Do Standard Corporate Governance Practices Matter in Family Firms?

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Abstract

We study the unique governance dynamics surrounding family ownership in a voluntary regulatory arena where we can directly observe the impact of firm ownership on corporate governance practices pertaining to the composition of the board of directors. We find that family firms are more likely to deviate from standards of best practice in corporate governance. However, lesser governance standards in family firms are not associated with lower performance because the family shareholder is the monitor in-place. In contrast, governance practices and disclosures matter in widely-held firms because they alleviate the conflicts between managers and dispersed shareholders. More broadly, our results show that family ownership and board governance practices are substitute governance mechanisms.

1 Introduction

Studies have shown that dominant family shareholders are common in many countries, both developed (Faccio and Lang, 2002; Holderness, 2009) and developing (Claessens et al., 2002), and that firm's ownership structure has an important but ambiguous governance role (Shleifer and Vishny, 1997). However, the interdependence between ownership and other governance mechanisms is relatively unexplored in the literature (Judge, 2011). The purpose of this paper is to examine the relationship between ownership characteristics and commonly recognized principles of best practice in corporate governance (e.g., independent boards or governance disclosures aimed at a better monitoring of the management) and its impact on firm performance. In particular, we ask whether concentrated ownership is a substitute for other governance mechanisms. If so, do board governance practices matter more in widely-held companies than in family firms?

Inside a corporation, two potential conflicts coexist: the first is among shareholders and the second is between shareholders and managers. In family firms, the potential conflict between the controlling family shareholder and minority shareholders is more severe than the potential conflict between managers and shareholders because typically the family controls the board of directors.

The family shareholder has the incentive to collect information and the power to monitor managers. He thus substitutes for the monitoring role of the board, alleviates the conflicts between owners and managers (Shleifer and Vishny, 1986; Bolton and Von Thadden, 1998), and acts as an alternative governance mechanism (Aghion and Tirole, 1997).¹ Families also have good knowledge of their firms' activities, which is reflected in better performance (Anderson and Reeb, 2003; Adams, Almeida and Ferreira, 2009). If the family shareholder can better substitute for the monitoring and advising role of the board, then standard corporate governance practices, like independent boards, board committees or higher quality disclosures, would be less relevant in family firms (the monitoring hypothesis).

¹Because large shareholders have the incentive to collect information and the power to monitor the manager, the large shareholders substitute for the monitoring role of the board, choose their preferred project and formal authority prevails. In contrast, shareholders who are not informed lose control and the manager has real authority (effective control) (Aghion and Tirole, 1997).

The family shareholders, however, may also have incentives to expropriate minority shareholders or entrench themselves in managerial positions (Shleifer and Vishny, 1997). If the family shareholder extracts firm resources at the minority shareholders' expense, then he will alter corporate governance practices and disclosures to entrench himself and achieve greater ease in extracting private benefits (the entrenchment hypothesis).

Both the monitoring and the entrenchment hypothesis imply that family firms should adopt lesser corporate governance practices and disclosures than non-family firms. How the interaction between the dominant family shareholder and corporate governance practices affect firm performance will tell which of the two hypotheses prevails.

In widely-held firms, the potential conflict arising from the separation of ownership and management is more severe than the conflict among shareholders. Because of the free-rider problem, dispersed shareholders have fewer incentives to monitor the management, who in turn can pursue self-serving goals that do not maximize shareholder value. At such firms, therefore, better and more transparent corporate governance practices should align managers' incentives with firm value maximization and should be associated with better performance.

We test these theories in an institutional environment where companies are not mandated to adopt prescribed governance practices. We chose the UK as the setting of our study because the UK pioneered a corporate governance approach characterized by voluntary compliance with governance standards coupled with mandatory disclosure. In such a setting, companies can deviate from governance standards listed in a "Code of Best Practice" as long as they explain the reasons for deviating as part of compliance with the Listing Requirements (the "Comply or Explain" approach). Based on the information contained in the corporate governance section of UK annual reports, we construct a unique dataset by hand-collecting details of both compliance with the UK corporate governance Code and explanations given for noncompliance by FTSE350 non-financial companies between 1998 and 2004. We chose this period because the Code of Best Practice was in force continuously and with no amendments.

The non-mandatory governance setting used in this paper provides an extraordinary laboratory

to test how different ownership characteristics are associated with different governance choices and to assess their impact on performance. Such a test would pose serious challenges if performed in a mandatory regulatory setting. In the United States, for example, the 2002 Sarbanes-Oxley Law and the NYSE listing standards require that a majority of the board of directors be independent and that board committees (audit, monitoring, and compensation) must be comprised entirely of independent directors. By contrast, UK firms do not have to conform to such requirements, provided they explain their reasons for doing so. By looking at the reasons why companies do not adopt corporate governance practices, we fine-tune the identification strategy for well-governed companies and detect whether companies deviate from governance standards because of different monitoring needs or self-serving goals.

Our analysis shows that ownership structure affects the decision to comply with corporate governance provisions. In particular, we find that family firms are less likely to comply with corporate governance standards, especially with the provisions related to the monitoring role of the board (e.g. the existence of independent non-executive directors). We also find that family firms do not explain their governance choices. Such companies do not publicly communicate the reasons why commonly considered good practices in corporate governance are not optimal for the company. Thus, the large shareholder behaves more like an insider and discloses as little as possible to other investors.

However, lesser governance standards in family firms are not associated with lower performance. The family shareholder endogenously chooses the company's optimal governance structure, which does not conform to standard governance practices recommended or prescribed by law. Such standard governance practices mostly empower the board of directors with monitoring roles, which are less relevant in family firms because the family shareholders is the monitor in-place. This result shows that the monitoring hypothesis prevails over the entrenchment hypothesis. Because the family's wealth is linked to the company's welfare, the family shareholder has strong incentives to act in the company's best interest rather than expropriate minority shareholders.

In contrast, governance practices and disclosures matter in non-family firms where better gov-

ernance practices and disclosures are associated with better performance. Because of the free-rider problem, better corporate governance standards and disclosures substitute the monitoring role of dispersed shareholders, limit the self-serving goals of managers and incentivize managers to an efficient use of company's resources.

Taken together, the evidence above suggests that corporate governance practices and disclosures bear a different impact depending on the ownership structure of the company. Specifically, better corporate governance standards and disclosures are more effective in solving the conflict between shareholders and management in companies with dispersed shareholding.

We also find that widely-held firms are associated with higher earnings quality only if they have better governance practices and disclosures in place. In contrast, we do not find any significant difference in earnings quality across family firms that may be explained by differing governance practices. The evidence on earnings quality thus complements our evidence on performance that corporate governance practices and disclosure are more relevant in widely-held companies.

This paper contributes to the literature in at least three ways. First, we focus on the unique governance dynamics surrounding family ownership, the role of governance for dispersed shareholders and how they alleviate agency problems. Second, we perform this combined analysis of corporate governance practices and ownership structures in a non-mandatory setting where companies can choose different governance structures. Such a setting allows us to observe the corporate governance practices and disclosures endogenously chosen by firms. Third, our findings hold important policy implications in light of the widespread adoption of corporate governance Codes modeled on the UK system.

This study bridges three strands of the literature. First, the corporate governance literature highlights the costs and benefits of insider and large shareholder monitoring (Shleifer and Vishny, 1986; Aghion and Tirole, 1997; Bolton and Von Thadden, 1998; Anderson and Reeb, 2003). Second, the literature on disclosure highlights the association between differing disclosure decisions and ownership characteristics. For instance, recent studies show that lesser disclosure by concentrated family ownership is explained by the fact that large family holders behave more like insiders and

have fewer incentives to disclose information (Ali, Chen, Radhakrishnan, 2007; Chen, Chen, and Cheng, 2008; Anderson, Duru, and Reeb, 2009). Third, the literature on corporate governance codes of best practice (see, e.g., Conyon and Peck (1998), Dedman (2003), Dahya, McConnell and Travlos (2002), Dahya and McConnell (2007)) mainly focuses on compliance with governance standards, whereas we also take into account the reasons for a company's departure from such standards. Our results bring together and extend these strands of the literature, and show that the impact of corporate governance practices and disclosures is the result of complex governance interdependences. In particular, our results suggest that one corporate governance mechanism (family ownership) acts as a substitute for another (related to boards).

The structure of the paper is as follows. Section 2 describes the sample selection, the corporate governance indicators, ownership and financial variables. Section 3, the multivariate analysis, Section 4 the robustness tests and Section 5 summarizes and concludes.

2 Sample and Data

2.1 The Combined Code Provisions

We download annual reports of companies belonging to the FTSE 350 index for the period of 1998 - 2004 from Mergent Online. We choose this period because the Combined Code was in force continuously and with no amendments for the entire duration, after which it was subsequently updated by the Higgs Committee recommendations. Each annual report contains a corporate governance section that states the level of compliance with the Combined Code and an explanation in the case of noncompliance with any of its recommendations. Since the Combined Code was in effect from December 31st, 1998 to June 30th, 2004, we exclude annual reports of companies with financial year endings before and after those dates, respectively. As is common in the literature, we exclude 106 financial companies (SIC codes 60 - 69) (banks, insurance, REITs, equity investment trusts, etc.) because the regulatory environment for those companies differs significantly from that of non-financial companies. Some annual reports are not listed in Mergent Online. We are therefore

left with 1275 total company-year annual reports.

From each annual report we collect the statement of compliance and the exact explanation given in case of non compliance with the following eight provisions listed in the Combined Code²:

- 1. Separation of Chairman and CEO: There should be a clear division of responsibilities at the head of the company (Provision A.2.1);
- 2. Senior Non-executive Director (SNED): Whether the posts (Chairman/CEO) are held by different people or by the same person, there should be a strong and independent non-executive element on the board (SNED), with a recognized senior member other than the chairman to whom concerns can be conveyed (Provision A.2.1);
- Non-executive Directors: They should comprise not less than one third of the board (Provision A.3.1);
- 4. Independent Non-Executive Directors: The majority of non-executive directors should be independent of management and free from any business or other relationship (Provision A.3.1);
- 5. The Term of Service Contracts: it should be one year or less (Provision B.1.7);
- Nomination Committee: it should be established to make recommendations to the board on all new board appointments. A majority of the members of this committee should be non-executive directors (Provision A.5.1);
- Compensation Committee: it should be established for a transparent policy on executive compensation. It should consist exclusively of independent non-executive directors (Provisions B.1 and B.2.2);

²The Combined Code consists of eleven provisions, of which we analyze eight. We did not include in our analysis the provisions related to the directors' re-election, pay linked to performance, and the quality of the internal control systems, because all companies in the sample complied or stated their intention to comply with these provisions. The inclusion of these provisions would not have affected our results. Furthermore, judging the effective level of compliance of the provisions pertaining to pay-linked to performance and internal controls would have required additional information which was not available to us.

8. Audit Committee: it should be established for transparent arrangements on the financial reporting. The committee should consist of at least three non-executive directors, a majority of whom should be independent (Provision D.3).

2.2 The explanations for the Combined Code noncompliances

Because companies are allowed to depart from corporate governance practices if they have valid reasons, the assessment of the level of compliance with certain provisions does not alone measure the quality of an individual company's corporate governance. The "Comply or Explain" approach requires companies to explain the reasons for their corporate governance deviations and it must be for shareholders to evaluate this part of the company's governance statement.³ The Financial Reporting Council (FRC), the UK regulatory body responsible for promoting confidence in corporate governance and reporting, has stated that "to be fully effective the "Comply or Explain" requires companies to provide their shareholders with the information they need to judge the adequacy of the company's governance arrangements, and it requires investors to consider those arrangements on their merits, even where they deviate from the Code".⁴ The quality and level of disclosure provided by companies that deviate from corporate governance standards is thus a component of the governance quality of a company, especially in light of the specific role shareholders are assigned in the monitoring of the explanations.

If a company does not comply with corporate governance provisions and does not provide a valid justification, shareholders have to assume that it cannot or does not want to provide the reasons for deviating, increasing the suspicion that the reasons are associated with self-maximizing purposes. In fact, poor disclosure is generally an indicator of bad governance. For instance, Leuz, Nanda, and Wysocki (2003) argue that managers and controlling owners manage the level and variability of reported earnings in order to mask true firm performance and to conceal their private control benefits from outsiders. Lang, Lins, and Miller (2004) find that firms with governance problems are

³All companies incorporated in the UK and listed on the Main Market of the London Stock Exchange are required under the Listing Rules to report on how they have applied the Combined Code in their annual report. However, the Code does not propose any explicit penalty for not providing explanations.

 $^{^42009}$ Review of the Effectiveness of the Combined Code, page 25.

likely to be less forthcoming in terms of disclosure, giving analysts less information to work with in assessing investment potential. Kothari, Shu, and Wysocki (2009) show that managers tend to withhold information if it is bad news.

When analyzing the companies' annual reports, we find instances of non compliance statements where there is no explanation of the reason why a company decided to opt out from certain governance standards. Such companies not only fail to follow corporate governance standards, but they also do not provide any justification to their shareholders of why the adoption of a certain corporate governance provision is not optimal to them. The absence of any explanation is an objective fact, and it can be easily detected in the corporate governance section of the annual report.

We then classify the explanations provided by noncompliant companies based on their level of informativeness and verifiability. The analysis of the explanations requires qualitative judgment on our part and necessarily contains some subjectivity, which we try to minimize by using objective and measurable criteria.

The Combined Code does not prescribe a mandatory format that companies must follow when giving such explanations, but states that the explanation has to be *narrative* and refer to the *company's unique circumstances*. In this sense, the Combined Code approach is characterized by mandatory disclosure, but with discretion over its form and content.⁵ We find different degrees of "narration" and "specific circumstances" in the explanations given in the annual reports. In particular, some explanations are more informative and provide more detail than others, whereas some companies give the same boilerplate explanations, like the following explanation found in Reuters' 1999 Annual Report: "The Board has not identified a senior independent non-executive director, as specified by the Code, because it considers such an appointment to be unnecessary at present". Reuters justifies the non appointment of a senior figure in the board as unnecessary at

⁵ "In the first part of the statement, the company will be required to report on how it applies the principles in the Combined Code. We make clear in our report that we do not prescribe the form or content of this part of the statement, the intention being that companies should have a free hand to explain their governance policies in the light of the principles, including any special circumstances applying to them which have led to a particular approach. It must be for shareholders and others to evaluate this part of the company's statement. [...] In our report we make clear that companies should be ready to explain their governance policies, including any circumstances justifying departure from best practice; and that those concerned with the evaluation of governance should do so with common sense, and with due regard to companies' individual circumstances." (Points 4 and 6 of the Preamble to the Combined Code)

the present, without further details. This explanation clearly fails to identify specific circumstances for departing from best practice, and the same words (*"because it considers it to be unnecessary at present"*) are also used by various other noncompliant companies. Therefore, such an explanation is neither narrative nor unique to the company.

Consider, on the contrary, the following explanation in GlaxoSmithKline's 2002 Annual Report: "In determining its overall policy in respect of service contracts, the Committee aims to balance the costs associated with any early termination provisions with the need to protect GlaxoSmithKline's intellectual property rights. [...] Executive Directors are employed on service contracts under which the employing company is required to give 24 calendar months' notice of termination. [...] Executive Directors' service contracts contain 'garden leave', non-competition, non-solicitation and confidentiality clauses. [...] The Remuneration Committee currently believes that one year contracts would not be in the best interest of GlaxoSmithKline with regard to offering a globally competitive overall remuneration package and securing maximum protection for its intellectual property rights". The contents of this explanation are narrative (information on the context and the motivations are provided) and contain verifiable and specific elements (the company belongs to a competitive industry and it aims at protecting its property rights by offering two years contracts containing "garden leave", non competing and confidentiality clauses), which are unique to the company's circumstances. For these specific reasons, GlaxoSmithKline believes that one year contracts would not be in the company's best interest. This explanation is also entirely unique to GlaxoSmithKline and no other company provides the same one.

Based on the presence of *verifiable and specific* elements related to the company's circumstances, we asked three graduate students to independently classify the explanations on a Type 0 to 2 scale. "Type 0" explanations occur when there is a non compliance statement in the annual report, but no explanation is provided. The omission of any type of explanation is a purely objective fact and does not suffer of any subjective judgment in its classification. "Type 1" explanations either provide vague or uninformative explanations, or use standard phrases, such as asserting that compliance is *"unnecessary"*, without further explanation (as in Reuters). "Type 2" explanations are detailed explanations unique to the company (as in GlaxoSmithKline) or describe temporary verifiable circumstances due to which the company is not compliant (e.g., a board member resignation).

We provided the graduate students with a spreadsheet containing the list of the exact explanations given by each company in cases of noncompliance and we told them to score them based on the aforementioned classification. The following caveat applies to our classification: we are unable to judge the veracity of the explanation from a business perspective, but we nevertheless verify that the events and circumstances described in the explanation correspond with reality. Our perspective is that of an individual uninformed shareholder who evaluates the corporate governance statement contained in the annual report and judges its degree of informativeness. In this sense, the analysis of the quality of explanations is related to the concept of transparency, defined as the ability of shareholders to comprehend the corporate governance decisions of the company. On the other hand, if companies could easily write false or narrative explanations for noncompliance we would not observe boilerplate explanations or, more worrying, lack of any explanation at all.⁶

2.3 Corporate Governance Indicators

We look at a company's overall level of compliance with all the provisions of the Code, as it is stated in the annual reports, and we construct the following dummy variable:

• Dummy *CG Compliance* that takes the value 1 if a company is fully compliant with all the Combined Code provisions, 0 otherwise.⁷

We then look at the company's noncompliances and we construct an index, the *Disclosure Index*, reflecting the quality of explanations provided. The index assigns a lower score to companies if they

⁶The lack of any explanation and a common use of boilerplate explanations has been also recognized by the Financial Reporting Council (FRC) in its 2009 Review of the Effectiveness of the Combined Code. Particular concerns were raised about the amount of information provided by non compliant companies. Some companies suggested that it may be useful for the FSA and/or the FRC to undertake a formal monitoring of the "Comply or Explain" element of the corporate governance statement to ensure that companies were meeting the requirement in the Listing and Disclosure and Transparency Rules.

⁷By assigning two points to both compliances and Type 2 noncompliances, the Disclosure Index does not penalize companies departing from corporate governance best practice if they disclose the reasons. In fact, both adherence to governance practice and governance disclosure are two important governance mechanisms which reduce agency problems. Our results do not change if *Disclosure Index* assigns three points to compliances.

do not provide informative and verifiable explanations because poor or lack of transparency in governance practices is a sign of bad governance (Leuz, Nanda, and Wysocki, 2003; Lang, Lins, and Miller, 2004; Anderson, Duru, and Reeb, 2009). We construct it as follows.

We give two points in cases of noncompliances that are well-explained and verifiable (Type 2). We give one point to explanations (Type 1) that are vague or not verifiable. We give zero points when no explanation is given (Type 0). We then take the sum of the points. Because firms may have a different number of noncompliant provisions and this affects the degree of governance opacity of a company, we add two points for each compliance. For example, take company A with one noncompliance classified as Type 2: its noncompliance score is 2. Take company B with two noncompliances classified as Type 1: its noncompliance score is 2 as company A, but company B has more noncompliances and it is less transparent than company A. Hence, we need to consider the number of compliances in the construction of the index.

• Formally, we compute the *Disclosure Index* as follows:

Disclosure Index =
$$\sum_{i=1}^{N}$$
 (Explanation Type)+ (2 * Number of compliances) (1)

where *Explanation Type* is the average of the score assigned by the three RAs for each noncompliance *i*. For instance, company A's *Disclosure Index* is 2 + (2 * 7) = 16, whereas company B's *Disclosure Index* is 1 + 1 + (2 * 6) = 14. In calculating the *Disclosure Index* all provisions are equally weighted because the Combined Code considers each provision to be equally important.

Our *Disclosure Index* follows the well established methodology in the literature (e.g., Gompers et al., 2003; Klapper and Love, 2004; Durnev and Kim, 2005) that uses a check-list of corporate governance aspects regarding specific provisions a company adopted (e.g., the Antitakeover Index, the ISS Index) or the level of disclosure (e.g., the S&P Transparency and Disclosure Rankings). The important difference is that our *Disclosure Index* is not limited to the quantitative assessment of governance disclosure, but it is a qualitative indicator of the value of that information. Based on the *Disclosure Index*, we also create dummy variables capturing the quality of governance disclosure of companies:

- Dummy *No Disclosure* equal to 1 if no explanation (Type 0) is provided for at least one noncompliant provision, and 0 otherwise. Such an indicator identifies those companies that do not comply and do not disclose information to shareholders about their governance decision. The omission of any type of explanation does not suffer of any subjective judgment in its classification;
- Dummy *Full Disclosure* equal to 1 (0 otherwise) if a company has a *Disclosure Index* equal to 16, i.e., if it discloses all informative and verifiable information (Type 2) about the reasons for non complying with the standards;
- Dummy *Poor Disclosure* that takes 1 (0 otherwise) if a company has a *Disclosure Index* lower than 16 but it does not have any Type 0 explanations.

2.4 Financial Data

We use the industry-adjusted return on assets (*ROA*) as our measure of performance since we are interested in investigating how heterogenous corporate governance choices reflect on the efficient use of the company assets. We also focus our analysis on operating performance rather than stock market performance because we do not know the exact day corporate governance announcements are made public; also, public information about governance may not be impounded in stock prices in a timely manner (see Core et al., 2006), whereas weak corporate governance is associated with an inefficient use of company's resources that leads to poor operating income. As discussed in Barber and Lyon (1996) and Core et al. (2006), return on assets is a preferred measure of operating performance because it is not affected by leverage, extraordinary items, and other discretionary items; it also has more desirable distributional properties than return on equity. We define the return on assets as the ratio of earnings before interests and taxes (EBIT) to total assets. We then compute the industry-adjusted measure by subtracting the return on assets of each company in each year with the median return on assets of its respective Fama-French industry group. Accounting information comes from Worldscope, whereas monthly stock market data is from Datastream.

We also use in the analysis the following variables that have been used in similar studies (e.g., Klapper and Love, 2004; Dahya and McConnell, 2007; Boone et al., 2007) investigating the determinants of corporate governance choices and their performance impact: the logarithm of the book value of assets (*Size*) or of the market value of assets (*Market Capitalization*), the logarithm of firm age (*Age*), the logarithm of the ratio of market to book value of equity (*Growth Opportunities*), the ratio of long term debt to total assets (*Leverage*), the ratio of EBIT to sales (*Profitability*), and the ratio of property, plant and equipment (PPE) to sales (*Capital Intensity*). Due to the presence of significant outliers, we winsorize all of the control variables, with the exception of *Age*, at the 1% level.

2.5 Ownership Data

Ownership data is downloaded from Thomson One Banker (Ownership Module). Following Faccio and Lang (2002) and Dahya, Dimitrov, and McConnell (2008), companies are divided between individually-owned (family firms) and widely-held based on the dominant shareholder at the 10% threshold. A firm has a dominant family shareholder if an individual, family, or privately held firm owned by an individual or family, controls at least 10% of the voting rights in the firm. We checked for the presence of dual-class shares and pyramid structures. We construct a dummy *Family* that takes the value 1 if a company has a dominant family shareholder and 0 if a firm is widely-held. Since 10% of voting rights is frequently sufficient to exert control, this cut-off is used extensively (e.g., La Porta et al., 1999, Dahya et al., 2008). If ownership data is not available for a particular company in Thomson One Banker, we hand-collect information from Hemscott's Corporate Register.

2.6 Summary Statistics

Panel A of Table 1 provides summary statistics of corporate governance characteristics. Of the total 1192 company-year observations for which we could find financial data, we have 306 cases (32%) of

companies complying with all the provisions of the Code. Compliance with all the provisions of the Combined Code increases steadily from less than 10% in 1998 to almost 60% in 2004 (Figure 1). The average *Disclosure Index* is 14.46 with a standard deviation of 1.73. The minimum value of *Disclosure Index* is 4 and the maximum is 16. There are 179 instances (15%) where companies do not provide any explanation for at least one of their noncompliances (*No Disclosure*). An average of 44% companies provide some vague disclosure (*Poor Disclosure*) and only 9% of companies are fully transparent about their noncompliances (*Full Disclosure*). The average number of noncompliances is 1.7 per non-compliant company; the median number of noncompliances is 1 (not reported).

In Figure 2 we can observe that *Disclosure Index* is increasing in the year 2002 and it is relatively invariant otherwise. In fact, companies tend to either stick to the same explanation or comply. In Figure 1 we observe that the increase in compliance is mostly driven by the noncompliant companies with *Poor Disclosure*. Companies that do not have valid and verifiable reasons for not adopting corporate governance best practices may decide to comply because they are unable to provide a valid and unique explanation. The percentage of companies omitting any form of disclosure (*No Disclosure*) slightly decreases over time, but in 2004 we still observe 10% of companies that lack of any corporate governance disclosure. Interestingly, the percentage of companies providing *Full Disclosure* tends to remain stable over time: such companies show that they have a valid justification that is unique to the company and they continue being non-compliant over time.

Panel B of Table 1 shows some financial characteristics of our sample. Because the companies belong to the FTSE350 index they are, on average, profitable in terms of ROA (4.59%), large (assets of GBP 3070 millions), relatively old (40 years old) and not highly levered (0.19). For our sample of 1192 company-year observations with corporate governance information we could find 1072 with company-year ownership information. We have 192 company-year observations related to the presence of family firms at the 10% threshold (18% of the sample) which is consistent with the summary statistics reported in Faccio and Lang (2002) relative to the sample of companies (FTSE 350 non financial companies) we consider in our analysis.

Panel C of Table 1 presents difference of means tests between family firms and widely-held

firms. Family firms comply less (24% vs. 34%) than non-family firms. Family firms have a lower *Disclosure Index* (13.7 vs. 14.6) and omit disclosure (22% vs. 14%) with respect to non-family firms. Family firms are smaller in size, with a lower market capitalization, sales and leverage. Family firms also tend to be younger, though the difference is not statistically significant. There is no statistically significant difference in ROA, Market to Book ratio or Capital Intensity between family and non-family firms.

3 Multivariate Analysis

3.1 Determinants of Corporate Governance Practices

We investigate whether the probability to comply more or less with governance standards is a function of the ownership structure. We run a logit estimation and we regress *Dummy CG Compliance* on the *Family* ownership variable and the control variables. We further disentangle *Dummy CG Compliance* into its various components to understand what specific corporate governance standards companies are most likely to deviate from (columns 2 - 7).⁸ We thus construct various dummy variables by grouping provisions which are likely to be inter-related or jointly determined. These dummy variables are summarized in the following table. Regressions are run with industry and time dummies and standard errors are robust and clustered at the firm-level.

⁸We construct aggregate indicators instead of using separately each of the eight provisions constituting Dummy CG Deviation because in the logit estimation some dummies perfectly predict the outcome and we would lose many observations due to the small number of non compliances within each provision. This explains why each logit regression has a different number of observations.

		(Compositi	on of the dummy	variables	
		Committes &				
Provision	Board	Contracts	Power	Non-Executive	Remuneration	Transparency
Chairman/CEO	Yes	No	Yes	No	No	No
Senior Non-executive director	Yes	No	Yes	No	No	No
Non-executive directors (NED)	Yes	No	No	Yes	No	No
Independent NED	Yes	No	No	Yes	No	No
Service Contract	No	Yes	No	No	Yes	No
Compensation Committee	No	Yes	No	No	Yes	No
Nomination Committee	No	Yes	No	No	No	Yes
Audit Committee	No	Yes	No	No	No	Yes

The results presented in Table 2, column 1, show that companies with a dominant family shareholder are more likely to deviate from the corporate governance standards. In particular, we find that family firms are more likely to be noncompliant with provisions related to the monitoring role of the board (column 2), they are more likely to have greater concentration of power in the board (column 4), to be less monitored by independent and outside directors (column 5), and to have less transparent nomination and audit committees (column 6).

Taken together, these results show that companies with a dominant family shareholder rely less on monitoring from the non-executive board members and tend to retain control in audit and nomination issues. This reflects the family's discretion in the management of the company. In contrast, companies with dispersed shareholders alleviate the free-rider problem by adopting corporate governance standards that delegate the monitoring role to non-executive and independent members of the board and to board committees.

3.2 Determinants of Corporate Governance Disclosure

We next turn our attention to the informativeness of the explanations companies provide. We perform a multinomial logit regression to analyze the decision to deviate from the governance standards jointly with the level of explanation provided, since the two decisions occur in sequence. In the multinomial logit regression, the dummy variables *No Disclosure*, *Poor Disclosure* and *Full Disclosure* are the dependent variables. The group of compliant companies is the reference dummy

group. The multinomial regression is run on the *Family* ownership variable and a set of companylevel variables as defined before, with industry and time dummies and robust standards error clustered at the firm level.

Table 3 shows the multinomial logit results. Companies with a dominant family shareholder are more likely to deviate from the governance standards *and* to omit explanations for their noncompliances. This evidence is consistent with the existent literature showing less governance disclosure by concentrated family ownership because families behave more like insiders and have fewer incentives to disclose public information (Anderson, Duru, and Reeb, 2009; Chen, Chen, and Cheng, 2008). In fact, because families are actively involved in the management, the information asymmetry between owners and managers is lower and the family shareholder prefers less public disclosure.

3.3 Performance Analysis

The results before show that family firms tend to adopt fewer governance standards and are less transparent about their governance choices. This evidence is consistent with both the monitoring hypothesis (the family is in the position to better monitor and discipline managers) and the entrenchment hypothesis (the family can extract private benefits of control). How the interaction between the dominant family shareholder and corporate governance affect firm performance will tell which of the two hypotheses prevails in family firms. In widely-held firms, because of the free-rider problem higher corporate governance standards should better substitute the monitoring role of the shareholders and limit self-serving goals by managers. Hence, in widely-held firms better corporate governance practices and disclosures should align managers' incentives to firm value maximization and should be associated with better performance.

3.3.1 Governance Disclosure

We start our investigation by looking at the effect of corporate governance disclosures within the sample of noncompliant companies, separately from the sample of compliant companies. In a multivariate setting, we run the following OLS regression:

$$ROA_{i,t+1} = \alpha + \beta Disclosure \ Index_{i,t} + \delta Controls_{i,t} + \varepsilon_{i,t} \tag{2}$$

where *ROA* is the next year industry-adjusted ROA and *Disclosure Index* is an index capturing the quality of corporate governance disclosure as previously defined. We use future performance to reduce endogeneity issues. The regression is run with time dummies and robust standard errors clustered at the firm level. We cannot include company dummies because *Disclosure Index* is either invariant or it changes slowly from year-to-year.

Table 4, column 1, shows that the coefficient of *Disclosure Index* has a positive and statistically significant relationship with performance. The economic magnitude of the relationship is high: one standard deviation increase in the *Disclosure Index* is associated with an increase in one year ahead ROA by 0.64%, a nearly 15% increase relative to the sample average of 4.27%. This evidence highlights that transparency in the governance practices is associated with a better and more efficient use of resources because it leads to less information asymmetry and facilitates monitoring of potential self-interested behavior.

We then include the ownership variable in the analysis and we run

$$ROA_{i,t+1} = \alpha + \beta_1 Disclosure \ Index_{i,t} + \beta_2 Family_{i,t} + \beta_3 (Disclosure \ Index_{i,t} \cdot Family_{i,t}) + \delta Controls_{i,t} + \varepsilon_{i,t}$$
(3)

where *Family* is a dummy variable equal to 1 if the company has a dominant family shareholder and 0 if the company is widely-held. The coefficient β_1 indicates the effect of better governance standards and disclosures on performance in non-family firms, whereas the coefficient β_3 gives the incremental marginal effect of corporate governance in family firms. The sum of the coefficients $\beta_1 + \beta_3$ gives the total effect of better governance and disclosure in family firms.

Column 2 shows that disclosure does have a significant impact on performance in non-family firms: the coefficient β_1 is indeed positive and significant (0.0080), which means that better quality of governance disclosure limits self-serving goals by managers, aligns managers' incentives to an efficient use of corporate resources and is associated with better performance. The coefficient β_3 is negative and significant (-0.0104), implying that the positive effect of corporate governance disclosure on ROA in widely-held held firms is offset to some extent in family firms. The F-test of the sum of the coefficients $\beta_1 + \beta_3$ does not reject the hypothesis that the sum is equal to zero (F-test= 0.49). The overall effect of better disclosure is thus not significant, which means that, unlikely from non-family firms, better governance disclosures do not have a positive impact on the performance of family firms.

3.3.2 Governance Compliance and Disclosure

We now include the sample of compliant companies in the analysis. We create a dummy CGNonCompliance equal to 1 - CG Compliance, i.e., equal to 1 if a company is noncompliant with at least one provision of the Combined Code and 0 otherwise. We then run the following slope dummy regression:

$$ROA_{i,t+1} = \alpha + \beta_1 CG \ NonCompliance_{i,t} + \beta_2 (CG \ NonCompliance_{i,t} \cdot Disclosure \ Index_{i,t}) + \delta Controls_{i,t} + \varepsilon_{i,t}$$
(4)

The coefficient estimate β_1 mainly captures the effect on performance of noncompliant companies with low *Disclosure Index* with respect to compliant companies; β_2 captures the incremental effect of better disclosure for noncompliant companies.⁹ ¹⁰ Table 4, Panel B, column 3, shows that the coefficient β_1 is negative and significant, suggesting that noncompliant companies with poor disclosure appear to be associated with worse performance than the compliant ones. The interaction term β_2 is significant, which indicates that, as the quality of disclosure increases, noncompliant companies have incrementally better performance.

⁹The interaction term CG NonCompliance_{i,t} · Disclosure $Index_{i,t}$ is set equal to zero for the sample of full compliant companies.

¹⁰We also run an OLS regression where the one year ahead ROA is regressed on the dummy CG NonCompliance or the dummy Family and the control variables used before. The coefficients of the dummy CG NonCompliance and of the dummy Family are not significant (result not reported). This suggests that on average there is no performance difference between compliant and noncompliant companies and between family and widely-held companies.

Overall, these results are consistent with the literature showing that corporate governance practices and better governance disclosure contribute directly to performance by disciplining the management, promoting better use of the assets in place, enabling better project selection, and reducing expropriation of investors' wealth (Shleifer and Vishny, 1997; Bushman and Smith, 2003; Klapper and Love, 2004; Durnev and Kim, 2006; Hope and Thomas, 2008). The results also suggest that compliance with corporate governance practices and better disclosure quality are two substitute governance mechanisms.

In line with the regression run in column 2, we also investigate the different effect of compliance and disclosure between family and non-family firms. We divide companies in four categories based on ownership and compliance with the governance provisions: fully compliant family firms (*Family Compliant*), noncompliant family firms (*Family Noncompliant*), fully compliant widely-held firms, and noncompliant widely-held firms (*Widely-held Noncompliant*). We construct dummy variables equal to 1 (and 0 otherwise) for each of the above categories. We then regress $ROA_{i,t+1}$ on these dummy variables, their interaction with *Disclosure Index* if noncompliant, and control variables. The fully compliant widely-held companies are the omitted reference category. Column 4 shows that family firms (both compliant and non-compliant) do not differ in performance from compliant widely-held firms and that in family firms higher quality disclosure is not significantly associated with performance. In contrast, noncompliant widely-held firms with poor disclosure have lower performance than compliant widely-held firms (-0.1175), with this effect being offset by an increase in the quality of disclosure (0.008).

Consistent with the evidence shown in column 2, the above results suggest the existence of a different impact of compliance and disclosure across ownership. Compliance with standard governance practices or better disclosure do not have a significant association with performance in family firms. The lack of a significant association suggests that governance practices and disclosures matter little in family firms because the family shareholder substitutes the monitoring role of the board and endogenously chooses the optimal company governance practices, which do not conform to the standard governance practices recommended or prescribed by law. This is consistent with the fact that family ownership is an effective organizational structure and shows that the monitoring hypothesis prevails on the expropriation hypothesis. Because the family's wealth is linked to the company welfare, the family shareholder has strong incentives to monitor managers and minimize the free-rider problem rather than expropriate minority shareholders. High legal protection of minority shareholders in the UK is an important condition underlying the prevalence of the monitoring hypothesis over the expropriation hypothesis by family firms and may provide a competitive advantage to the firm (Burkart, Panunzi, and Shleifer, 2002).

In contrast, noncompliant widely-held companies with opaque governance disclosure have worse performance. Because of the free-rider problem, better corporate governance practices and disclosures align managers' incentives to firm value maximization and are associated with better performance. Taken together, the evidence above suggests that, in the presence of high legal protection, as in the UK, corporate governance practices and disclosures have a different impact depending on the ownership structure of the company, specifically, they matter more for widely-held companies than for family firms.

3.3.3 Lack of Disclosure

We then use the dummy *No Disclosure* in lieu of *Disclosure Index* to investigate what is the effect of the lack of corporate governance disclosure on performance and we run:

$$ROA_{i,t+1} = \alpha + \beta No \ Disclosure_{i,t} + \delta Controls_{i,t} + \varepsilon_{i,t}$$
(5)

Table 4, Panel C, shows that complete lack of disclosure is associated with a lower ROA: companies omitting any type of explanation on average have a 1.7% lower ROA than all the other companies for both the overall sample (column 5) and the subsample of noncompliant companies (column 6). These results show that omitting corporate governance information is associated with agency problems and private benefits extraction.

In order to investigate the different impact of disclosure between family and non-family firms,

we divide companies into the following categories based both on ownership type and disclosure quality: a) widely-held firms that do not comply and do not explain at least one noncompliant provision (*No Disclose Widely-held*); b) widely-held firms that either fully comply or provide some form of disclosure (*Comply or Disclose Widely-held*); c) Family firms that do not comply and do not explain at least one noncompliant provision (*No Disclose Family*); d) Family firms that either fully comply or provide some form of disclosure (*Comply or Disclose Family*). We construct dummy variables equal to 1 (and 0 otherwise) for each of the above categories. We then regress $ROA_{i,t+1}$ on the above dummies and control variables, in which *Comply or Disclose Widely-held* is the omitted reference group. Columns 7 (all sample) and 8 (noncompliant sample) show that lack of disclosure is significantly associated with worse performance in companies with dispersed shareholding, but not in family firms. This indicates that a lack of transparency in governance practices in widely-held firms hides self-serving goals by managers, but it is not associated with entrenchment activities by the family.

3.3.4 Alternative Specifications

In Table 5, we divide companies based on their ownership (family firms and widely-held firms) and we run specifications (2), (??) and (5) for each sample of companies. Columns 1 and 2 show that better corporate governance standards and disclosures are important in widely-held companies because noncompliant widely-held companies with opaque governance disclosure have worse performance. Columns 3 and column 4 show that higher corporate governance standards and disclosures are not significantly associated with better performance in the presence of a large family shareholder. Columns 5 to 8 confirm that lack of disclosure is associated with lower performance in companies with dispersed shareholding only. Table 5 analysis thus complements and reinforces the evidence in Table 4 for each different type of ownership.

4 Robustness Tests

4.1 Endogeneity

Endogeneity concerns are endemic in the corporate governance literature. If companies endogenously choose their governance structure and disclosure to maximize profitability, we should not observe any relationship with performance (Hermalin and Weisbach, 2003). By contrast, if managers or the controlling shareholder have opaque governance disclosures and adopt corporate governance practices different from the standards from reasons other than profit maximization, they should be less profitable. The UK system allows us to tackle this aspect of the endogeneity problem because we can analyze the reasons why a company may depart from governance standards, thus differentiating between value-maximizing and self-serving decisions. Moreover, companies for which the governance standards are not optimal are not incentivized to go private as a result of the sub-optimal mandatory governance structures, and we can thus observe their governance decisions. Other possible concerns could be related to unobserved factors that are driving both governance and performance. For example, a growing firm with a large need for outside financing may have more incentives to adopt better governance standards and disclosure in order to lower its cost of capital, thus inducing a positive correlation between governance and performance.

We address endogeneity concerns in several ways. First, in our regressions we investigate the relationship between the current governance structure with future (next year) operating performance. Second, we add several control variables that proxy for specific firm characteristics (ownership, size, growth opportunities, leverage, and capital intensity) and find that our governance results are not spuriously caused by these omitted variables.¹¹

We further deal with endogeneity by instrumenting the endogenous variable *Disclosure Index* and running 2SLS estimations. A good instrument should be correlated with the endogenous variable but uncorrelated with the error term in the structural equation. In choosing our instrument, we follow the existing corporate governance literature (e.g., John, Litov, and Yeung, 2008) and we

¹¹Another possible method is to include firm fixed effects, but this is not appropriate in our case because the *Disclosure Index* and the other corporate governance indicators are mostly invariant over time.

use the average *Disclosure Index* of firms in the same industry, based on Fama-French industry groups and years, which captures industry factors explaining corporate governance.¹² Since our dependent variable measure (ROA) is already adjusted for industry effects, it is reasonable to assume that the instrument is not correlated with the error term. We look at the first stage regression to detect whether there is a weak instrument problem (Table 6, column 1). The instrument coefficient estimate shows a positive and significant (at 1%) relationship, while the Cragg-Donald Wald F statistics is 37.38. Based on the Stock et al. (2002) critical values we can reject the null hypothesis of weak instruments. We therefore complete the 2SLS approach by estimating the second stage. The second stage results reported in Table 6, column 2, confirm the OLS results observed in Table 4. We apply a similar IV specification on the dummy *No Disclosure* by using the industry average of *No Disclosure* as an instrument and we find that our earlier results are confirmed (results not shown). With the usual caveats and limitations of the IV approach in mind, the above test gives us some confidence in limiting concerns about endogeneity when interpreting the causal relationship between operating performance and corporate governance disclosure.

4.2 The Corporate Governance Index

4.2.1 Alternative classification

By assigning two points to both compliances and Type 2 noncompliances, the *Disclosure Index* does not penalize companies departing from corporate governance best practice if they disclose the reasons. In fact, both adherence to governance practices and governance disclosure are two governance mechanisms that reduce agency problems. Our results do not change if we assign three points to compliances.

The classification of the explanations for noncompliances is based on their level of informativeness and verifiability, but it requires qualitative judgment and some subjectivity. The only exception is when companies omit any form of disclosure (Type 0), a situation that is clearly objective and

 $^{^{12}}$ We exclude industries with only one company observation. Our results are robust also to the exclusion of industries with less than five companies.

immediately detected in the annual report.

Notwithstanding that the *Disclosure Index* contains some form of subjectivity that cannot be entirely eliminated, we re-classify the explanations independently from the graduate students. All the results found in the preceding section are confirmed after using our classification. This highlights the fact that the classification of the explanations is easily replicable on the basis of information publicly available to all shareholders, and it makes us less concerned about possible biases. We also check that the results are not sensitive to the particular Type-scale used. We rescale the Types of the explanations using a more detailed 6-Types scale classification based on the specificity of the information.¹³ All our results are robust to the use of a different scaling criteria. The above results are not reported but they are available upon request.

4.2.2 Alternative proxies

The *Disclosure Index* is constructed to capture the level of governance transparency. We have found that family firms tend to be more opaque in their governance structure because they comply less and disclose less. The literature has developed other indexes of corporate transparency related to different types of information dissemination structures. For instance, Anderson, Duru and Reeb (2009) proxy corporate opacity by using the bid-ask spread or the total number of equity analysts following each firms. Bid-ask spreads are a widely-held used proxy for information asymmetry among investors, similarly to the number of analysts variable which is used to capture the intensity of market scrutiny. We find that family firms tend to be followed by a lower number of analysts and have higher bid-ask spreads, which indicates a higher level of corporate opacity. Effectively, family firms are more opaque than widely-held companies as they have higher asymmetric information and worse governance transparency. The above results are not reported but they are available upon

¹³The rescaling of the index is as follows: "Type 5" are genuine, detailed explanations unique to the company (as in GlaxoSmithKline); "Type 4" describe temporary verifiable situations due to which the company is not compliant (e.g., a board member resignation), but no further information is provided on the company's circumstances; "Type 3" and "Type 2" explanations vaguely provide some explanations which are not specific to company's circumstances or simply too general, respectively; "Type 1" explanation is totally uninformative and uses some standard sentences provided by various companies, such as asserting that compliance is "unnecessary", without further explanations (as in Reuters). Finally, "Type 0" occurs when there is a non compliance statement in the annual report, but no explanation is provided.

request.

4.3 Ownership

We have used a dummy variable specification to identify family vs. widely-held companies. In untabulated regressions, we replicate Tables 2 to 4 regressions by using the fractional level of family ownership in the company. The evidence shown in Tables 2 and 4 is confirmed. In the multinomial logit regressions (Table 3) the fractional level of family ownership still predicts larger noncompliance by family firms, but no differences in the quality of explanations.

Family ownership is computed at the 10% threshold. Since 10% of voting rights is frequently sufficient to exert control, this cut-off is used extensively (e.g., La Porta et al., 1999, Dahya et al., 2008). We do not consider alternative higher control thresholds for robustness. At the 20% threshold family ownership is less likely as we only have 113 company-year observations of family firms (10% of the sample). This is consistent with the descriptive statistics provided by Faccio and Lang (2002) who shows that 90% of the UK largest firms are widely-held at the 20% threshold. The lack of sufficient variation in the ownership variable at the 20% threshold poses econometric challenges, especially in the estimation of multivariate regressions with control variables and fixed effects, and we consequently do not consider it in our analysis.

4.4 Quality of earnings

An alternative indicator of agency problems in a firm is the quality of reported earnings. In this subsection we investigate the effect of the *Disclosure Index* on reported earnings quality. We follow the accounting literature and use the Dechow and Dichev (2002) model, as modified by Ball and Shivakumar (2006), as a proxy for earnings quality. We estimate the following equation using data for all available companies in the UK from Worldscope at the two-digit SIC industry level.

$$ACC_t = \alpha + \beta_1 CF_t + \beta_2 CF_{t-1} + \beta_3 CF_{t+1} + \beta_4 DCF_t + \beta_5 DCF_t * CF_t + \varepsilon_t \tag{6}$$

where:

 ACC_t = total accruals at t, scaled by average total assets at t; total accruals are earnings before extraordinary items minus operating cash flows;

 CF_t = operating cash flows at t, scaled by average total assets at t;

 CF_{t-1} = operating cash flows at t-1, scaled by average total assets at t;

 CF_{t+1} = operating cash flows at t+1, scaled by average total assets at t;

 DCF_t = one if the change in cash flows at t is less than zero ($CF_t - CF_{t-1} < 0$), and zero otherwise.

We then use the above industry estimates to calculate the residual for companies in our sample. The residual captures the unexpected portion of total accruals that deviate from economic transactions. The absolute value of the residuals, i.e., abnormal accruals, from equation (6) is our proxy for the quality of earnings. The higher the value of abnormal accruals is, the worse the quality of reported earnings is.

Table 7 shows the results from specifications (2) and (??) with ACC_t as dependent variable for the subsample of widely-held and family firms. Columns 1 and 2 show that noncompliant widelyheld firms with low *Disclosure Index* have higher accruals, i.e. lower quality of reported earnings, than compliant ones. This effect marginally decreases as the quality of disclosure increases. This confirms our earlier findings that governance practices and disclosure have a moderating effect on reported earnings quality in case of widely-held firms. In contrast, columns (3) and (4) show *Disclosure Index* has no significant effect on abnormal earnings in family firms. This is consistent with the evidence described in Wang (2006) and Ali, Chen, Radhakrishnan (2007) that, for a sample of US firms, earnings quality is worse in non-family firms because agency problems are worse than in family firms. The above results thus complement our earlier findings and provide further evidence that corporate governance and disclosure reduce agency problems between managers and shareholders in widely-held companies, but they have little impact in family firms.

4.5 Alternative dependent variable

The performance analysis uses return on assets as the dependent variable because operating performance reflects the efficient use of company assets. For robustness, we use the market-to-book ratio as an alternative measure of performance in lieu of ROA.¹⁴ We find that the market-to-book results are very comparable with the evidence on ROA shown in Tables 4 and 5: corporate governance practices and higher quality disclosure have a significant impact in widely-held companies but not in family firms (results not shown).

5 Summary and Discussion

This paper examines how corporate governance choices and disclosures differ between family and non-family firms, and their consequences for performance. Our analysis takes advantage of an institutional setting in which corporate governance standards are recommended but not legally mandated and companies have flexibility in their governance choices. We find that family firms are more likely to deviate from corporate governance standards, which is consistent with the role of the dominant family shareholder as monitor in-place. Family firms also tend to disclose less information about their governance choices.

We show that the impact of governance and disclosure varies across firms: better governance practices and disclosures are associated with better performance in widely-held companies, but they do not have a significant impact on performance in family firms. This difference suggests that corporate governance practices matter little in family firms because the family shareholder acts as an alternative governance mechanism, alleviating free-rider problems and effectively monitoring managers. In contrast, corporate governance practices matter in widely-held companies where boards adhering to better corporate governance practices and disclosures align managers' incentives to an efficient use of the company resources.

Our results show that the corporate governance of firms is the results of complex interdepen-

¹⁴The log of market-to-book ratio is regressed on *Disclosure Index* and the following control variables: Sales, Growth in Sales, R&D Expenses/Assets, Capital Expenditures/Assets, Leverage.

dences that go beyond a one-size-fits-all perspective. For instance, Chhaochharia and Grinstein (2007) find that the 2002 US governance rules had a different impact across firms and some provisions were detrimental to small firms. When judging and valuing a firm's corporate governance, we must consider the role and influence of ownership structure on corporate governance practices and outcomes. Our study further suggests that ownership, corporate governance practices and disclosures are substitute governance and monitoring mechanisms that reduce agency costs. Hence, noncompliance with some corporate governance practices does not necessarily imply bad governance in a firm.

Our results are consistent with the evidence found by Anderson and Reeb (2003) who find that in the US family ownership is an effective organizational structure that reduces agency costs. Both US and UK firms operate in an environment with strong country legal protection. Unlike the US, however, the UK corporate governance regime designed on the "Comply or Explain" system affords companies discretion in their choices. In family firms, because the dominant family shareholder optimally substitutes the monitoring role of the board and operates in an environment that guarantees high legal protection to minority shareholders, company-level governance practices do not have an additional effect on performance. High legal protection of minority shareholders in the UK is thus an important condition underlying the prevalence of the monitoring hypothesis over the expropriation hypothesis by family firms. In such an environment, the issue of "who monitors the family" is solved by the investor protection laws (La Porta, Lopez-de-Silanes, Shleifer and Vishny, 2000; Ellul, Guntay and Lel, 2009)¹⁵. At the same time, the absence of mandated regulations and formal monitoring of disclosure gives discretion to companies, which some of them take advantage for self-serving goals. This suggests that voluntary regulation may have drawbacks in countries with weak legal protection where companies are less inclined to be transparent and are more likely to take advantage of the allowed flexibility for expropriation and entrenchment purposes (Claessens et al., 2002). However, the question of whether mandatory regulation would help solve the agency

¹⁵La Porta et al. (2000) find that the ability of the controlling shareholder to extract resources from the firm depend on the protection afforded to outside investors. Ellul, Guntay, and Lel (2009) find that family firms originating from countries with high investor protection have lower cost of debt financing than non-family firms.

conflicts and be preferred to voluntary regulation is left unanswered and for future research.

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Table 1: Summary statistics

compliant with all eight provisions of the Combined Code, and 0 otherwise. Disclosure Index measures the level of disclosure provided in case of This table shows statistics for our sample of UK companies analyzed over the period 1998-2004. Panel A shows the Corporate Governance non compliance with corporate governance standards. No Disclosure is a dummy variable that takes the value 1 if a company does not provide any explanation for at least one of its noncompliances. Poor Disclosure is a dummy variable that takes the value 1 if the company provides some explanation for all its noncompliances, 0 otherwise. Full disclosure is a dummy equal to 1 if a company if it provides informative explanations for all its noncompliances, 0 otherwise. Panel B shows the financial characteristics of firms. Accounting data is from Worldscope while ownership lata is from Thomson One Banker. ROA is the ratio of earnings before interest and taxes to the book value of assets adjusted for the median Market to Book is the logarithm of the ratio of market to book value of equity. Leverage is the ratio of long term debt to the book value of assets. Capital Intensity is the ratio of net property, plant, and equipment to sales. Family is a dummy equal to 1 if a company has a family or individual indicators gathered from the annual reports of companies. CG Compliance is a dummy variable that takes the value 1 if a company is fully rom the respective Fama-French industry group. Age is the number of years since incorporation. Size is the book value of assets in GBP millions. shareholder with at least 10% stake, 0 otherwise. Widely-held are firms that do not have a family or individual shareholder with at least 10% stake. Panel C reports the difference in mean tests for the above variables based on whether the firm is family owned or not.

Panel A: Corporate Governance Indicators CG Compliance 1192 0.3238 0.4681 0 Disclosure Index 806 14.4667 1.7358 15 No Disclosure 1192 0.3238 0.4672 0 Poor Disclosure 1192 0.1502 0.3574 0 Poor Disclosure 1192 0.4475 0.4972 0 Full Disclosure 1192 0.4475 0.4972 0 Age (Years) 1192 1.071 39.69 34.77 25 Size (GBP millions) 1192 37.63 1.017 39.40 34.77 25 Size (GBP millions) 1192 37.63 1.037 0.3763 0.475 25 Market to Book 1192 1192 37.63 1.036 0.475 0.707 Size (GBP millions) 1192 1.0356 0.4367 0.2735 0.2735 Market to Book 1192 37.63 1.0587 0.700 257 Leverage <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>							
CG Compliance 1192 0.3238 0.4681 15 Disclosure Index 806 14.4667 1.7358 15 No Disclosure 1192 0.1502 0.3574 0 Poor Disclosure 1192 0.4455 0.4972 0 Poor Disclosure 1192 0.7455 0.172 0 Full Disclosure 1192 0.7872 0.2823 0 Age (Years) 1071 39.69 34.77 25 Size (GBP millions) 1192 3070 5578 1017 Market capitalization (GBP millions) 1192 3763 12872 838 Sales (GBP millions) 1192 3763 12872 938 Market to Book 1192 3763 12872 938 Leverage 1192 0.1850 0.1700 2.2251 Leverage 1192 0.1820 0.1425 0.1701 Leverage 1192 0.1831 <	Panel A	: Corporate Go	vernance I	ndicators			
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No Disclosure 1192 0.1502 0.3574 0 Poor Disclosure 1192 0.4455 0.4972 0 Full Disclosure 1192 0.6872 0.2823 0 Full Disclosure 1192 0.6876 5578 1017 Age (Years) 1071 39.69 34.77 25 Size (GBP millions) 1192 3763 12872 9383 Market capitalization (GBP millions) 1192 3763 12872 938 Sales (GBP millions) 1192 3763 12872 937 Market to Book 1192 1850 0.1425 0.1703 Leverage 1192 0.1850 0.1425 0.277 Leverage 1192 0.1850 0.1425 0.276 Capital intensity 1072 0.1432 0.276 0.277 Family 1072 0.1432 0.26*** 0.277 Family Parenter 1.37356 5.19*** Coptital intensity Panel C: Differ	ssure Index	806	14.4667	1.7358	15	14	15.3333
Poor Disclosure 1192 0.4455 0.4972 0 Full Disclosure 1192 0.6872 0.2823 0 ROA 1192 4.59% 9.62% 3.00% RoA 1192 4.59% 9.62% 3.00% Age (Years) 1071 39.69 3.77 25 Size (GBP millions) 1071 39.69 3.77 25 Market capitalization (GBP millions) 1192 3.763 12872 33.875 Sales (GBP millions) 1192 3.763 12872 33.875 9.2255 Market cobook 1192 0.1850 0.1425 0.277 Capital intensity 1192 0.1820 0.1425 0.276 Leverage 1192 0.1820 0.1435 0.276 Capital intensity 1022 0.1432 0.1432 0.276 Emily Panel C: Difference 0.1432 0.2448 $2.06***$ Faulty Panel C: Differ	isclosure	1192	0.1502	0.3574	0	0	0
Full Disclosure 1192 0.0872 0.2823 0 ROA Panel B: Firm Characteristics 3.00% 3.00% 3.00% Rob T192 1.071 39.69 3.00% 3.00% Age (Years) 1.071 39.69 3.1.77 25 Size (GBP millions) 1.192 30.69 3.1.77 25 Market capitalization (GBP millions) 1192 3763 12872 838 Sales (GBP millions) 1192 3763 12872 938 Market to Book 1192 1192 3763 12875 9.2255 Leverage 1192 0.1850 0.1425 0.170 Leverage 1192 0.8526 1.0587 0.277 Leverage 1192 0.1850 0.1425 0.277 Leverage 1192 0.1850 0.1425 0.277 Leverage 1192 0.1830 0.1426 0.274 Capital intensity Panel C: Difference of Means 1.455 0.266**** <td>Disclosure</td> <td>1192</td> <td>0.4455</td> <td>0.4972</td> <td>0</td> <td>0</td> <td>1</td>	Disclosure	1192	0.4455	0.4972	0	0	1
Panel B: Firm Characteristics ROA 1192 4.59% 9.62% 3.00% Age (Years) 1071 39.69 34.77 25 Size (GBP millions) 1192 3070 5578 1017 Market copitalization (GBP millions) 1192 3070 5578 1017 Market to Book 1192 3763 12872 8383 938 Market to Book 1192 1192 2853 9275 9170 Leverage 1192 0.1850 0.1425 0.1701 2.277 Leverage 1192 0.8356 0.1720 0.277 Leverage 1192 0.8356 0.277 Leverage 1192 0.6826 1.0587 0.277 Leverage 1192 0.8356 0.1726 0.277 Leverage 0.1420 0.1426 0.277 0.277 Family $Family$ $Fatas$ 0.6686 0.286888 0.20888 <	Disclosure	1192	0.0872	0.2823	0	0	0
ROA 1192 4.59% 9.62% 3.00% Age (Years) 1071 39.69 34.77 25 Size (GBP millions) 1192 3070 5578 1017 Market capitalization (GBP millions) 1192 3763 12872 838 Sales (GBP millions) 1192 3763 12872 838 Market to Book 1192 2.853 8275 938 Market to Book 1192 0.1425 0.170 Leverage 1192 0.1850 0.1425 0.170 Capital intensity 1192 0.1791 0.3836 0 Family 1072 0.1791 0.3836 0 Family 1072 0.1791 0.3336 0.277 Family 1072 0.1791 0.3336 0.274 Family 1072 0.1791 0.3386 0 Family 1072 0.1791 0.3876 0.1761	đ	anel B: Firm C	haracterist	ics			
Age (Years) 1071 39.69 34.77 25 Size (GBP millions) 1192 3763 12872 838 Market capitalization (GBP millions) 1192 3763 12872 838 Sales (GBP millions) 1192 3763 12872 838 Sales (GBP millions) 1192 2853 8275 938 Market to Book 1192 1192 2853 8275 933 Leverage 1192 1192 0.1425 0.170 277 Leverage 1192 0.1850 0.1425 0.170 277 Leverage 1192 0.18375 0.1425 0.170 0.277 Leverage 1192 0.170 0.3336 0 0.277 Family 1072 0.1791 0.3336 0 0.2748 $0.268**$ Family $Family$ $Family$ $feamily$ f		1192	4.59%	9.62%	3.00%	0.00%	8.14%
Size (GBP millions)1192 3070 5578 1017 Market capitalization (GBP millions) 1192 3763 12872 838 Sales (GBP millions) 1192 2853 8275 938 Market to Book 1192 1192 2.853 8275 938 Market to Book 1192 0.1850 0.1425 0.1701 Leverage 1192 0.1850 0.1425 0.1701 Capital intensity 1192 0.6826 1.0587 0.2771 Family 1.072 0.1791 0.3336 0 Compliance 0.3375 0.2448 $2.50**$ No disclosure Index 14.5778 13.7356 $5.19***$ No disclosure 0.4432 0.2188 $-2.66***$ Poor disclosure 0.4432 0.2188 $-2.66***$ Poor disclosure 0.1420 0.2188 $-2.66***$ ROAActive 0.6841 0.0781 0.277 Age (Years) 0.0841 0.0781 0.278 Size (GBP millions) 3538 1.422 $4.24**$ Market capitalization (GBP millions) 3022 1531 $2.28**$	${ m Years})$	1071	39.69	34.77	25	12	65
Market capitalization (GBP millions) 1192 3763 12872 838 Sales (GBP millions) 1192 2853 8275 938 Market to Book 1192 4.3091 7.0390 2.225 Leverage 1192 0.1850 0.1425 0.170 Leverage 1192 0.6826 1.0587 0.277 Eamily 1192 0.6826 1.0587 0.277 Family 1192 0.1791 0.3336 0 Panel C: Difference of Means Test Nidely-held Family t-stats CG compliance 0.3375 0.2448 2.50** 0 0.276 No disclosure Index 14.5778 13.7356 5.19*** 0 0.276 No disclosure 0.4432 0.2188 2.66*** 0.386 0 0 Poor disclosure 0.1420 0.2188 2.66*** 0.386 0 0.277 Rod 0.0seure 0.4432 0.2188 2.66*** 0 0.386 0.38 Solo disclosure No disclosure 0.4432 0.2188 </td <td>GBP millions)</td> <td>1192</td> <td>3070</td> <td>5578</td> <td>1017</td> <td>454</td> <td>3127</td>	GBP millions)	1192	3070	5578	1017	454	3127
Sales (GBP millions) 1192 2853 8275 938 Market to Book 1192 4.3091 7.0390 2.225 Leverage 1192 0.1850 0.1425 0.170 Leverage 1192 0.6826 1.0587 0.277 Capital intensity 1192 0.6826 1.0587 0.277 Family 1072 0.1791 0.3836 0 Family Panel C: Difference of Means Test 0 0 Family Panel C: Difference of Means Test 0 0 0 CG compliance 0.3375 0.2448 2.50** 0 0 0 CG compliance 0.3375 0.2448 2.50** 0	et capitalization (GBP millions)	1192	3763	12872	838	402	2546
Market to Book 1192 4.3091 7.0390 2.225 Leverage 1192 0.1850 0.1425 0.170 Capital intensity 1192 0.6826 1.0587 0.277 Family 1072 0.1791 0.3836 0 Family Panel C: Difference of Means Test 0.277 0.277 Family Panel C: Difference of Means Test 0.274 0.2748 For compliance 0.375 0.2448 2.50** 0.277 Or disclosure Index 14.5778 13.7356 5.19*** 0.28 No disclosure Index 0.4432 0.2448 2.66*** 0.38 No disclosure 0.1420 0.2188 -2.66*** 0.38 Poor disclosure 0.4432 0.748 0.277 0.277 Rod 4.50% 4.44% 0.08 0.26** Poor disclosure 0.4432 0.758 -0.26** Rod 4.60% 4.44% 0.08 Age (Years) 3.1422 <td>(GBP millions)</td> <td>1192</td> <td>2853</td> <td>8275</td> <td>938</td> <td>403</td> <td>2670</td>	(GBP millions)	1192	2853	8275	938	403	2670
Leverage11920.18500.14250.170Capital intensity11920.68261.05870.277Family10720.17910.38360Family0.17910.383600FamilyPanel C: Difference of MeansTest0.277CG compliance0.33750.24482.50**CG compliance0.33750.24482.50**Siclosure Index0.14200.21882.56***No disclosure0.14200.21882.66***Poor disclosure0.14200.21882.66***No disclosure0.14200.21882.66***No disclosure0.14200.21882.66***No disclosure0.14200.21882.66***No disclosure0.14200.21882.66***No disclosure0.14200.21882.66***No disclosure0.14200.21882.66***Poor disclosure0.14200.21882.66***Poor disclosure0.14200.21882.66***Poor disclosure0.14200.21882.66***Poor disclosure0.14200.21882.66***Poor disclosure0.08410.07810.27ROA4.60%4.44%0.08Age (Years)313114224.24***Market capitalization (GBP millions)353813212.78**Sales (GBP millions)302215312.28**	et to Book	1192	4.3091	7.0390	2.2250	1.3400	3.8850
Capital intensity 1192 0.6826 1.0587 0.277 Family 1072 0.1791 0.3836 0 Family Panel C: Difference of Means Test 0.3836 0 Family Panel C: Difference of Means Test 0.3836 0 CG compliance 0.3375 0.2448 $2.50**$ Disclosure Index 14.5778 13.7356 $5.19**$ No disclosure 0.3375 0.2448 $2.50**$ Poor disclosure 0.1420 0.2188 $2.56**$ Poor disclosure 0.1420 0.2188 $-2.66***$ Poor disclosure 0.1432 0.7438 -0.38 Full disclosure 0.4432 0.7458 -0.38 Rod A 4.50% 4.44% 0.08 Rod A 4.50% 4.44% 0.08 Size (GBP millions) 3131 1422 $4.24**$ Market capitalization (GBP millions) 3538 1321 $2.78**$	age	1192	0.1850	0.1425	0.1702	0.0701	0.2741
Family 1072 0.1791 0.3836 0 Panel C: Difference of Means Test \overline{M} (dely-held Family t-stats \overline{M} (dely-held \overline{M} (dely-h	al intensity	1192	0.6826	1.0587	0.2770	0.1252	0.6306
Panel C: Difference of Means TestWidely-heldFamily t -statsCG compliance 0.3375 0.2448 2.50^{**} Disclosure Index 14.5778 13.7356 5.19^{***} No disclosure 0.1420 0.2188 -2.66^{***} Poor disclosure 0.1420 0.781 0.27 Rod 0.0841 0.0781 0.27 ROA 4.50% 4.44% 0.08 Age (Years) 3131 1422 4.24^{***} Market capitalization (GBP millions) 3538 1321 2.78^{***} Sales (GBP millions) 3022 1531 2.22^{**}	y	1072	0.1791	0.3836	0	0	0
Widely-heldFamilyt-statsCG compliance 0.3375 0.2448 2.50^{**} Disclosure Index 14.5778 13.7356 5.19^{***} No disclosure 0.1420 0.2188 -2.66^{***} Poor disclosure 0.1420 0.2188 -2.66^{***} Poor disclosure 0.1420 0.2188 -2.66^{***} Poor disclosure 0.1420 0.7781 0.27 Poor disclosure 0.0841 0.0781 0.27 ROA 4.50% 4.44% 0.08 Age (Years) 40.03 35.70 1.45 Size (GBP millions) 3131 1422 4.24^{***} Market capitalization (GBP millions) 3538 1321 2.78^{***} Sales (GBP millions) 3022 1531 2.22^{**}	Par	el C: Difference	of Means	Test			
CG compliance 0.3375 0.2448 2.50^{**} Disclosure Index 14.5778 13.7356 5.19^{***} No disclosure 0.1420 0.2188 -2.66^{***} Poor disclosure 0.1432 0.4583 -0.38 Full disclosure 0.4432 0.4583 -0.38 Full disclosure 0.4432 0.7811 0.27 ROA 4.50% 4.44% 0.08 Age (Years) 40.03 35.70 1.45 Size (GBP millions) 3131 1422 4.24^{***} Market capitalization (GBP millions) 3538 1321 2.78^{***} Sales (GBP millions) 3022 1531 2.22^{**}		Widely-held	Family	t-stats			
Disclosure Index 14.5778 13.7356 5.19^{***} No disclosure 0.1420 0.2188 -2.66^{***} Poor disclosure 0.1432 0.4533 -0.38 Full disclosure 0.4432 0.0781 0.27 ROA 4.50% 4.44% 0.08 Age (Years) 40.03 35.70 1.45 Size (GBP millions) 3131 1422 4.24^{***} Market capitalization (GBP millions) 3538 1321 2.78^{***} Sales (GBP millions) 3022 1531 2.22^{**}	ompliance	0.3375	0.2448	2.50^{**}			
No disclosure 0.1420 0.2188 -2.66^{***} Poor disclosure 0.4432 0.4583 -0.38 Full disclosure 0.0841 0.0781 0.27 ROA 4.50% 4.44% 0.08 Age (Years) 40.03 35.70 1.45 Size (GBP millions) 3131 1422 4.24^{***} Market capitalization (GBP millions) 3538 1321 2.78^{***} Sales (GBP millions) 3022 1531 2.22^{**}	ssure Index	14.5778	13.7356	5.19^{***}			
Poor disclosure 0.4432 0.4583 -0.38 Full disclosure 0.0841 0.0781 0.27 ROA 4.50% 4.44% 0.08 Age (Years) 40.03 35.70 1.45 Size (GBP millions) 3131 1422 4.24^{***} Market capitalization (GBP millions) 3538 1321 2.78^{***} Sales (GBP millions) 3022 1531 2.22^{**}	sclosure	0.1420	0.2188	-2.66***			
Full disclosure 0.0841 0.0781 0.27 ROA 4.50% 4.44% 0.08 Age (Years) 4.003 35.70 1.45 $Size$ (GBP millions) 3131 1422 4.24^{***} $Market capitalization (GBP millions)353813212.78^{***}Sales (GBP millions)302215312.22^{**}$	disclosure	0.4432	0.4583	-0.38			
ROA 4.50% 4.44% 0.08 Age (Years) 40.03 35.70 1.45 Size (GBP millions) 3131 1422 4.24^{***} Market capitalization (GBP millions) 3538 1321 2.78^{***} Sales (GBP millions) 3022 1531 2.22^{**}	lisclosure	0.0841	0.0781	0.27			
Age (Years) 40.03 35.70 1.45 Size (GBP millions) 3131 1422 4.24*** Market capitalization (GBP millions) 3538 1321 2.78*** Sales (GBP millions) 3022 1531 2.22**		4.50%	4.44%	0.08			
Size (GBP millions) 3131 1422 4.24^{***} Market capitalization (GBP millions) 3538 1321 2.78^{***} Sales (GBP millions) 3022 1531 2.22^{**}	${ m Years})$	40.03	35.70	1.45			
Market capitalization (GBP millions)353813212.78***Sales (GBP millions)302215312.22**	GBP millions)	3131	1422	4.24^{***}			
Sales (GBP millions) 3022 1531 2.22^{**}	et capitalization (GBP millions)	3538	1321	2.78^{***}			
	(GBP millions)	3022	1531	2.22^{**}			
Market to Book 4.2075 4.4835 -0.50	et to Book	4.2075	4.4835	-0.50			
Leverage 0.1471 4.20***	age	0.1935	0.1471	4.20^{***}			
Capital intensity 0.6512 0.6937 -0.52	al intensity	0.6512	0.6937	-0.52			

	are the following dummy
practices	pendent variables
governance	as where the de
of corporate	ogistic regression
erminants c	the results of l
Table 2: Det	This table shows

variables: (1) CG Compliance is equal to 1 if a company is compliant with all the provisions of the Combined Code, and 0 otherwise; (2) Board is equal to 1 if the company is compliant with all the provisions related to the separation of CEO/Chairman, existence of a senior non executive director, non-executive presence to the nomination, compensation, audit committees and the terms of service contracts, and 0 otherwise; (4) Power is equal to 1 if a company is and independent directors, and 0 otherwise; (3) Committees & Contracts is equal to 1 if a company is compliant with all the provisions related compliant with both the provisions related to the separation of CEO/Chairman and existence of a senior non executive director, and 0 otherwise; (5) Non-Executives is equal to 1 if a company is compliant with both the provisions related to non-executive presence and independent directors, and 0 otherwise; (6) Transparency is equal to 1 if a company is compliant with both the provisions concerning the nomination and audit committees, and 0 otherwise; (7) Remuneration is equal to 1 if a company is compliant with both the provisions related to the compensation committee and service contracts, and 0 otherwise. Family is a dummy variable which takes the value 1 if the firm has a family or individual shareholder with at (east 10% stake. Control variables are as defined in Table 1. T-statistics (with standard errors clustered by firm) are in parentheses. ***, ** and * denote significance at the 1%, 5%, and 10% levels, respectively. This

	(1)	(2)	(3)	(4)	(5)	(9)	(2)
			Committees &				
Dependent variable	CG Compliance	Board	Contracts	Power	Non-Executives	${\it Transparency}$	Remuneration
Family	-0.6597*	-1.0697***	-0.0484	-0.6303*	-1.2295^{***}	-0.9509**	0.2402
	(-1.73)	(-3.12)	(-0.13)	(-1.92)	(-3.07)	(-2.20)	(0.63)
Market to Book	-0.0123	-0.0131	0.0043	-0.0024	-0.0084	-0.0249	0.0067
	(-0.77)	(-0.92)	(0.31)	(-0.18)	(-0.53)	(-1.40)	(0.52)
Market capitalization	0.0893	0.1172	0.1289	0.1216	0.1873	0.3977^{**}	0.0884
	(0.83)	(1.09)	(1.10)	(1.14)	(0.99)	(2.09)	(0.68)
Age	-0.2783^{**}	0.0057	-0.2074^{*}	-0.0342	0.1367	-0.0882	-0.1446
	(-2.43)	(0.05)	(-1.73)	(-0.27)	(0.75)	(-0.52)	(-1.17)
Leverage	-1.7885^{*}	0.3009	-1.6646	-0.3086	1.2298	1.5954	-1.7837*
	(-1.73)	(0.32)	(-1.61)	(-0.31)	(0.81)	(1.12)	(-1.67)
Capital intensity	0.2713^{*}	0.0448	0.4413^{**}	0.1918	-0.4148	0.1825	0.2927
	(1.79)	(0.25)	(2.39)	(0.95)	(-1.55)	(0.51)	(1.53)
Profitability	0.5342	1.9416^{**}	-0.5995	1.2802	2.4518^{*}	2.0703	-1.3760
	(0.65)	(1.99)	(-0.55)	(1.27)	(1.86)	(1.42)	(-1.14)
Industry dumnies	\mathbf{Yes}	\mathbf{Yes}	\mathbf{Yes}	\mathbf{Yes}	\mathbf{Yes}	\mathbf{Yes}	\mathbf{Yes}
Constant & Year dummies	\mathbf{Yes}	\mathbf{Yes}	\mathbf{Yes}	\mathbf{Yes}	${ m Yes}$	\mathbf{Yes}	\mathbf{Yes}
$Pseudo R^2$	0.173	0.146	0.137	0.131	0.187	0.215	0.131
N	858	840	831	808	643	664	831

Table 3: Determinants of corporate governance disclosure

This table shows the results of a multinomial logistic regression with the following dummy variables equal to 1, and 0 otherwise: No Disclosure if a company does not provide any explanation for at least one of its noncompliances; Poor Disclosure if the company provides some explanation for all its noncompliances; Full Disclosure if the company provides for all its noncompliances. The base variable for the regression are companies that are compliant with all provisions of the Code. Family is a dummy variable which takes the value 1 if the firm has a family or individual shareholder with at least 10% stake, and 0 otherwise. Market to Book is the logarithm of the ratio of the market to book value of equity. Market capitalization is the logarithm of the market capitalization of the company. Age is the logarithm of the number of years since incorporation. Leverage is the ratio of long term debt to the book value of assets. Capital intensity is the ratio of net property, plant, and equipment to sales. Profitability is the ratio of earnings before interest and taxes to sales. t-statistics (with standard errors clustered by firm) are in parentheses. ***, ** and * denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)
	No Disclosure	Poor Disclosure	Full Disclosure
Family	1.0156^{**}	0.4340	0.6521
	(2.23)	(1.05)	(1.22)
Market to Book	-0.0013	0.0249	0.0515^{**}
	(-0.06)	(1.38)	(2.18)
Market capitalization	-0.2690	-0.0836	0.0438
	(-1.44)	(-0.73)	(0.32)
Age	0.3873^{*}	0.1781	0.4598^{**}
	(1.88)	(1.45)	(2.19)
Leverage	2.0809	2.7559^{**}	0.7378
	(1.42)	(2.48)	(0.52)
Capital intensity	-0.3203*	-0.3279*	-0.0893
	(-1.73)	(-1.76)	(-0.35)
Profitability	-0.8656	-0.3611	-2.0291
	(-0.66)	(-0.37)	(-1.61)
Industry dummies		Yes	
Constant & Year dummies		Yes	
R^2		0.132	
N		887	

Table 4: Compliance, disclosure and performance

This table shows results of ordinary least squares regressions with one year ahead industry-adjusted ROA as the dependent variable, where ROA is defined as the ratio of earnings before interest and taxes to book value of assets adjusted for the median from the respective Fama-French industry group. Disclosure Index measures the level of disclosure provided in case of non compliance with corporate governance standards. CG NonCompliance is a dummy equal to 0 if a company is compliant with all the provisions of the Combined Code, and 1 otherwise. Family is a dummy variable that takes the value 1 if the firm has a family or individual shareholder with at least 10% stake, and 0 otherwise. Widely-held are firms that do not have a family or individual shareholder with at least 10% stake. CG NonCompliance is a variable which takes the value 1 if a company is noncompliant with at least one of the provisions of the Combined Code and 0 otherwise. Family Compliant are fully compliant firms and Family Noncompliant are noncompliant firms within the sub-sample of family firms. Widely-held Noncompliant are noncompliant firms within the sub-sample of equity. Leverage is the ratio of long term debt to the book value of assets. Capital intensity is the ratio of net property, plant, and equipment to sales. T-statistics (with standard errors clustered by firm) are in parentheses. ***, ** and * denote significance at the 1%, 5%, & 10% respectively.

	Pan	el A		Pan	el B
	(1)	(2)		(3)	(4)
Disclosure Index	0.0037^{*}	0.0080**	CG NonCompliance	-0.0609*	
	(1.69)	(2.59)		(-1.86)	
Family		0.1488^{**}	CG NonCompliance [*]	0.0040*	
		(2.31)	Disclosure Index	(1.93)	
Family [*] Disclosure Index		-0.0104**	Family Compliant		-0.0145
		(-2.20)			(-0.77)
			Family Noncompliant		0.0238
					(0.53)
			Widely-held Noncompliant		-0.1175^{**}
					(-2.58)
			Family Noncompliant [*]		-0.0021
			Disclosure Index		(-0.60)
			Widely-held Noncompliant*		0.0080^{***}
			Disclosure Index		(2.67)
Size	-0.0061	-0.0056	Size	-0.0070	-0.0066
	(-1.01)	(-0.84)		(-1.40)	(-1.18)
Market to Book	0.0032^{***}	0.0036^{***}	Market to Book	0.0031^{***}	0.0034^{***}
	(3.46)	(3.26)		(3.74)	(3.62)
Leverage	-0.0617	-0.0550	Leverage	-0.0922**	-0.0852*
	(-1.25)	(-1.00)		(-2.13)	(-1.80)
Capital intensity	-0.0102	-0.0114	Capital intensity	-0.0060	-0.0071
	(-1.50)	(-1.60)		(-1.31)	(-1.46)
Constant & Year dummies	Yes	Yes	Constant & Year dummies	Yes	Yes
\mathbb{R}^2	0.122	0.135	\mathbb{R}^2	0.117	0.127
N	806	728	Ν	$1,\!192$	1,072

Table 4: Compliance, disclosure and performance (continued)

No Disclosure is a dummy variable that takes the value 1 if a company does not provide any explanation for at least one of its noncompliances, and 0 otherwise. No Disclose Family is a dummy equal to 1 if a family firm does not comply and does not provide any explanation for at least one of its noncompliances. Comply or Disclose Widely-held is a dummy equal to 1 if a widely-held firm fully complies or provides an explanation for all its noncompliances. Comply or Disclose Family is a dummy equal to 1 if a family firm fully complies or provides an explanation for all its noncompliances. Comply or Disclose Family is a dummy equal to 1 if a family firm fully complies or provides an explanation for all its noncompliances.

		Pan	el C	
	(5)	(6)	(7)	(8)
No Disclosure	-0.0175*	-0.0171*		
	(-1.73)	(-1.64)		
No Disclosure Family			0.0024	0.0047
			(0.12)	(0.23)
No Disclose Widely-held			-0.0209*	-0.0216*
			(-1.73)	(-1.71)
Comply or Disclose Family			-0.0121	-0.0092
			(-0.88)	(-0.53)
Size	-0.0067	-0.0057	-0.0061	-0.0048
	(-1.38)	(-0.98)	(-1.10)	(-0.72)
Market to Book	0.0031^{***}	0.0032***	0.0033***	0.0035**
	(3.70)	(3.43)	(3.50)	(3.13)
Leverage	-0.0908**	-0.0603	-0.0838*	-0.0547
	(-2.12)	(-1.23)	(-1.80)	(-1.00)
Capital intensity	-0.0062	-0.0102	-0.0070	-0.0108
	(-1.39)	(-1.55)	(-1.48)	(-1.57)
Constant & Year dummies	Yes	Yes	Yes	Yes
\mathbb{R}^2	0.118	0.124	0.295	0.302
Ν	$1,\!192$	806	1,072	728

ahead industry-adjusted <i>ROA</i> assets adjusted for the mediau of non compliance with corpor Combined Code, and 1 other at least one of its non-complii stake. <i>Widely held noncomplii</i> shareholder with at least 10% defined in Table 1. <i>t-statistic</i>	4 as the depen in from the resjonate governam- orate governam- cwise; No Disc iances, and 0 c iant are noncou of stake. Famili s (with standa	dent variable, wh pective Fama-Fre ce standards. CC dosure is a dumn therwise. Widely mpliant firms with y noncompliant a ard errors cluster	here ROA is nch industu ruch industu ry <i>NonComp</i> ry variable <i>p-held</i> are fi hin the sam re noncom ed by firm)	s defined as the 1 y group. Disclosition of that takes the v that takes the v runs that $do not$ pple of widely-hell pliant firms with that in parenthe	tatio of earni sure Index m o 0 if a comp alue 1 if a c have a fami d firms. Fam in the sub-se ses. ***, ***	ngs before intere- easures the level any is compliant ompany does not ly or individual s <i>uily</i> are firms whii umple of family fi and * denote sig	st and taxes of disclosure with all the t provide an shareholder ch have a fai irms. Contro ;nificance at	to book value of provided in case provisions of the y explanation for with at least 10% with at least 10% inly or individual l variables are as the 1%, 5%, and
10% levels, respectively.								
	(1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)
	Widely	Widely-held		Family	Widely	Widely-held		Family
	held	noncompliant	Family	noncompliant	held	noncompliant	Family	noncompliant
CG NonCompliance	-0.1183***		0.0333					
	(-2.62)		(0.64)					
Disclosure Index		0.0083^{***}		-0.0033				
		(2.74)		(-0.81)				
$CG NonCompliance^*$	0.0081^{***}		-0.0024					
Disclosure Index	(2.71)		(-0.63)					
No Disclosure					-0.0208^{*}	-0.0223*	0.0098	0.0136
					(-1.71)	(-1.76)	(0.41)	(0.50)
Size	-0.0055	-0.0058	-0.0156^{*}	-0.0066	-0.0048	-0.0047	-0.0158^{**}	-0.0072
	(-0.89)	(-0.78)	(-1.94)	(-0.68)	(-0.79)	(-0.64)	(-2.07)	(-0.81)
Market to Book	0.0037^{***}	0.0035^{***}	0.0022	0.0035	0.0035^{***}	0.0033^{***}	0.0022	0.0034
	(3.42)	(2.82)	(1.17)	(1.55)	(3.27)	(2.67)	(1.15)	(1.52)
Leverage	-0.1195^{**}	-0.0865	0.1137	0.0855	-0.1184^{**}	-0.0856	0.1108	0.0832
	(-2.37)	(-1.51)	(0.98)	(0.63)	(-2.36)	(-1.49)	(1.01)	(0.63)
Capital intensity	-0.0040	-0.0098	-0.0227	-0.0199	-0.0040	-0.0091	-0.0223	-0.0194
	(-0.85)	(-1.41)	(-1.47)	(-1.07)	(-0.88)	(-1.38)	(-1.49)	(-1.06)
Constant & Year dumnies	\mathbf{Yes}	\mathbf{Yes}	\mathbf{Yes}	\mathbf{Yes}	Yes	\mathbf{Yes}	\mathbf{Yes}	\mathbf{Yes}
${ m R}^2$	0.137	0.142	0.157	0.176	0.132	0.135	0.156	0.174
Ν	880	583	192	145	880	583	192	145
			Ì					

This table examines results of ordinary least squares regressions within the subsamples of family firms and widely-held firms with one year

Table 5: Compliance, Disclosure and Performance - Results within subsamples

Table 6: Instrumental variable regressions

This table reports two stage least squares (2SLS) instrumental variable regression results. The dependent variable is one year ahead industry-adjusted ROA, where ROA is defined as the ratio of earnings before interest and taxes to book value of assets adjusted for the median from the respective Fama-French industry group. *Disclosure Index* is instrumented by the *Industry Disclosure Index*, i.e. the average *Disclosure Index* of firms in the same Fama-French industry group. Columns (1) and (2) report results from both the first and second stage estimations. *Family* is a dummy variable which takes the value 1 if the firm has a family or individual shareholder with at least 10% stake, and 0 otherwise. *Size* is the logarithm of book value of assets. *Market to Book* is the logarithm of the ratio of the market to book value of equity. *Leverage* is the ratio of long term debt to the book value of assets. *Capital intensity* is the ratio of net property, plant, and equipment to sales. *t-statistics* (with standard errors clustered by firms) are in parentheses. ***, ** and * denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)
	(1)	(2)
	First	Second
~~~~~	Stage	Stage
Disclosure Index		$0.0275^{**}$
_		(2.53)
Family* $Disclosure\ Index$		-0.0238*
		(-1.95)
Family	$-19.0705^{***}$	$0.3458^{**}$
	(-3.36)	(2.00)
Size	0.2323***	-0.0081
	(2.64)	(-1.36)
Market to Book	-0.0086	$0.0040^{***}$
	(-0.77)	(3.53)
Leverage	0.3451	-0.0882*
	(0.49)	(-1.69)
Capital intensity	-0.0772	-0.0119
	(-1.20)	(-1.55)
Industry Disclosure Index	0.8173***	
	(456)	
Family [*] Industry Disclosure Index	$1.2717^{***}$	
	(3.36)	
Constant & Year dummies	Yes	Yes
Cragg-Donald Wald F statistic		37.38
$R^2$	0.309	0.072
Ν	694	694

#### Table 7: Compliance, disclosure and the quality of earnings

This table reports results of ordinary least squares regressions for the subsamples of family firms and widely-held firms where the absolute value of abnormal accruals is the dependent variable. *Disclosure Index* measures the level of disclosure provided in case of non compliance with corporate governance standards. *CG NonCompliance* is a dummy equal to 0 if a company is compliant with all the provisions of the Combined Code, and 1 otherwise. *Widely-held* are firms that *do not have* a family or individual shareholder with at least 10% stake. *Widely-held noncompliant* are non-compliant firms within the sub-sample of widely-held firms. *Family* are firms that *have* a family or individual shareholder with at least 10% stake. *Widely-held noncompliant* are non-compliant firms within the sub-sample of widely-held firms. *Family* are firms that *have* a family or individual shareholder with at least 10% stake. *Size* is the logarithm of book value of assets. *Market to Book* is the logarithm of the ratio of the market to book value of equity. *Leverage* is the ratio of long term debt to the book value of assets. *Capital intensity* is the ratio of net property, plant, and equipment to sales. *t-statistics* (with robust standard errors) are in parentheses, and ***, ** and * denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)
		Widely-held		Family
	Widely-held	$\operatorname{noncompliant}$	Family	$\operatorname{noncompliant}$
CG NonCompliance	0.1430*		-0.0401	
	(1.80)		(-0.40)	
Disclosure Index		-0.0090*		0.0009
		(-1.73)		(0.13)
CG NonCompliance [*]	-0.0096*		0.0032	
Disclosure Index	(-1.80)		(0.47)	(0.25)
Size	0.0009	-0.0030	-0.0082	0.0036
	(0.17)	(-0.47)	(-0.66)	(0.25)
Market to Book	$0.0014^{*}$	$0.0016^{**}$	0.0032	0.0050
	(1.91)	(2.09)	(0.95)	(1.46)
Leverage	0.0782	$0.1387^{**}$	0.1779	0.2423
	(1.39)	(1.99)	(1.19)	(1.37)
Capital intensity	$0.0100^{*}$	0.0123	0.0155	0.0240
	(1.74)	(1.50)	(0.75)	(0.94)
Constant & Year dummies	Yes	Yes	Yes	Yes
$R^2$	0.028	0.048	0.079	0.151
Ν	798	514	177	130

#### Figure 1: Trends in Compliance and Quality of Explanations

This graph plots trends in the percentage of companies fully compliant with all the provisions of the combined code (*Compliant*), the percentage of companies not compliant with at least one provision of the code and providing informative explanations (*Full Disclosure*), percentage of companies not compliant with at least one provision of the code and providing non-informative explanations (*Poor Disclosure*) and companies not providing any explanations for at least one of their noncompliances (*No Disclosure*) for the period 1998-2004.





This graph plots trends in the average Disclosure Index per year for noncompliant companies.

