index, claiming it is biased towards the US system and does not capture the most significant aspects of the law (Lele and Siems, 2007; Siems, 2007). For a longitudinal data set that extends from 1970 to 2005, Armour *et al*. (2009) show that, despite differences in legal origin, the level of protection across countries has converged somewhat in recent years. In particular, civil law countries have increased their protection of minority shareholders over the same period more than common law countries, suggesting that if there is a legal origin effect, it has been declining over time. Siems (2007) shows minority shareholder protection in common law countries is relatively similar but there is no comparable similarity within the German and French civil law families. Neither is there a clear-cut distinction in shareholder protection between developed and developing countries.

In addition to laws protecting minority shareholders, many countries now have governance codes, although the approach used to encourage compliance differs from country to country.[17] The UK has always used a 'comply or explain' basis for regulating CG and disclosure of the extent of compliance in the financial statements is a condition of listing on the London Stock Exchange. In other jurisdictions, including Australia, the same approach is adopted.[18] It acknowledges that 'one-size fits all' is inappropriate, especially where there are good reasons to depart from the preferred governance structure. However, promulgating governance standards and making them mandatory is insufficient to ensure compliance: monitoring and enforcement are also required. So far we know little about the degree to which compliance with governance codes is influenced by a country's system for compliance monitoring and enforcement.[19]

5. Finance outcomes

In this section, we outline what the literature has coined the financial 'outcomes' of CG practices in the firm. Examples we discuss are the firm's operating and investment performance, its cost of capital, the sensitivity of CEO turnover to performance and the firm's payout policy. Strictly speaking, it is incorrect to call them 'outcomes' because of their interactions with CG.

5.1. Corporate governance and firm performance

What ultimately matters for firms, regulators and economists alike is whether CG affects corporate performance and if it does, then how. The consensus view in the literature is that the relationship between firm performance and CG is endogenous and may depend on other (unobserved) firm characteristics as well. Because of the endogeneity, the value maximising governance choices of one firm may differ from those of another. As a result, in equilibrium the relation between governance choice and shareholder value is ambiguous. Overall, research that takes the endogenous relationship into account finds at best only weak support for the proposition that better CG practices create value. In what follows we discuss this rapidly evolving literature in some detail.

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[17] Information on countries' governance codes is available at http://www.ecgi.org/codes/all_codes.php.

[18] In New Zealand, the CG 'guidelines are intended to help entities think about how they can achieve each Principle. [They] do not expect entities to report specifically against these guidelines. Reporting should describe how an entity has achieved the Principles' (Securities Commission, New Zealand, 2004, p. 5).

[19] See http://www.asx.com.au/about/corporate_governance/monitoring_compliance.htm for information on the ASX's CG compliance monitoring programme.

5.1.1. Firm performance and board structure

Director independence is widely considered to be a key dimension of good CG because it allows the board to properly fulfil its legal duty to oversee management and to protect the interests of other parties, primarily the shareholders. Yet, evidence supporting this conventional wisdom is limited.

Block (1999) shows outside directors may be performing their duty as monitors of management, with the market reacting favourably to the appointment of outside directors when strong monitoring practices are not already in place. The market reaction is greatest for firms when the appointment leads to a majority of outside directors on the board, when board ownership is low, and when the appointee possesses strong ex ante monitoring incentives (Block, 1999; Lin *et al.*, 2003). For firms that already have a majority of outside directors on the board, the appointment of an outsider adds little or nothing to shareholder value.

While the evidence shows the market may react favourably to the appointment of outside directors, evidence that board independence matters to long-term firm performance is ambiguous and contradictory. Summarising the early empirical literature, Dalton *et al.* (1998) use a meta-analysis of 54 past studies of board independence (159 samples, $n = 40\ 160$) and firm financial performance, concluding there is little systematic evidence to support agency theory as it relates to independent oversight. More recent US studies that account for potential endogeneity in the relationship between firm performance and CG also provide no conclusive evidence that a more independent board leads to better firm performance, or vice versa for that matter (Bhagat and Black, 2002; Dahya and McConnell, 2007; Bhagat and Bolton, 2008; Fu and Yu, 2010). Using a panel of 6000 US firms between 1991 and 2003, Wintoki *et al.* (2010) show board structure is dynamically endogenous, with current board structure strongly related to past performance when measured by return on assets (ROA) and Tobin's q. However, when they control for past performance, simultaneity and unobservable heterogeneity by adopting a dynamic panel GMM estimator, they find no causal relation between board structure and current firm performance. For a 2SLS equation framework, Bhagat and Black (2002) document evidence of reverse causation: poorly performing firms are more likely to increase board independence, but this does not improve their performance.

Several studies have examined the relationship between board structure and performance of firms with controlling shareholders. For a cross-country sample of 799 publicly listed firms with a dominant shareholder, Dahya *et al.* (2008) report a positive relation between firm performance (Tobin's q) and the fraction of directors unaffiliated with dominant shareholders, and this effect is stronger in countries with weak legal protection for minority shareholders. In a simultaneous equation framework, the association between firm performance and board composition runs in one direction only: from board independence to firm performance. They conclude that the dominant shareholder could increase firm value

by appointing an independent board, especially in countries with weak legal shareholder protection.

Korea, with its predominance of cross-holdings between group-affiliated firms (chaebols), provides a unique setting for assessing whether there is a causal connection between board structure and firm value. Kim and Black (2010) rely on a 1999 Korean law that mandated a board majority of outside directors, an audit committee and a director nominating committee for large public firms, but not for others. They use a combination of event study, difference-in-difference, firm fixed-effects, and instrumental variable methods and embed each in an overall regression discontinuity approach. They find consistent evidence of economically more significant share price increases for large firms than for small firms across all methods when the reforms were announced and thereafter. Several years after the reforms, large firms' profitability rose above that of small firms, suggesting a channel through which board structure may affect firm value. In a firm fixed-effects framework, similar share price gains are found for large firms that were legally required to change their board structure and for smaller firms that did so voluntarily.

Another aspect of board structure is whether the CEO is also the chairperson (duality). In the United States, where duality exists in a majority of firms, this leadership structure has been blamed for poor firm performance and the failure of firms to adapt to a changing environment. According to Fama and Jensen (1983), the separation of decision management (CEO) and decision control (chairperson) functions within a firm reduces agency costs and enhances firm performance. The board's chairperson has the greatest influence over its functioning, which implies that the effective separation of decision management and decision control requires that the board's chairperson should not also be the CEO. If Fama and Jensen (1983) are correct, firms that separate the roles of CEO and chairperson should experience an improvement in performance subsequent to the change in leadership structure. However, evidence taken from short-run performance studies suggests the US market is indifferent to changes in a firm's duality status, with no significant cumulative average excess return around the announcement day (Baliga *et al.*, 1996). In contrast, in the UK, where CG codes advise firms to split the roles of CEO and chairperson, the decision to split (combine) them is greeted with a positive (negative) abnormal return. The abnormal return is strongly related to various measures of agency costs (Carapeto *et al.*, 2005).

The evidence suggests that firms endogenously choose their leadership structure as part of broader firm characteristics and ownership structure decisions (Bhagat and Black, 2002; Chen *et al.*, 2008a; Iyengar and Zampelli, 2009). Using a sample of 5154 US firms between 1999 and 2003 and the Heckman (1979) two-step procedure to correct for self-selection bias, Chen *et al.* (2008a) document that although firms may change their leadership structure (from duality to non-duality or vice versa) in response to deteriorating firm performance, there is no evidence of an improvement in firm performance following the change. When an

endogenous switching regression model framework is used to test explicitly for the presence of selection bias, Iyengar and Zampelli (2009) find no evidence that CEO duality is purposefully chosen to optimise firm performance.

5.1.2. Firm performance and ownership structure

The fundamental insight into the relationship between performance and ownership structure dates back to Berle and Means (1932), who argue that the separation of ownership and control of corporations reduces managers' incentives to maximise corporate efficiency. At the core of their argument is the agency problem originating from conflicts of interest between the managers and the firm's owners or residual claimants. In corporations with diffuse ownership, the resolution of conflicts of interest between residual claimants and managers becomes a central issue.

The ownership structure of a firm may affect its performance by determining the severity of agency conflicts. One argument is that higher insider ownership minimises agency conflicts by aligning the interests of the owners and managers (Jensen and Meckling, 1976). In contrast, Shleifer and Vishny (1989) develop the managerial entrenchment model and argue that at a certain level of insider ownership managers have effective control and engage in non-value maximising behaviour, because the relative cost of that behaviour is outweighed by their private benefit. Early research confirms these arguments, finding that insider ownership is associated with performance in a nonlinear fashion (Morck *et al.*, 1988; McConnell and Servaes, 1990).

However, a firm's performance can also impact its ownership structure. Shareholders of poorly performing firms may choose to sell or tender their shares in the case of a hostile takeover bid, thereby altering the ownership structure of the firm. Thus, the relation between ownership structure and performance is ambiguous. It is likely that the ownership structure of a firm, and hence the level of managerial ownership, is an endogenous outcome of a profit-maximising process by shareholders (Demsetz, 1983).

Accounting for the possibility of endogeneity, there appears to be no causal relationship between insider ownership and firm performance (Demsetz and Lehn, 1985; Loderer and Martin, 1997; Cho, 1998; Demsetz and Villalonga, 2001; Bhagat and Black, 2002; Coles *et al*., 2007; McConnell *et al*., 2008). For a sample of 867 acquisitions by US firms between 1978 and 1988, Loderer and Martin (1997) document a significant positive association between firm performance (Tobin's q and 6-days' cumulative abnormal returns) and insider ownership using cross-sectional OLS regressions. However, using a 2SLS regression framework, this relationship disappears. Instead, they find evidence of reverse causality, with increased firm performance affecting insider ownership. Demsetz and Villalonga (2001) and Coles *et al.* (2007) report similar results, with a positive relation between firm performance and insider ownership for OLS but not for 2SLS regressions. Avoiding the endogeneity issue altogether, McConnell

et al. (2008) measure changes in firm performance around announcements of 4141 insider purchases of 1700 US firms from 1994 to 1999. They report a mean 6-day announcement period abnormal return of 0.94 per cent, consistent with a causal interpretation of the empirical relation between insider ownership and firm performance. As with the original findings of Morck *et al.* (1988), the relationship is curvilinear with firm value first increasing and then decreasing as insider ownership increases. There is no evidence that insider purchases are a response to changes in firm characteristics that require a new optimal equilibrium ownership level, or that insiders purchase shares to signal that the firm is undervalued.

La Porta *et al.* (1999) contend that the greatest source of agency problems often stems from controlling outside shareholders who divert the firm's resources for their own private benefit, in turn reducing shareholder value. Hence, a more concentrated ownership structure could lead to a reduction in the value of the firm as a result of expropriation by large shareholders.

Hu and Izumida (2008) shed light on the endogenous and dynamic nature of the ownership-performance relationship in Japanese firms. As ownership structure in Japan is dominated by keiretsu, in which the dominant shareholding firm is itself widely held, there may be important differences between Japanese and US firms in terms of corporate monitoring and information sharing. Employing Granger causality tests in panel data models and considering investment and leverage as transmission mechanisms within a simultaneous equation system, they report ownership concentration has a significant effect on contemporary and subsequent corporate performance. Specifically, a U-shaped relationship between ownership concentration and performance is found, consistent with the expropriation and monitoring effects of large shareholders. They fail to find that changes in performance are accompanied by changes in ownership concentration, possibly owing to a less liquid securities market and more stable shareholdings in Japan.

Shleifer and Vishny (1997) criticise the Korean chaebol structure as among the least investor-protective corporate systems in the world. Consistent with this criticism, Chang (2003) shows that firm performance causes ownership structure in Korea (but the reverse is not true) and that controlling shareholders use inside information to increase their direct and indirect ownership stakes in more profitable firms. Furthermore, chaebols exploit the groups' internal resources by transferring profits to other affiliates through intra-group trades.

5.1.3. Firm performance and outside blockholders

An issue that has attracted attention is whether outside shareholders with a large stake are active in ways that improve the firm's performance. Both the convergence of interest hypothesis and the efficient monitoring hypothesis predict outside blockholders will actively monitor the firm's management (Shleifer and Vishny, 1986; Pound, 1988; McConnell and Servaes, 1990; Admati *et al.*, 1994;

Pagano and Röell, 1998). All else equal, increases in outside blockholdings are often taken as a measure of improved CG. However, when large shareholders gain close to full control, they start generating private benefits of control that are not shared with minority shareholders (Shleifer and Vishny, 1997). Hence, the presence of shareholders with a large stake in the firm can harm the minority shareholders. The impact on firm performance is therefore ambiguous.

Research also shows that the identity of the outside blockholders matters, with institutional investors being more likely to play a governance role (Khan, 2006). Brickley *et al.* (1988) report institutional shareholders in the United States vote more actively on anti-takeover amendments than other shareholders and more actively oppose proposals that seem harmful to shareholders. The most widely recognised activists have been US public pension funds, especially CalPERS.

Two important surveys of the literature on this topic conclude that on the whole there has been relatively little shareholder activism in the United States and even when there has been, the link between activism and performance is at best weak. Black (1998, p. 459) concludes that a 'small number of American institutional investors … spend a trivial amount of money on overt activism efforts… Institutions achieve the effects on firm performance that one might expect from this level of effort—namely, not much'. Similarly Karpoff (2001, p. 1) reports 'most evidence indicates that shareholder activism can prompt small changes in target firms' governance structures, but has negligible impacts on share values and earnings'. This is consistent with the vanishing evidence of significant positive abnormal returns surrounding the announcement of performance targetings by CalPERS, dubbed the 'CalPERS effect' (Nelson, 2006).

One of the more promising areas of research on shareholder monitoring is in examining the differing incentives across institutional investor categories (David *et al.*, 1998). For example, Chen *et al.* (2007) find that only concentrated holdings by independent long-term institutions are related to better post-merger firm performance and that their presence makes withdrawal of bad bids more likely. These institutions make long-term portfolio adjustments rather than trading for short-term gains and they sell before only very bad outcomes.

Hedge funds are thought to play an increasingly active role in CG and corporate control (Klein and Zur, 2006; Boyson and Mooradian, 2007; Brav *et al.*, 2008; Greenwood and Schor, 2009). One reason for their greater role is that hedge funds, because of their short-termism, are more likely to profit from activism. In the United States, hedge funds tend to target more profitable firms than other activists, seldom seek control, tend to be non-confrontational and mostly address cash-flow agency costs (Brav *et al.*, 2008; Klein and Zur, 2009). Hedge fund activism typically produces positive governance outcomes, leads to higher dividend payouts and lowers CEO compensation. Hedge fund activism also results in large positive abnormal returns for target firms around takeover announcements, with hostile activism typically receiving a more favourable market reaction (Greenwood and Schor, 2009). The large positive abnormal returns are mainly related to the ability of activists to force target firms into a takeover.

The longer-term impact of hedge fund activism on firm performance is somewhat mixed. While Klein and Zur (2009) find hedge fund activism does not lead to improved accounting performance in the year after the initial purchase, Brav *et al.* (2008) find activism improves long-term operating performance (ROA and ROE) for target firms.

Shareholder activism is not confined to the United States, with some research suggesting it may be more rewarding in other parts of the world. Hermes, the fund manager owned by the British Telecom Pension Scheme, is the first documented experiment of shareholder activism in the UK. Becht *et al.* (2009) note that Hermes' approach to shareholder activism takes a private rather than public form, such as meetings with executives and contacts with other institutional investors. It was successful in a majority of cases where it sought to replace the CEO or the chairperson, or to restructure the business, or to improve operational management and investor relations. Activism appeared to pay off, resulting in improved corporate performance of target firms. In the UK, the free-rider problem was partially accommodated by sharing the costs of activism with other institutional investors.

5.1.4. Firm performance and the market for corporate control

The takeover market is widely viewed as a means of containing agency conflicts arising from the firm's free cash flow. When there is an active takeover market, managers can attempt to entrench themselves using anti-takeover devices, such as the adoption of poison pills instead of share ownership. Bebchuk *et al.* (2009) argue that internal barriers, designed to prevent or slow down hostile takeovers and developed by management with the approval of the board, can constrain external governance forces. Correspondingly, Masulis *et al.* (2007) find that acquirers with more anti-takeover provisions are less subject to the disciplinary power of the market for corporate control.

This perspective predicts internal barriers designed to prevent hostile takeovers are value destroying. Consistent with this view, studies report negative abnormal returns surrounding the announcement of the adoption of anti-takeover devices (Malatesta and Walkling, 1988; Masulis *et al.*, 2007). The more entrenching the amendments, the more value they destroy. Controlling for the adopting firm's pre-existing governance structure, when firms introduce a poison pill provision, only those with no pre-existing protective governance provision experience abnormal share price gains and abnormal revisions in 5-year earnings growth rate forecasts (Caton and Goh, 2008). Abnormal returns and forecast revisions are related to governance structure but not to board composition or subsequent merger activity.

A heavily cited study by Gompers *et al.* (2003) showed firms with strong shareholder rights have yielded higher abnormal returns. For a sample of 1500 US firms between 1990 and 2000, they form deciles of firms ranked according to their self-constructed G-index. An investment strategy that sold short firms in

the highest decile (least empowering of shareholders) and bought those in the lowest decile (most empowering of shareholders) would have earned an average abnormal return of 8.5 per cent per annum during this decade. Firms with weak governance were also found to have lower accounting performance (ROE) but the difference was not statistically significant. Similar findings are documented by Bebchuk *et al*. (2009) using their reduced-form entrenchment index (E-index).

Subsequent studies find zero long-term abnormal returns once endogeneity is considered. For example, Bhagat and Bolton (2008), taking into account the endogeneous relationships between corporate performance and CG, capital structure, and ownership structure, find stronger shareholder rights, inside ownership and CEO–chairperson separation are associated with better contemporaneous and subsequent operating performance (ROA) but none of the governance measures is correlated with future share price performance. They also find that, given poor firm performance, the probability of disciplinary management turnover is positively correlated with inside ownership and board independence. However, better-governed firms are less likely to experience disciplinary management turnover in spite of poor performance.

Core *et al*. (2006) determine whether the relationship between weak governance and low returns is causal by testing whether the market is negatively surprised by poor operating performance of firms with weaker governance. They find firms with weak shareholder rights exhibit significantly lower industry-adjusted performance (ROA) in the next year. But analysts' forecast errors and earnings announcement returns show no evidence that this underperformance surprises the market. Their results suggest that any difference in a firm's likelihood of being taken over does not cause abnormal returns.

For a large sample of US firms between 1999 and 2002, Chidambaran *et al.* (2007) directly examine the (Granger) causality argument by looking at annual changes in CG characteristics (board characteristics, CEO pay-performance sensitivity, insider ownership, institutional ownership, CEO turnover and shareholder rights) and subsequent annual changes in firm performance, defined as industry-adjusted share returns, industry-adjusted accounting profits or an asset pricing regression alpha. They find no significant performance difference between firms with good and bad governance changes. Further, more than half the firms with good governance changes subsequently underperform. They also find that governance changes are related to changes in the firm's observable characteristics and are driven by movement towards industry average governance levels.

Cremers and Ferrell (2010) utilise Granger causality to address endogeneity between CG and firm performance for a panel data analysis of US firms and a long time period characterised by large governance changes (1978–1989). They document a robust positive association between improvements in shareholder rights (G-index) and abnormal share returns between 1978 and 1989. The negative firm valuation effects of classified boards, poison pills and G-index are significantly greater after the judicial approval of the poison pill in 1985. They find

no evidence to support the reverse causality explanation, namely that poorly performing firms tend to adopt more anti-takeover devices.

5.1.5. Firm performance and legal protection

Examining cross-listings on a US exchange is one means of studying the effects of changes in investor protection on firm performance. Firms can reduce agency costs by bonding to a more credible governance system or to higher disclosure standards and accounting rules than those prevailing in their home country (Coffee, 1999; Benos and Weisbach, 2004). This extends to enhanced monitoring by intermediaries of high repute, such as, financial analysts, auditors, underwriters and rating agencies (Coffee, 2002; Lang *et al.*, 2003; Doidge *et al.*, 2004).

Consistent with the bonding hypothesis, the literature documents cross-listing on a US stock exchange is associated with small valuation gains, as measured by stock returns immediately surrounding the announcement of cross-listing (Foerster and Karolyi, 1999; Miller, 1999; Doukas and Switzer, 2000; Ammer *et al.*, 2008; Roosenboom and van Dijk, 2009). Miller (1999) reports a positive 1.15 per cent average abnormal return on 183 ADR-initiating announcement dates between 1985 and 1995. Roosenboom and van Dijk (2009) find similar announcement period returns of 1.3 per cent. The valuation gains are larger for firms from countries with weaker protection of shareholder rights (Ammer *et al.*, 2008). Further, variables related to investor protection have significant explanatory power in cross-sectional regressions of announcement abnormal returns (Roosenboom and van Dijk, 2009).

Although there may be a significant, albeit small, valuation gain surrounding the announcement of cross-listing, some studies find little evidence that cross-listing generates positive post-listing long-run abnormal returns (Foerster and Karolyi, 1999; Sarkissian and Schill, 2009); contrasting results are reported by others. For example, Lang *et al.* (2003) show cross-listed firms are valued more highly, on average, than their non-cross-listed peers. Doidge *et al.* (2004) report Tobin's q ratios 16.5 per cent higher in firms that cross-list on a US stock exchange relative to matched non-cross-listed firms from the same country. Pinkowitz *et al.* (2006) and Frésard and Salva (2009) provide evidence that cross-listing on a US exchange raises the valuation of cash holdings and that the premium in the value of cash enjoyed is sustained in the long run. The valuation effects are strongest for firms from countries with weak legal protection of shareholder rights, with one dollar of cash worth approximately the same amount in higher shareholder protection countries with highly developed financial markets but less than 65 cents in low protection countries where there is more risk (Pinkowitz *et al.*, 2006).

Other examples of market-induced changes include voluntary adoptions of higher governance quality by Brazilian firms joining Bovespa's New Market (Da Silveira *et al.*, 2007) and the use of tag-along rights by Brazilian firms'

controlling owners to increase shareholder protection for non-controlling owners (Bennedsen *et al*., 2007). While these changes may have added value, other legal and regulatory changes occurred around the same time and could have confounded the estimates.

5.2. *Corporate governance and the sensitivity of CEO turnover to performance*

Many studies show that good governance affects board decisions on critical tasks (e.g. Brickley *et al*., 1988). The decision to remove the CEO of a poorly performing firm is arguably one of the most important decisions made by the board (Weisbach, 1988) as it has long-lasting implications for the firm's investment, operating and financing decisions. Empirical work suggests that differences in CG affect the sensitivity of CEO dismissal to poor firm performance. For example, Boeker (1992) documents for a sample of 67 US firms in the semiconductor industry over a 22-year period (1968–1989) that outsider dominated boards are more likely to dismiss the CEO if the firm is performing poorly relative to the industry. Fich and Shivdasani (2006) report US firms with busy boards (those in which a majority of outside directors hold three or more directorships) are associated with weak CG and lower sensitivity of CEO turnover to firm performance. Independent but busy boards display CEO turnover-performance sensitivities indistinguishable from those of insider-dominated boards. Goyal and Park (2002) report for their sample of US firms for 1992–1996 that the sensitivity of CEO turnover to firm performance is significantly lower when the CEO is more powerful, as measured by CEO–chairperson duality. Lau *et al*. (2009) examine the effect of CG on the strength of the negative association between firm performance and CEO dismissal for large corporations in Australia between 1997 and 2004. Consistent with US and UK studies, corporate performance is negatively related to the probability of CEO dismissal in Australia, using both accounting and market-based performance measures. Board independence does not attenuate the observed negative association between firm performance and CEO dismissal.

External governance, as proxied by takeover activity, affects the intensity of managerial discipline. Comparing all management turnovers in un-acquired US industrial firms in 2- to 5-year periods (the active takeover market of 1984–1988 and the less active market of 1989–1993), Mikkelson and Partch (1997) find turnover and performance are related only in the active period. Huson *et al*. (2001) study forced CEO turnover as a primary outcome of internal monitoring during a period in which there were substantial changes in CG structures and in the market for corporate control. They report increases in the level of disciplinary takeover activity from the 1970s to the mid-1980s are not associated with changes in the sensitivity of CEO turnover to firm performance. Further, the relation between the likelihood of forced CEO turnover and firm performance did not change significantly between 1971 and 1994, despite substantial increases in outsider representation on corporate boards.

Kaplan and Minton (2006) examine CEO turnover, both internal (board driven) and external (through takeover or bankruptcy), from 1992 to 2005 for a sample of large US firms. They find boards respond not only to poor performance relative to the industry, but also to poor industry and market performance. Since 1998, the relationship between internal turnover and firm performance is stronger for performance in the contemporaneous year, suggesting boards now monitor performance more frequently and more aggressively. External CEO turnover is not significantly related to share performance. They argue that boards, possibly encouraged by large shareholders, perform both the role they performed in the 1980s and the role that hostile takeovers played then.

Ownership has a role in the relation between CEO turnover and firm performance. Boeker (1992) finds poorly performing US firms in which the CEO has a high proportion of ownership are more likely to dismiss the CEO than poorly performing firms with less CEO ownership, consistent with a scapegoating argument. Bhagat and Bolton (2008) employ 2SLS to address potential endogeneity and find that, conditional on poor firm performance, the probability of disciplinary management turnover increases with director ownership and board independence in the United States. In contrast, for UK firms, Dahya *et al.* (1998) report it is more likely that the top manager will be forced out of their firm as a result of the poor firm performance when the manager's stake in the firm is < 1 per cent. As the level of ownership rises, managers become increasingly entrenched in their posts. Likewise, Hillier and McColgan (2008) report UK boards with managerial ownership exceeding 50 per cent make less use of alternative corporate control systems and are less likely to remove their CEO or other board members following poor performance.

Kato and Long (2006) show the presence of a large controlling shareholder and the appointment of independent directors strengthen the relationship between the firm's performance and CEO turnover in China. Sensitivities are weaker for firms where the CEO also holds a position with the controlling shareholder. For Italy, a country that features low legal protection for investors, Volpin (2002) documents low sensitivity of CEO turnover (voluntary and involuntary) to firm performance when the controlling shareholders are also top executives, when control is fully in the hands of one shareholder and is not shared by a set of core shareholders, and when the controlling shareholder owns less than 50 per cent of the firm's cash-flow rights. Gibson (2003) evaluates the effectiveness of CG in emerging markets by estimating the link between CEO turnover and firm performance, for over 1200 firms in eight countries. He finds CEOs are more likely to lose their jobs when their firm's performance is poor. However, for the subset of firms with a large domestic shareholder, CEO turnover and firm performance are unrelated. Maury (2006) investigates how CG and firm performance affect top executive turnover in Finnish firms. He reports an increase in CEO, top management and board turnover in response to poor share price performance and operating losses. Turnover is higher when the firm

has a two-tier board structure (i.e. when the CEO is not the chairperson) and lower when the CEO or a board member is the controlling shareholder.

Kang and Shivdasani (1995) show outside directors appointed by the main banks of financially troubled Japanese firms assume an important monitoring role: the sensitivity of CEO dismissal to poor earnings performance is substantially higher for firms with ties to a main bank. Chang and Shin (2006) report that, in Korea, before the Asian Financial Crisis of 1997–1998 the likelihood of replacing poorly performing CEOs was unrelated to membership of a chaebol. After the crisis, CEO turnover sensitivity to performance became greater in chaebol firms than in stand-alone firms. They argue this improved monitoring follows reforms initiated by the Korean government, non-government organisations and other capital market participants.

Studies of the CEO turnover-performance relationship yield further evidence that institutional investors play an important monitoring role. Wu (2004) reports the relationship between performance and CEO dismissal becomes stronger after firms are named by CalPERS' CG programme. Del Guercio *et al*. (2008) report a substantial withheld vote by institutional investors motivates directors to take immediate action to avoid further embarrassment, including operating performance improvements and abnormal disciplinary CEO turnover. In contrast, Parrino *et al*. (2003) show institutional ownership changes are negatively related to the likelihood of forced CEO turnover. Finally, Hillier *et al*. (2005) find firms that undertake equity offerings have an increased rate of forced CEO turnover when firm performance is poor. Defond and Hung (2004) test the assertion that the degree of investor protection provided at the country level is associated with identifying and terminating the services of poorly performing CEOs. Using a large sample of 21 483 firm-year observations in 33 countries from 1997 to 2001, they find strong law enforcement institutions significantly improve the association between CEO turnover and poor performance, whereas extensive investor protection laws do not. In addition, in countries with strong law enforcement, CEO turnover is more likely to be associated with poor stock returns when stock prices are more informative. The finding that strong law enforcement institutions are associated with improved CEO turnover-performance sensitivity is consistent with good CG requiring law enforcement institutions capable of protecting shareholders' property rights (i.e. protecting shareholders from expropriation by insiders).

Consistent with the argument that the harsh monitoring of the US CG system spills over to the rest of the world as a result of globalisation, Lel and Miller (2008) report firms from weak shareholder protection regimes that are cross-listed on a major US exchange are more likely to terminate poorly performing CEOs than non-cross-listed firms or firms that are cross-listed on exchanges that do not require the adoption of equally stringent shareholder protection (Over-The-Counter, private placements and London listings). Similar results are found by Jungeilges *et al*. (2010) for their sample of 250 of the largest European firms that cross-list on US exchanges.

In sum, there is solid evidence that both internal and external measures of CG strengthen the inverse relationship between CEO turnover and firm performance. Although strong law enforcement institutions significantly improve this association, extensive investor protection laws do not.

5.3. Corporate governance and equity

Insiders interested in raising equity capital are expected either to have better CG or to pay higher dividends to establish a reputation for favourable treatment of minority shareholders and avoid costly external financing. In this section, we review prior research that considers the link between CG and the cost of equity, and between CG and payout policy.

5.3.1. Cost of equity

Studies typically assume well-functioning legal systems and better CG practices affect firm valuation by reducing expropriation of minority shareholders' interests and improving the expected cash flows that can be distributed to shareholders. Whether or not those practices reduce a firm's cost of capital, another determinant of firm value, is unclear. This is an important issue because the cost of capital is a more direct measure of a firm's financing costs than its valuation, and financing costs affect not only a firm's investment and payout decisions but also its external financing capacity.

The bulk of the US literature documents strong shareholders rights are negatively related to the implied cost of equity capital, supporting the widely held view that better governance presents less agency risk to shareholders (Huang *et al.*, 2006, 2009b; Chen *et al.*, 2010). It suggests CG enhances firm value by reducing the cost of equity capital, not just by improving the expected cash flows that can be distributed to shareholders. The marginal effect of CG on the cost of equity appears stronger for firms with more severe agency problems (Chen *et al.*, 2010). The results are robust to the possible endogeneity of shareholder rights and other CG characteristics. The market also appears to respond quickly to changes in shareholder rights by adjusting the required rate of return accordingly (Huang *et al.*, 2006).

The cost of capital is also influenced by the extent to which the firm is transparent to outsiders. For example, firms that report unusually large accounting adjustments when calculating their earnings, or make fewer disclosures, have a higher cost of equity (Ashbaugh-Skaife *et al.*, 2004; Cheng *et al.*, 2006). As another example, Hail and Leuz (2009) report firms that cross-list on a US exchange enjoy a lower cost of capital, possibly because of the requirement to meet the more stringent disclosure requirements of the US Securities and Exchange Commission (SEC).

Others find the firm has a lower cost of equity when the board and its audit committee are more independent, when there is higher insider ownership and

when more of the shares are held by activist institutions (Ashbaugh-Skaife *et al.*, 2004; Huang *et al.*, 2009b). Further, insider ownership may substitute for shareholder rights in affecting the cost of equity capital, making strong shareholder rights less important in a high insider ownership setting (Huang *et al.*, 2009b).

An important issue is whether the results documented in high-protection countries can be generalised to weak-protection countries and whether there is a degree of substitution (trade-off) or complementarity between country and firm level investor protection. The evidence on this is somewhat mixed. Aggarwal *et al.* (2009) report country-level investor protection and firm-level governance practices are complements rather than substitutes. They observe that less than one-tenth of foreign firms have a higher governance score compared to their US counterparts. Of those with a higher governance score, 86 per cent are based in countries with shareholder protection similar to the United States. They conclude that lower country-level investor protection makes it suboptimal for foreign firms to invest as much in governance as US firms do. Similarly, Doidge *et al.* (2007) note when economic and financial development is poor, the incentive to improve firm-level governance is low because outside finance is expensive, as is the adoption of better governance characteristics. These incentives increase or decrease with a country's investor protection depending on whether firm-level governance practices and country-level investor protection are substitutes or complements. Likewise, for a sample of large firms from 14 European countries, Kim *et al.* (2007) report firms in countries with stronger legal protection of shareholder rights have lower ownership concentrations and more independent directors.

The same relationship that exists in the United States, where strong CG reduces the implied cost of equity capital, can also be found in low protection countries (Attig *et al.*, 2008; Byun *et al.*, 2008; Chen *et al.*, 2010). For example, Chen *et al.* (2010) find firm-level CG has a significantly negative effect on the implied cost of equity capital in Asia's emerging markets and is most pronounced in countries that provide relatively poor legal protection. This is in line with surveys conducted by McKinsey & Co. (Coombes and Watson, 2000), which show institutional investors in both low and high investor protection countries are willing to pay a premium of more than 20 per cent for shares in firms with good CG. Thus, in emerging markets, firm-level CG and country-level shareholder protection may be substitutes in reducing the cost of equity.

Bruno and Claessens (2010) find evidence consistent with the 'over-monitoring' hypothesis in that the absence of flexibility in country regulations generates costs, harms managerial initiative and leads to lower valuations. Although they confirm better firm-level CG is associated with a lower cost of capital, firms with good firm-level governance practices operating in stringent legal environments have a CG valuation discount relative to similar firms operating in flexible legal environments. At the same time, stronger regulation does not reduce the valuation discount of firms with weak governance.

Despite a large literature on IPO underpricing, relatively little is known about whether CG is related to the firm's ability to raise outside capital. Boulton *et al.* (2010) examine whether differences in the CG environment across countries help to explain the cross-sectional variation in IPO underpricing. Examining a sample of 4485 IPOs across 35 countries from 2000 to 2004 and controlling for the usual determinants of underpricing, they find IPO underpricing is generally higher in countries with CG systems that strengthen the position of investors relative to insiders. However, results are mixed in that investors assign a higher valuation to IPO firms in countries offering strong CG. IPO firm values are higher (firms have lower earnings yields) in countries with stronger democratic institutions and in countries that give more power and authority to the regulator charged with monitoring the country's main stock exchange. Other measures of investor protection display either no or a negative correlation with firm value. In a follow-up study, Boulton *et al.* (2011) find less underpricing in countries with higher earnings quality, implying investors assign lower valuations to IPOs in countries with lower earnings quality. Firms in countries with lower earnings quality can reduce underpricing by appointing higher-quality underwriters. They also observe lower underpricing in countries that allow banks to hold equity in non-financial firms and in countries with more liquid markets. Similarly, Shi (2006) finds increased disclosure regulation reduces information asymmetry and consequently lowers the cost of new equity and IPO underpricing. The disclosure effect is smaller in countries with strong auditing regimes, indicating auditor quality and disclosure regulation are substitutes for resolving information asymmetry. The extent of capital market integration does not appear to have any significant effect on the relationship between disclosure and underpricing.

To summarise, the growing literature on the effect of CG on performance provides some support for the view that firms with better internal and external CG have a lower cost of raising equity capital. However, the results should be interpreted with some caution as the research is fraught with difficulties in estimating the implied cost of equity. For example, long-run ex post-returns bear little resemblance to the implied cost of equity (Fama and French, 1997), and the use of the dividend discount model with current share prices and analysts' forecasts of terminal values lacks reliability.

5.3.2. Payout policy

The relationship between CG and dividend policy is fundamental to the discussion of the agency costs of free cash flow (Easterbrook, 1984; Jensen, 1986). Easterbrook (1984) argues dividends may keep firms in the capital market, where monitoring of managers is available at lower cost, and may be useful in adjusting the level of risk taken by managers and the different classes of investor.

There are two competing hypotheses on the relation between dividends and agency theory (La Porta *et al.*, 2000). Under the outcome hypothesis, strong investor protection may give minority shareholders enough power to pressure

managers into distributing cash. Consequently, better CG is associated with higher dividend payouts. The alternative view, which is the substitution hypothesis, predicts corporate payout and CG play the same role in reducing agency costs (Rozeff, 1982). Insiders interested in raising capital will pay dividends to establish a reputation for favourable treatment of minority shareholders. Thus, a negative relationship between CG quality and payout is predicted, to avoid costly external financing. Empirical studies, discussed later, reveal that the agency theory of dividend policy offers a good description of how dividend policies are shaped. However, evidence on the sign of the relationship between agency costs and payout policy is mixed and largely depends on how CG is measured.

La Porta *et al.* (2000) study whether dividend policy is influenced primarily by the quality of the legal system. Examining a large cross-section of firms from 33 countries with different levels of shareholder protection, they observe legal protection can help minority shareholders by pressuring controlling insiders to disgorge cash. Firms in countries with stronger investor protection, as measured by an anti-director rights index or by the legal regime dummy, pay higher dividends than firms in weak-protection countries, consistent with the outcome hypothesis.

These findings are consistent with the documented findings of others, that payout ratios are generally higher in firms from low protection countries, which reflects likely agency conflicts (Dittmar *et al.*, 2003). If legal protection helps minority shareholders in this way, we can expect to see an increase in dividend payments in firms from weak-protection countries subsequent to cross-listing on exchanges in high-protection countries, controlling for other firm-specific variables. This is supported by Petrasek (2009) and Abdallah and Goergen (2008), who report shareholders of firms from weak-protection countries are able to force management to increase the dividend payout after they cross-list in high-protection countries. It is not observed if the host exchange does not mandate additional disclosure. Payout policy depends on many other aspects of a country's institutional environment, in addition to legal regime. Licht *et al.* (2005) and Bae *et al.* (2009) emphasise the need to incorporate culture in the analysis of CG and dividend policy. Surveying managers of European firms, Bancel *et al.* (2005) show ownership structure of the firm is the only factor that explains cross-sectional variation in the rankings of most determinants of payout policy.

Rozeff (1982) is among the first to find evidence consistent with substitution between CG and payout. Firms that use a high percentage of insider ownership to reduce agency costs tend to pay smaller dividends, while firms with low insider ownership are characterised by higher dividend payout ratios. These results remain intact when the endogeneity of relationships between dividend policy, debt and insider ownership are taken into account (Jensen *et al.*, 1992). Subsequent evidence shows the relationship between insider ownership and payout is non-monotonic: increased executive share ownership reduces agency costs and decreases dividend payout up to some point; beyond that point, greater ownership increases dividend yield (Schooley and Barney, 1994; Farinha, 2003;

Farinha and López-de-Foronda, 2009). This is consistent with a managerial entrenchment effect that leads to wealth being expropriated and lower dividend payouts. Aivazian *et al.* (2003) show firms in emerging markets with bank-centred financial systems make less stable dividend payments than their US counterparts. This finding supports the substitution hypothesis of dividend policy, on the premise that the institutional structures of these developing countries make dividends a less viable means of reducing agency costs than for their US counterparts, which operate in a more highly developed arms length capital market.

To avoid the problem of an endogenous measure of managerial entrenchment, Francis *et al.* (2007) examine the exogenous shock-passage of anti-takeover laws as proxies of increased agency costs. Consistent with the outcome hypothesis, they find firms with entrenched managers have a lower propensity to pay dividends and lower dividend payout ratios after passage of anti-takeover laws. Cheng *et al.* (2005) find evidence of increased managerial entrenchment after the passage of anti-takeover laws, with managers reducing their ownership stake because they could maintain their prior level of control while holding fewer shares.

Controlling shareholders can take advantage of their position by influencing dividend policy at the expense of minority shareholders. Studies that consider the relationship between the presence of a large shareholder and dividend payout find evidence consistent with expropriation. Faccio *et al.* (2001) report investors in West European and East Asian firms are aware of their greater exposure to expropriation within tightly controlled groups. To offset their concerns, higher dividends are paid by firms affiliated with such groups, especially those exhibiting a wider discrepancy between the percentage of shares they hold and their ability to control the firm. In contrast, investors seem less aware of expropriation within firms that are loosely affiliated with groups. Such firms fail to pay higher dividends, with a wider discrepancy between ownership and control associated with lower dividend rates. Having multiple large shareholders increases dividend payouts in Europe but decreases them in Asia. Dividend policy may also be driven by differences in blockholder identity. For example, using dynamic panel data analysis, Thomsen (2004) finds negative blockholder effects on dividend payout for bank and government ownership while the evidence for other ownership groups (family, firm and institutional investors) is mixed. For US firms, Holderness and Sheehan (1998) document that the dividend yield and the dividend payout ratio are lower in individual majority-shareholder controlled firms than in similar sized firms with more diffuse ownership. Similar results are reported for firms elsewhere irrespective of their country's legal protection (Bartram *et al.*, 2010), including Germany (Gugler and Yurtoglu, 2003), Czech Republic (Bena and Hanousek, 2006), Finland (Maury and Pajuste, 2002) and Tunisia (Kouki and Guizani, 2009). Barclay *et al.* (2009) report blockholders do not use their voting power to change the firm's dividend policy in a way that would be more tax efficient for them. Multiple blockholders are associated with increased dividend payout (Gugler and Yurtoglu, 2003; Bena and Hanousek, 2006), consistent

with the arguments of Bloch and Hege (2000) that the presence of multiple blockholders on the share register reduces the extent to which benefits are expropriated, to garner the support of the minority shareholders in the firm.

With respect to dividend policy, agency costs interact at the firm and country levels. In a cross-country study, Mitton (2004) finds a positive relation between firm-level CG and dividend payout, consistent with the outcome model. The relationship is limited primarily to countries with strong investor protection, suggesting that firm-level CG and country-level investor protection are complements rather than substitutes. Kalcheva and Lins (2007) document that cash holdings are higher when managers have more effective control of a firm and that this relationship is more pronounced as legal protection of shareholders decreases. Further, when legal protection of shareholders is weak, firm values are higher when controlling managers pay dividends. Only when legal protection of shareholders is strong is cash held by controlling managers unrelated to firm value. Bartram *et al.* (2010) report that although investors in high-protection countries are able to use their legal power to extract cash, agency conflicts at the firm level hinder their ability to do so. In poor protection countries, investors can seek refuge in firm level governance mechanisms to curb agency conflicts, suggesting a substitution between country and firm level investor protection.

Officer (2007) provides evidence that CG affects both the propensity of firms to pay dividends and the market reaction to dividend initiation announcements. Firms with characteristics that are thought to proxy for weak internal and external governance (large, insider-dominated boards, entrenched managers, and low ownership levels by insiders and important external monitors) are more likely to pay dividends, consistent with the substitution hypothesis. While firms with strong CG do experience significantly positive announcement returns, firms with weak CG have significantly higher abnormal returns when they initiate a dividend.

Repurchases are another form of returning cash to shareholders. Share repurchases should be expected to be influenced by agency costs, if they are substitutes for dividends. However, as repurchases are seen as a more flexible form of payout (Brav *et al.*, 2005), they may be a less important instrument for reducing agency costs. The evidence on this issue is mixed. Using governance metrics based on anti-takeover provisions and inside ownership, Harford *et al.* (2008) find firms with weaker governance structures choose to repurchase instead of increasing dividends, avoiding future payout commitments. Bancel *et al.* (2005) find that repurchase policy is influenced more by the tax structure and less by the legal system of a country compared to the dividend policy. The evidence in the study by Bartram *et al.* (2010) shows, compared to repurchases, dividends are more likely to be the sole method of payout in high-protection countries and in firms that are less closely held.

In sum, the literature is no closer to unravelling the relationship between corporate payouts, CG and agency costs. While agency theory of dividend policy offers a good description of how dividend policies are shaped, there seems to be

a lack of consensus on whether corporate payout and CG play the same role in reducing agency costs (i.e. they are substitutes) or whether payout is a result of increased investor protection (i.e. it is an outcome). Strong investor protection is probably part of the story, empowering minority shareholders to pressure managers into distributing surplus cash.

5.4. Corporate governance and debt

In this section, we examine research on the role of financial leverage in disciplining managers and on the influence of CG on the cost of debt.

5.4.1. Leverage

Argued from the agency perspective, the choice of the firm's optimal capital structure is closely related to the choice of CG. Leverage can act as a substitute self-disciplining internal governance practice that mitigates agency costs by imposing fixed obligations on the use of corporate cash flow (Jensen and Meckling, 1976). This argument is further extended by Jensen (1986) in the context of leveraged buyouts, which force managers to disgorge the firm's free cash flow by replacing equity with debt. The reduction in equity increases the alignment of the interests of managers and shareholders by increasing managerial ownership (Jensen and Meckling, 1976). The outcome perspective of agency theory suggests the reverse. If strong CG protects bondholders and leads to higher credit ratings and a lower cost of debt, we should observe higher leverage among better-governed firms.

For a sample of Canadian firms, Aivazian *et al.* (2005) provide support for the theory that leverage plays a disciplining role. They find leverage is negatively related to investment and that the relationship is stronger for firms with few growth opportunities. Ortiz-Molina (2007) tests the hypothesis that leverage reduces manager–shareholder conflicts by examining pay-performance sensitivity as a function of leverage. He finds pay-performance sensitivity decreases in straight-debt, but is higher in firms with convertible debt. Stock options are the component of CEO pay that is most sensitive to differences in capital structure.

John *et al.* (2010) propose CEO compensation is optimally designed to trade off two types of agency problem: the standard shareholder–manager agency problem and the problem of shifting risk between shareholders and debtholders. This gives rise to two predictions: (i) the pay-for-performance sensitivity of CEO compensation decreases with the leverage ratio; and (ii) the pay-for-performance sensitivity of CEO compensation increases with the intensity of outside monitoring of the firm's risk choices. They test and find support for both hypotheses in the banking industry, where regulators and non-depository (subordinated) debtholders provide outside monitoring of risk.

Entrenched managers avoid the disciplining role of leverage. Jiraporn and Liu (2008) find firms with staggered boards have lower leverage. The result however

vanishes after the enactment of SOX. Similarly, Berger *et al.* (1997) find entrenched CEOs seek to avoid leverage, with leverage increasing in the aftermath of entrenchment-reducing shocks to managerial security, including unsuccessful tender offers, involuntary CEO replacements, and the addition to the board of major shareholders. Using panel data for 611 firms listed on the Taiwan Stock Exchange from 2002 to 2006, Shyu and Lee (2009) find a robust negative link between excess control rights and short-term leverage in family-controlled firms. Wiwattanakantang (1999) finds, in Thailand, single-family-controlled firms with greater family ownership have higher leverage.

Florackis and Ozkan (2009) report a significant non-monotonic relationship between insider ownership and leverage for their sample of UK firms, consistent with the alignment and entrenchment hypotheses. The nature of the relationship depends on the firm's CG structure, with a significant relationship between leverage and insider ownership holding mainly for weak governance firms. To address potential endogeneity between CG and leverage, Agrawal and Knoeber (1996) use a complex simultaneous equation framework. For a sample of 383 large US firms for 1987, they find leverage is positively related to insider ownership and the proportion of outsiders on the board. However, the relationship runs from leverage to ownership and board structure, rather than the reverse.

Jiraporn and Gleason (2007) find firms adopt higher leverage ratios where shareholder rights are more restricted. This is consistent with other results in that adoption of anti-takeover provisions, although detrimental to shareholders, is viewed favourably by bondholders, resulting in a higher credit rating and a lower cost of debt (Ashbaugh-Skaife *et al.*, 2006; Francis *et al.*, 2010). Hence, the direction of this relationship may run from CG to leverage.

Leverage can be used by controlling shareholders to fund resources to expropriate. Faccio *et al.* (2010) examine the expropriation of outside shareholders' interests by controlling shareholders in East Asian and European economies. They propose that the role of leverage in CG may depend on the structure of firm ownership and control. Whereas leverage could constrain managers' expropriation of the resources belonging to dispersed shareholders in say the United States, it could facilitate the expropriation of minority shareholders' rights by the controlling shareholders of the business groups that are prevalent in Europe and Asia. Their findings suggest European capital market institutions are sufficiently effective so that competition for external capital from informed suppliers restricts the leverage of firms that appear more vulnerable to expropriation through being lower down a corporate pyramid. Asian institutions appear ineffective, allowing controlling shareholders of firms lower down a pyramid to increase leverage to acquire more resources to expropriate. They suggest that these contrasting outcomes are reflected in regional differences in access to related-party loans. In another study, Faccio *et al.* (2003) regress leverage on an index of firm exposure to expropriation by the controlling shareholder: the ratio of his ownership rights (O) to his control rights (C) and on an index of creditor rights. Among firms that can access related party loans, a lower O/C ratio leads

to increased leverage when creditor protection is weak, but reduces leverage when it is strong. In the first case, higher leverage gives the controlling shareholder access to more resources to expropriate. In the second case, minority shareholders and external lenders constrain the leverage of group affiliates that seem more vulnerable to expropriation. They account for endogeneity between O/C and leverage using a dummy equal to 1 if the firm's name includes the name of any of its top officers (CEO, chairperson of the board, president, a vice-president, or secretary of the board) and zero otherwise. This variable is independent of leverage.

Greater bank concentration may substitute for creditor protection and asset tangibility to reduce the agency cost of leverage between shareholders and debtholders. Evidence that supports this contention is provided by González and González (2008), who find leverage increases with greater bank concentration and stronger protection of creditor rights, but decreases with stronger protection of property rights.

Sarkar and Sarkar (2008) highlight the role of ownership structures and institutions in debt governance. They estimate simultaneously the relation between Tobin's q and leverage using a large cross-section of listed manufacturing firms in India for 3 years: 1996, 2000 and 2003. While in the early years of institutional change debt did not have any disciplinary effect on either standalone or group-affiliated firms, there was an effect in the later years as institutions became more market oriented. They find limited evidence of debt being used as an expropriation mechanism in group firms that are more vulnerable to such expropriation. However, the disciplining effect of debt is found to persist even after controlling for such expropriation possibilities.

For a sample of Australian firms, Brailsford *et al.* (2002) report a positive relation between outside blockholders as monitors and leverage. Likewise, Mehran (1992) finds a positive relationship between the percentage ownership by large individual investors and a firm's leverage ratio. Du and Dai (2005) provide evidence among East Asian firms that controlling shareholders with relatively small ownership tend to increase leverage out of the motive of raising external finance without diluting their shareholding dominance. They propose that such risky capital structure choices serve as one potential channel through which weak CG contributed to the severity of losses during the Asian financial crisis.

Piot (2001) tests two agency cost hypotheses: (i) ownership diffusion is a proxy for shareholder–manager conflicts; and (ii) ownership diffusion is a proxy for shareholder–manager conflicts and leverage in high-investment-opportunity-set (IOS) firms, supposing an increased expropriation risk for debtholders. Results do not support the ownership hypothesis and corroborate the leverage-IOS one, suggesting that the Anglo-American principal-agent model has little explanatory power in the concentrated ownership framework of the French CG system.

To sum up, the evidence indicates leverage has an important role to play in disciplining management, with the governance role of leverage being sensitive to ownership and control structures. There is some evidence leverage is used as a

mechanism for expropriation in group-affiliated firms that are more vulnerable to it.

5.4.2. Cost of debt

The outcome hypothesis of agency theory suggests that the relationship between CG and debt reflects the role of CG in determining a firm's cost of debt financing and hence its choice of capital structure. The belief is that debtholders perceive strong CG can reduce the possibility of default and improve the availability of credible accounting information for accurate estimation of default risk. In addition, better CG may help alleviate the existence of information asymmetry between the firm and its lenders. This would enable bondholders to accept a reduction in their risk premium.

Studies by Bhojraj and Sengupta (2003), Anderson *et al.* (2004) and Ashbaugh-Skaife *et al.* (2006) confirm that stronger monitoring power of the board over management is associated with higher credit ratings and a lower cost of debt for US firms. For a sample of S&P 500 firms for the period of 1993–1998, Anderson *et al.* (2004) find evidence that bondholders are willing to reduce their risk premium for firms with more effective monitoring by both the board and its audit committee, presumably giving them assurance on the integrity of the firms' accounting disclosures. They find board independence, board and audit committee size, and meeting frequency are all inversely related to the cost of debt. Also, fully independent audit committees are associated with a significantly lower cost of debt financing. Pittman and Fortin (2004) report that the auditor's reputation, a significant factor in determining the quality of financial information disclosure, was an important variable in determining the cost of debt for a sample of US firms that went public during 1977–1998. Over a 9-year period after SEC registration, firms that retained Big Six auditors, a proxy for audit quality, had a lower average cost of debt. In the French environment, where banks and other financial institutions are the main capital providers but rarely have direct influence over a firm's CG, Piot and Missonier-Piera (2007) report results similar to the United States in that the cost of debt is lower where there are strong CG practices (indicated by board independence, the existence of a compensation committee comprising non-executive directors, the quality of the audit process and the presence of institutional shareholders with more than 5 per cent of ownership).

Ashbaugh-Skaife *et al.* (2006) report firm credit ratings are positively related to the degree of financial transparency, board independence, board ownership and board expertise, but negatively related to CEO power over the board and the number of blockholders. Likewise, Liu and Jiraporn (2010) find firm credit ratings are lower and yield spreads are higher for firms with CEOs with more decision-making power, supporting the notion that bondholders perceive powerful CEOs as detrimental to their interests and will consequently demand higher yields. Sengupta (1998) reports evidence of a negative association between a

firm's disclosure quality and the cost of its debt. Bhojraj and Sengupta (2003) find higher institutional ownership lowers bond yields and increases the ratings on new bond issues, consistent with the monitoring argument. However, concentrated institutional ownership has an adverse effect on bond yields and ratings.

Although the adoption of anti-takeover provisions is seen as detrimental to shareholders because they entrench management, they are viewed favourably by bondholders, resulting in higher credit ratings (Ashbaugh-Skaife *et al.*, 2006) and a lower cost of debt (Francis *et al.*, 2010). This may be justified by anti-takeover provisions shielding bondholders from expropriation in takeovers. Alternatively, banks charge higher loan spreads to firms more vulnerable to takeover, mainly because of their concern about a substantial increase in financial risk after a takeover (Chava *et al.*, 2009). For example, Klock *et al.* (2005) document a negative relation between the adoption of anti-takeover provisions (G-index) and the cost of debt for US firms between 1990 and 2000. The cost of debt is about 34 basis points lower for firms with the strongest anti-takeover provisions relative to those with the weakest. Cremers *et al.* (2007) report the difference in bond yields due to differences in takeover vulnerability can be as high as 66 basis points. Event risk covenants reduce the credit risk associated with strong shareholder governance. Chava *et al.* (2009) find that firms with the weakest takeover defences pay a 25 per cent higher spread on their bank loans. Francis *et al.* (2010) find state anti-takeover laws tend to decrease bond yields and increase bond values, which is again opposite to their effect on equity values. Bradley *et al.* (2008) report the presence of anti-takeover measures is associated with higher credit scores for firms with investment grade debt and lower for firms with speculative grade debt.

Thus, the literature provides strong support for the idea that creditors take into account a firm's CG practices in their assessment of the firm's risk when determining the cost of debt. The consistency in the reported findings is possibly aided by the relative ease with which credit ratings and the cost of debt (in particular, the yield spread) can be measured.

6. Accounting outcomes

6.1. Corporate governance and the firm's disclosure environment

In this section, we examine the influence of CG on the firm's transparency when viewed by outside parties. We first consider the link between CG and the firm's disclosure practices, before moving on to relationships between CG and analyst following, along with other properties of analysts' forecasts.

6.1.1. Disclosures

Given the monitoring role of CG, we would expect to find a positive association between governance quality and firm disclosure. In fact, the evidence

provides a mixed view on whether better CG has a positive influence on disclosures: it depends on the ownership structure and whether disclosures compensate for perceived weakness in the firm's governance.

Beekes and Brown (2006) find a positive association between CG quality and disclosure: better-governed firms release a greater number of price sensitive documents to the ASX. They also examine how quickly the price during the year approaches its end of year value, which they term the 'timeliness of price discovery'. Australian firms with better CG have timelier price discovery, consistent with them releasing more information relating to firm performance during the year—which they also found to be true.

Cerbioni and Parbonetti (2007) show the proportion of independent directors is positively correlated with the quantity of disclosure of biotechnology firms in Europe, implying that better monitoring may positively influence firm disclosure even when there are incentives to retain information within the firm. CEO duality is associated with lower disclosure, although the association is weaker where there are more experienced non-executive directors on the board (Gul and Leung, 2004). Monitoring provided by the external auditor is associated with greater disclosure (Bassett *et al*., 2007). In Taiwan, where auditors are required to review management earnings forecasts, Chin *et al*. (2007) find the accuracy of management earnings forecasts may be affected by auditor independence in that managers' earnings forecasts are more optimistic when the incumbent auditor provides NAS. Thus, where there is greater monitoring provided by the external auditor, managers are likely to provide better quality (less biased) information in their earnings forecasts.

Other studies suggest the firm's disclosure policy may substitute for inadequate governance practices. Eng and Mak (2003) find lower managerial ownership is associated with greater disclosure by Singaporean firms. They also find lower voluntary disclosure when the proportion of outside directors increases, consistent with the argument that CG quality and disclosure are substitutes. Substantial shareholders too may be important for monitoring firm's activities, although it is unclear whether their presence would increase disclosure or be a substitute for lower levels of it. Research on the influence of institutional investors on disclosure suggests the level of firm transparency depends on how long the institutional investor intends to hold the shares: long-term (short-term) institutional ownership is associated with lower (higher) levels of risk disclosure in UK annual reports (Abraham and Cox, 2007). However, Ajinkya *et al*. (2005) find a positive association between outside directors and institutional ownership, and management earnings' forecast frequency and accuracy, for a sample of US firms.

Some firms are likely to have incentives to be less forthcoming with information. Family firms, firms with concentrated ownership and firms that are members of corporate groups, such as Japanese keiretsu, are expected to be associated with lower levels of transparency. Prior research shows family firms without dual-class-shares that would result in differing voting and control rights disclose more information compared to other family firms (Ali *et al*., 2007).

Despite this, family firms issue more earnings warnings than non-family firms (Chen *et al*., 2008c), perhaps driven by fears of litigation or of other means of ex post-settling up.

Despite the presumption from regulators that CG leads to better disclosure practices, studies find opposing results, leaving the debate open as to whether CG is a substitute for, or complementary to, a firm's disclosure practices. Rich research opportunities exist here in investigating the impact of CG on firm disclosure on a cross-country basis, taking into account the differing institutional and governance frameworks in place.

6.1.2. Analysts' forecasts

There is a growing literature investigating links between CG and various properties of analysts' forecasts. If CG impacts on the level of firm transparency, it will be reflected in increased analyst following and greater precision of earnings forecasts, with smaller forecast revisions and less disagreement among analysts (Lang and Lundholm, 1996). A cross-country study by Bhat *et al*. (2006) documents the importance of governance transparency (the use of governance-related disclosures) for analyst forecast accuracy, even after controlling for financial transparency (indicated by the level, timeliness and quality of disclosures). It appears analysts place some importance on governance characteristics, as this enables them to assess the credibility of the firm's disclosures.

Byard *et al*. (2006) find CG quality is positively associated with analyst forecast accuracy for US firms. Beekes and Brown (2006) find Australian firms with better CG have a greater analyst following, while there is less bias and greater accuracy (but greater disagreement) in their forecasts. The unexpected result on the level of analyst disagreement may be because analysts over-weight the importance of extreme values of governance, leading some of them to be overly optimistic about the earnings of better-governed firms and overly pessimistic about the earnings of firms with weak governance. The introduction of 'comply or explain' governance codes with specific sections relating to the importance of transparent and timely disclosures (as in Indonesia, Philippines, South Korea and Taiwan) has improved analyst forecast accuracy for these countries relative to other Asian countries that did not adopt the specific disclosure-related sections (Nowland, 2008). In sum, better CG appears to be widely associated with greater forecast accuracy, although the nature of the influence of CG on analyst consensus is unclear and worthy of closer study.

Relative to other firms, analysts' forecasts for firms that are operated or controlled by founding families are more accurate and less-dispersed, with smaller forecast revisions (Ali *et al*., 2007). This finding, which is somewhat surprising given the lack of transparency often associated with family-controlled firms, is attributed to their greater earnings quality, as well as management disclosures when there is impending bad news. Despite incentives for lower transparency in firms within chaebol groupings, Chang *et al*. (2007) find they have a greater

analyst following. However, this analyst following for chaebol firms does not lead to greater accuracy in forecasting or lower forecast dispersion, suggesting analysts' forecasting quality is detrimentally affected by the lower transparency of chaebol firms.

While the evidence reviewed here indicates CG has a positive influence on the informativeness of a firm's disclosures, as reflected in the properties of analysts' forecasts, the institutional environment must also be important. Given the lower quantity of firm disclosures in civil law countries, we would expect analysts to be less able to make accurate predictions in these countries. Barniv *et al.* (2005) support this view and suggest the quality of financial reporting has a greater influence on analysts' predictive ability than investor protection laws. In countries with weaker investor protection and lower disclosure levels, local analysts have an information advantage, which enables them to make better forecasts, although the effect is predictably weaker for firms with international operations and better disclosure practices (Bae *et al.*, 2008).

In conclusion, while prior evidence shows that both analyst following and the properties of the analysts' forecast are affected by CG, the results should be interpreted with care as most research in this area has not taken into account the potentially endogenous nature of a firm's CG, disclosure policies and analyst following. Also, although CG may have a positive effect on analysts' forecast accuracy, there is no consistent view of the effect of CG on the level of consensus across analysts' forecasts or the amount of change in forecast revisions. We also do not fully understand the effect of CG on how analysts interpret new information and revise their forecasts. Both of these issues are worthy of further investigation.

6.1.3. Regulation and compliance

When firms are provided with choice in the volume of disclosure, a study of Australian firms' disclosures of their CEO's remuneration, after the Company Law Review Act of 1998, indicates firms tend to opt for fewer and poorer quality disclosures (Clarkson *et al.*, 2006). Firms with higher disclosure levels prior to the introduction of stricter regulations tended to be larger and to have better CG characteristics. After new CG regulations took effect in 2004, the influence of governance was reduced. Another Australian study examines mandatory disclosures relating to the introduction of International Financial Reporting Standards (IFRS). Firms were required to discuss how the transition to IFRS was being managed and the effect on the financial statements of adopting the Australian equivalent of IFRS. Kent and Stewart (2008) find greater disclosure of the IFRS impact for firms with better governance (as measured by more frequent meetings of the board and its audit committee, and the engagement of a large audit firm). Thus, CG has a positive influence on disclosure levels, even when disclosures are mandatory. However, having financial experts on board committees had the opposite effect to that expected: those firms disclosed less, not more, information.

In sum, the evidence for Australian firms suggests CG regulation has a positive impact on the quality of the firm's disclosures but additional research is merited in other countries, particularly in developing countries, to understand better the influence of CG regulation on firm disclosure behaviour.

6.2. *Corporate governance and accounting quality*

Given the weight placed by regulators on CG, we expect to find a positive link between governance and accounting quality. For example, the UK Cadbury Report (1992) emphasised the need for non-executives on the board of directors and the presence of an audit committee to monitor financial reporting quality. This sentiment has been reflected in many CG codes around the world, including the Australian Stock Exchange's Principles of Good Corporate Governance (ASX Corporate Governance Council, 2003). The existence of a link between particular CG characteristics and different forms of accounting quality has been investigated widely. We review the literature linking CG and five measures of earnings quality: earnings timeliness, earnings informativeness, earnings management, restatements and fraud.

6.2.1. *Conservatism and earnings timeliness*

It is important that firm performance should be reflected in earnings on a timely basis. For example, greater transparency in earnings can lower the firm's cost of capital (Bhattacharya *et al.*, 2003). If better CG and higher-quality earnings are closely linked, there could be substantial economic benefits to better governance.

One issue is the level of timeliness and reporting conservatism, i.e. the incorporation of 'bad' news on a timely basis and the recognition of profits only when it is sufficiently likely they will materialise. Watts (2003) argues conservatism is a fundamental concept of accounting necessary for efficient contracts between managers, shareholders and debt-holders. Consistent with this view, LaFond and Watts (2008) argue conservatism arises because of information asymmetry between insiders and shareholders, and the use of conservatism reduces managers' ability to manage earnings. Conservatism is thus a means to align the interests of contracting parties.

Managers and the firm's auditors have strong incentives to be conservative, to guard against future litigation for overstatement of earnings. For obvious reasons, understatement does not prompt the same concern. Research demonstrates these opportunistic incentives to manage earnings have a greater impact for public than private firms (Givoly *et al.*, 2010). Managers are vulnerable, with their human and financial capital often tied up in the same firm, providing them with clear incentives to report earnings conservatively. Chung and Wynn (2008) find firms with less indemnity insurance cover for their managers have greater levels of reporting conservatism. Auditors have valuable reputations to consider and

avoid risking future litigation for overstatement of earnings. Thus, Kim *et al.* (2003) find evidence of greater conservatism for clients of larger audit firms when managers have incentives to increase their firm's reported earnings. Monitoring by other external parties such as institutional investors can also have an impact on accounting reporting choices, resulting in conservative policies. de Bos and Donker (2004) investigate the incidence of voluntary accounting changes in Dutch firms between 1990 and 1998. The results show the presence of institutional investors decreased the probability of voluntarily adopting income-increasing accounting policies, suggesting large shareholders are effective monitors of accounting policies when managers have incentives to increase income.

It need not be the case that conservative accounting is inconsistent with good business decisions. Firms that are more conservative and recognise losses in a timelier manner may be more attractive to investors. For example, if a firm recognises losses on a timelier basis, it has incentives to avoid investing in loss-making projects. In addition, it will cut its losses by divesting projects losing money. By reporting conservatively, the firm's managers may be disciplined into making better investment decisions. Consistent with this view, Francis and Martin (2010) find firms that are more conservative make more profitable acquisitions.

The role of CG, and specifically the role of non-executive (outside) directors and the audit committee in monitoring the degree of conservatism, has been researched widely. Evidence from a variety of studies (e.g. Beekes *et al.*, 2004 for the UK; Ahmed and Duellman, 2007 for the United States) suggests conservatism is greater when there is a larger proportion of outside directors on the board. Krishnan and Visvanathan (2008) find greater reporting conservatism for a sample of US firms when a member of the audit committee is a financial expert, but only where there is also a strong board.

Rather than conservatism being a complementary mechanism when governance is strong, it could be the case that greater accounting conservatism is demanded by contracting parties as a substitute for inadequate monitoring when governance is weaker. Thus, Bushman *et al.* (2004) find an inverse relation between earnings timeliness and CG quality, while LaFond and Roychowdhury (2008) report conservatism and managerial ownership are inversely related in that lower levels of managerial ownership result in greater agency problems and an increased demand for conservatism. Firms with opaque earnings may compensate for opacity by employing costly but more effective governance practices.

It is not easy to reconcile these competing views, although it must be acknowledged that many studies do not control for the fact that accounting choice and CG are potentially endogeneous. In a study that controls for endogeneity, García Lara *et al.* (2007) find, for a sample of Spanish firms, that information is incorporated into earnings in a more timely fashion when governance is better. A subsequent study by García Lara *et al.* (2009) on a sample of US firms

between 1992 and 2003 suggests improved governance leads conservatism; they are not substitutes. They also consider the effect of SOX on earnings quality and report greater conservatism after its enactment.

In sum, the relationship between CG and conservatism remains uncertain, with some studies suggesting CG is complementary to reporting conservatism and others suggesting better (and more costly) governance can substitute for lower transparency in the firm's earnings or when its earnings are less timely. Many of these prior studies do not control for the potential endogenous nature of accounting choice and CG structures, which may partly explain the lack of consistent findings.

6.2.2. Earnings informativeness

Earnings informativeness refers to the strength of the correlation between earnings and returns. If there is a more timely reflection of value-relevant information in earnings, the correlation will be higher. Outside directors bear some responsibility for monitoring financial reporting by insiders and are in a position to influence the informativeness of earnings. Contrary to what we might expect, research shows earnings informativeness is affected by the board's size more than its independence. Vafeas (2000) finds earnings are more informative for firms with smaller boards, but the presence of outside directors has no significant effect. Similarly, larger boards of New Zealand firms are associated with lower earnings informativeness, while the proportion of outside directors again has no effect (Ahmed *et al*., 2006).

The level of managerial ownership may also influence informativeness. Yeo *et al.* (2002) find, for a sample of Singaporean firms, informativeness increases with managerial ownership, at lower levels of managerial ownership. However, beyond a certain point, entrenchment effects dominate and earnings quality declines.

In some jurisdictions, there are incentives to release less information to the market and make earnings less transparent, because of the ownership structures in place. A study of firms listed on the Korean Stock Exchange finds the earnings of larger firms are more value relevant. However, large firms with chaebols have less value-relevant earnings and book values (Bae and Jeong, 2007).

Where there are dual-class-shares, the controlling shareholders are likely to have a greater influence on the firm and to take actions that benefit them at the expense of other shareholders. As controlling shareholders typically are involved in overseeing the financial reporting process, this may include actions to prevent information flows to the market and also to make earnings less transparent. Consistent with this argument, Francis *et al.* (2005) find the earnings of dual-class firms are less informative than the earnings of single-class firms. For East Asian firms, in which concentrated ownership is more common, Fan and Wong (2002) find lower earnings informativeness (measured by the returns-earnings relationship), consistent with controlling shareholders taking actions that

expropriate minority shareholders' interests and limiting the quantity of information disclosed to the market.

A number of studies investigate the effect of changes in the regulatory environment following the discovery of serious accounting irregularities. Gillan and Martin (2007) for example consider the Enron case in the United States and conclude that changes to the internal structure of Enron's board would not have prevented what happened. However, stricter internal controls and greater auditor independence may have limited management's ability to conceal Enron's real financial condition. This provides some justification for the changes embodied in SOX, which resulted in many cross-listed firms having additional governance disclosure requirements imposed upon them, particularly relating to the composition of the audit committee. Chang and Sun (2009) find earnings informativeness to be positively related to the independence of the audit committee and the board of directors after SOX.

Thus, prior evidence shows CG can influence earnings informativeness, with the earnings of firms with controlling shareholders being less informative. There is some evidence that the informativeness of earnings in the United States has improved since SOX; future studies could investigate the influence of other CG regulatory changes to establish the external validity of this result.

6.2.3. Earnings management

Earnings management is a process of choosing a set of accounting policies to present a particular view of the firm's performance to other parties. It may be intended to provide a more informative picture and signal future performance (Bowen *et al.*, 2008; García Lara *et al.*, 2009), or it may be opportunistic and intended to mislead investors. Many of the studies mentioned later focus on the use of discretionary accruals, but managers can also take 'real' decisions to manage earnings by delaying or accelerating cash flows or expenses. García Osma (2008) presents evidence on this type of earnings management and finds boards that are more independent inhibit manipulation of research and development expenditure, suggesting better monitoring in these firms. We first consider a variety of opportunistic motivations for earnings management linked to CG and then outline how CG practices may constrain earnings management.

Some incentives for earnings management arise from executive compensation schemes. Numerous studies confirm incentive-based pay, in particular the use of options, motivates managers to manage earnings to meet performance targets or thresholds (Cheng and Warfield, 2005; Bergstresser and Philippon, 2006; Houmes and Skantz, 2010). For example, Bergstresser and Philippon (2006) document greater levels of accruals in years when CEOs exercise many more stock options. Cornett *et al.* (2009) use a simultaneous equations approach to take into account endogeneity between firm performance, CG and earnings management. They show that when the CEO's pay is linked to their firm's performance, it is also associated with greater earnings management, consistent

with previous studies. The link between executive compensation and earnings management can extend to other senior executives. Jiang *et al.* (2010) show CFO incentives were also positively associated with earnings management before the passage of SOX. Post-SOX, neither CEO nor CFO incentives have been linked to earnings management, suggesting there has been greater scrutiny of firm's activities post-SOX and less opportunity for earnings management. Consistent with the above, Sánchez-Ballesta and García-Meca (2007) find that there is less earnings management (and earnings are more informative) at low levels of insider ownership. While small amounts of insider ownership may align the interests of insiders and other owners, the relationship between managerial ownership and earnings management is nonlinear.

While incentive-based pay schemes may lead to opportunism, the pressure on managers to engage in such activities is by no means consistent across countries. For example, Brown and Higgins (2001) find managers of US firms are more likely to manage their earnings surprises compared with other countries. They attribute their results to the litigation pressures in the United States and remuneration structures that provide strong incentives for managers to meet expected performance levels. McVay *et al.* (2006) find that when there is a weak board, earnings may be managed to the analysts' earnings forecast just prior to the sale of managers' shares. Park and Park (2004) show accruals management and insider trading results in lower stock prices. That is, the market appears to penalise such activities.

A second opportunistic motivation for earnings management is the incentive to meet market expectations. Research shows firms that fail to meet market expectations are penalised in the share market. One action firms can take to avoid reductions in earnings is to understate expenses. For example, recognising stock options expense under SFAS 123 has been shown to be an area where firms understate the level of an expense. This action is more likely where the firm's option expense is larger and also where there is weaker CG (Aboody *et al.*, 2006). A special case of needing to meet expectations relates to IPOs. The literature shows that where firms have provided earnings forecasts for the year following an IPO, they have an incentive to manage earnings to meet the forecast. Cormier and Martinez (2006) find greater earnings management in the year following an IPO among French firms that provide earnings forecasts and have weak CG. Chin *et al.* (2009) find foreign ownership in Taiwanese firms is positively associated with earnings management to meet or beat the target level of earnings. This suggests a need to meet the performance expectations of external owners. However, the prevalence of earnings management is reduced where foreign ownership is based in countries with stronger levels of investor protection.

Third, changes of senior management or board members can provide incentives for earnings management. For example, a new management team can have an incentive to use income-decreasing earnings management and 'take a bath' soon after their appointment, in which case lower earnings are blamed on the previous management team. However, the evidence indicates changes in senior

management are not always associated with earnings management. Geiger and North (2006) show the appointment of a new chief financial officer (CFO) from outside the firm is associated with lower discretionary accruals. On the other hand, in a CEO succession where the CEO also chairs the board, there can be considerable incentive to provide a positive impression. Davidson *et al.* (2004) examine successions which do and do not create duality and find evidence consistent with more impression and earnings management where duality is created, a result attributed to the greater control that these individuals have in the organisation.

Fourth, the ownership structure of firms may influence incentives for earnings management. Founding-family-controlled firms are significantly less likely to manage earnings as they do not face the same pressures to meet expectations as other firms (Jiraporn and DaDalt, 2009). Consistent with this proposition and using data for firms from the S&P 500, Wang (2006) finds founding-family ownership is associated with greater earnings quality. The existence of controlling shareholders has a large influence on firms' activities. Earnings management in China arises because of agency conflicts between controlling and minority shareholders (Liu and Lu, 2007). Also, the level of ownership by foreign investors can influence the firm's activities, particularly where governance structures differ from those typically found in the foreign investors' home country (Liu and Lu, 2007).

Many have studied the influence of CG on earnings management among US firms but our knowledge of Asia is more limited. One reason is the lack of reliable CG data, although Credit Lyonnais Security Asia (CLSA) does score CG for a number of countries. The CLSA score rates firms on their management discipline, transparency, independence, accountability, responsibility, fairness and social awareness. Shen and Chih (2007) use CG data from the CLSA for 9 Asian countries (Hong Kong, India, Indonesia, Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand) and find firms with better CG have less earnings management and less earnings smoothing. Other evidence of earnings smoothing is provided in a study of Taiwanese firms' use of reversal of impairment losses between 2005 and 2007 after the introduction of IAS 36, Impairment of Assets. These reversals were used opportunistically as 'cookie jars' to relieve firms from the tightness of debt covenants in bad times. The incidence of this behaviour is lower for firms with better governance (Duh *et al.*, 2009). In Korea, businesses are not consolidated for tax purposes, providing chaebols with incentives to move profits from one firm to another to minimise the combined tax liability of the group. Research comparing chaebol and non-chaebol firms shows evidence of income shifting of this nature (Jung *et al.*, 2009). There is also evidence of greater earnings management in Korean firms with a controlling shareholder, especially where there is a group affiliation (Kim and Yi, 2006).

The ability of governance structures to detect or prevent earnings management depends upon the level of monitoring they provide and, in particular, on the independence of the board and the audit committee and on the effectiveness of the internal audit function. Findings on which characteristics of governance are

more important for constraining earnings management differ from country to country. A study of UK firms indicates that the proportion of outside directors is important for constraining income-increasing earnings management to avoid reporting losses, but no comparable role is found for the audit committee (Peasnell *et al.*, 2005). This contrasts with Davidson *et al.* (2005), who find an inverse relationship between the independence of the board and its audit committee, and the level of earnings management among Australian firms. Klein (2002) also finds evidence among US firms to support the view that both the board's and the audit committee's independence are important constraints on earnings management. Other studies focus on the role of financial experts on the board and the audit committee. Xie *et al.* (2003) find financial experts are associated with a lower level of accruals management in the United States. Another US study examines the link between the audit committee and earnings management and finds no significant effect for industry background or size of the committee, but it does find evidence of lower earnings management where the audit committee includes a financial expert (Bedard *et al.*, 2004). Further analysis reveals earnings management is reduced for both income-increasing and income-decreasing actions, demonstrating the audit committee's desire to avoid misrepresenting the firm's performance to market participants.

The internal audit function is an important means of increasing accounting quality and reducing earnings management (Prawitt *et al.*, 2009). After controlling for audit committee effects, a study of S&P 1500 firms from 1996 to 2002 shows US firms that voluntarily established a governance committee had their previous opportunistic reporting constrained (Huang *et al.*, 2009a). Among Spanish firms, García Osma and Gill-de-Albornoz Noguer (2007) find evidence of greater earnings management where there are more independent directors, except where the firm's nomination committee has a majority of institutional directors (directors who represent the interests of majority shareholders). For Indian firms, the quality of the board rather than its composition is important to preventing earnings management (Sarkar *et al.*, 2008); earnings management is greater when the board has busy directors, where there is CEO duality and where there are controlling shareholders. In a study of Canadian firms, in which ownership typically is concentrated, Park and Shin (2004) find no evidence that outside directors reduce earnings management, although earnings management is lower where there are directors from financial intermediaries and institutional investors. In sum, research in this area indicates internal CG can constrain earnings management and improve earnings quality. However, it is important to consider the country-specific context when evaluating practices that may reduce earnings management.

We next turn our attention to external monitoring provided by analysts, institutional investors and auditors, who may also be influential on the decision to engage in earnings management. Firms with a greater analyst following are associated with less earnings management, perhaps because of their visibility (Yu, 2008). Firms with institutional investors use less accruals management (Chung *et al.*, 2002). Similarly, Charitou *et al.* (2007) find new managers of financially

distressed US firms are less likely to use income-decreasing earnings management to 'take a bath' where the firm has institutional investors. Other studies find only long-term institutional investors are associated with constraining accounting discretion; transient investors do not have the same influence (Koh, 2003, 2007; Hsu and Koh, 2005).

Auditors monitor and report on the integrity of their client's financial statements, although they are believed to influence the quality of the client's reported earnings as well. Auditor size, tenure and specialisation are shown to be related to the level of earnings management (Lin and Hwang, 2010). The relationship does not appear to hold in France, where the size of the audit firm is independent of the client's level of earnings management, a result attributed to the lower litigation risk under the French Civil Code (Piot and Janin, 2007). Firms with higher reporting quality are more likely to be issued with a clean audit opinion, while evidence from Portugal suggests firms with more independent boards are less likely to receive a modified audit opinion (Farinha and Viana, 2009). Auditors make judgments on the amount of audit work required, based upon characteristics of the client. If a client has complicated transactions to verify or large accruals requiring additional audit work, the audit fee will be larger. A study of 648 Australian firms finds those with greater discretionary accruals are associated with higher audit fees (Gul *et al*., 2003).

In addition to governance practices, the legal system in place affects the level of earnings management due to the potential penalties that can be imposed. Strong legal systems are associated with lower levels of earnings management (Burgstahler *et al*., 2006). In weaker legal environments, there can be strong incentives for firms to employ an industry-specialist auditor as they are associated with lower discretionary accruals (Kwon *et al*., 2007). In a study of earnings management in 31 countries, Leuz *et al*. (2003) find earnings management is lower in regions with greater investor protection. In Korea, the regulatory authority may require a firm with acute incentives for earnings management to replace their auditor with a new external auditor. Firms subject to this regulatory action have lower levels of accruals management than other firms that select their own external auditor (Kim and Yi, 2009).

Research evidence discussed previously confirms firms with better CG are typically subject to less earnings management. As better data for CG and earnings quality measures become available, there will be opportunities to assess more reliably how CG is related to the nature and extent of incentives for earnings management and to the degree of earnings conservatism in different firms. This should be particularly true of Asian countries, where our knowledge is at present limited to just a few studies.

6.2.4. Restatements and fraud

Accounting restatements occur due to errors. Some errors may not be intentional; others may be designed to mislead users of financial statements. The

market reaction to the discovery of a material misstatement requiring a restatement may depend on whether it was required due to an 'error' or an 'irregularity'. Hennes *et al.* (2008) classify announcements relating to restatements as either errors or irregularities based on guidance from the SEC, lawyers and auditors. In most cases, the market is not misled by restatements; the market reaction to restatement announcements is more negative for financial statement irregularities than errors (−14 per cent for irregularities and −2 per cent for errors). Also, there are fewer lawsuits when the restatements are classified as errors.

The likelihood of an accounting restatement appears to be linked to the CG structure and associated monitoring in place. Where the CEO is a member of the founding family, there is a higher probability of restatement (Agrawal and Chadha, 2005), indicating a lack of independence and monitoring when there are family ties. After a restatement has occurred, Cheng and Farber (2008) show there is a decline in the proportion of managerial compensation paid as stock options, resulting in both lower return volatility and greater overall profitability.

Investigation into firms subject to an enforcement action by the Financial Reporting Review Panel (FRRP) in the UK finds such firms have a high proportion of inside directors and are less likely to have an audit committee or to be audited by a large branded auditor (Peasnell *et al.*, 2001). Also, the presence of busy directors and directors' share ownership may have limited the audit committee's ability to monitor financial reporting quality in firms investigated by the FRRP (Song and Windram, 2004). Evidence from Australian firms suggests fraud is more likely where there is CEO duality, but less likely where there is greater board independence and institutional ownership (Sharma, 2004). Uzun *et al.* (2004) find for US firms between 1978 and 2001 that greater independence in the board and its committee structure are associated with lower levels of corporate fraud. A firm whose audit committee includes at least one member with financial expertise is less likely to issue a restatement (Abbott *et al.*, 2004), suggesting financial background is important for the audit committee to function effectively. There are fewer misleading disclosures by firms whose boards are more experienced and have longer tenure (Donoher *et al.*, 2007). All of these studies indicate that board independence and board committee experience, along with effective monitoring by the audit committee and the external auditor, are important factors in preventing misleading financial disclosures and in the extreme case, fraud. However, a later study of 347 cases of alleged fraud in US firms reports the CG structures of firms accused of fraud are similar to those found in a matched sample of firms (Beasley *et al.*, 2010). It is possible that governance regulations have resulted in more uniform governance characteristics among all firms, making it more difficult to identify those more likely to engage in fraud.

It may be expected that firms identified as committing fraud have incentives to replace their senior management team as well as the directors, although some studies do not confirm this expectation (Agrawal *et al.*, 1999; Peasnell *et al.*, 2001). Others find significant evidence of management turnover and reputational

effects. For instance, Desai *et al*. (2006) find at least one top manager is replaced within two years of the date of the restatement in over half their sample of firms involved in a restatement. Another study suggests CEOs and CFOs filing material restatements are twice as likely to leave the firm, and directors and audit committee members are 70 per cent more likely to leave, when compared to a matched sample of firms that had not filed restatements (Arthaud-Day *et al*., 2006). Helland (2006) finds evidence of reputational effects for directors of firms subject to large shareholder class actions and when cases are brought by the SEC. For US firms, Srinivasan (2005) finds the likelihood of turnover is linked to the severity of the misstatement and that the audit committee members and outside directors suffer reputational penalties as well. Whether the CEO is a founding member is important too; evidence suggests the CEO is less likely to leave the organisation when they are a founding member of the firm (Leone and Liu, 2010). The influence of fraud on a firm's reputation may be long-lived, despite changes to its governance structure to remedy prior weakness, with no subsequent increase in either institutional ownership or analyst following (Farber, 2005).

On the whole, the evidence reviewed in this section suggests greater monitoring has a positive effect on most measures of accounting quality, resulting in more timely earnings, greater earnings informativeness, less earnings management, fewer restatements and a lower incidence of fraud. The necessity for all listed firms to meet minimum standards of governance could make it more difficult in the future to further explore the relationship between accounting quality and governance for US firms in particular.

7. Conclusions

Corporate governance is about the governance of corporations. As embodied in statements or codes of 'best' practice, it is about matters which the shareholders and the board can properly decide and implement. We describe this as the legal view. The finance view, i.e. the view taken in the finance literature, is somewhat different. It emphasises the role of CG, often in combination with financial policies (such as dividend policy), in mitigating agency costs. The accounting literature has tended to focus on issues commonly found in accounting journals, such as, archival studies of corporate disclosure practices, properties of analysts' forecasts or indicators of the quality of accounting numbers, when seen as outputs of the firm's CG system. The sheer breadth of the CG literature means it accommodates other views as well, to which we make only passing reference. Examples are the views taken in the marketing and management literature.

Despite the breadth, and depth, of the literature on CG, as with any academic endeavour there is always room for improvement, whether it be in the form of better theory, better models, better empirical proxies, better data, better estimators, better analysis or better interpretations. Because the literature already has a degree of maturity, most improvements will be incremental.

There have been the usual calls for a multidisciplinary approach to CG theory. But academics develop theories to capture what they judge to be the essence of relationships of greater interest to them, so multidisciplinary advances will not come easily. Databases need to be more focused on measures that capture local conditions, such as the governance arrangements found in keiretsu in Japan or chaebols in Korea, and it is heroic if not foolish to assume today that 'best' governance practices in the United States likewise would be 'best' in say Kenya, Greece or Indonesia. More comprehensive data will foster research in settings where there are greater agency costs and greater variance in governance practices. Larger panel data will also yield more reliable estimates of the benefits of better governance practices to the wider community.

However, we do live in a world of change. The spreading around the world of statements or codes of 'best' CG practice, combined with the call for greater corporate transparency, indicates to us that what we have been able to observe so far may be far removed from what we need to observe, if the conclusions we reach are to endure.

There is still much we can do.

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