

Choosing Your Own Monitors: Evidence From Family Firm Boards

ABSTRACT

Research on boards of directors is largely silent about the effects of ownership structure on the composition and role of boards. Using a large sample of U.S. publicly-held firms, we first show that firms with concentrated ownership and control – family firms – are prone to appointing independent directors with prior experience on other family firm boards (“family-friendly directors”). However, investors view these appointments as value decreasing. Next, we document a negative relation between the presence of these family-friendly directors and the quality of monitoring over firms’ financial reporting and control systems based on measures of actual and expected financial misconduct, the quality of internal controls, and insider trading. Family-friendly directors also exhibit evidence of developing a “type” in the director labor market – these directors have a greater (smaller) likelihood of receiving future family firm (non-family firm) directorships. Overall, our findings provide new insights about the impacts of ownership structure on the quality of outside director monitoring.

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JEL Codes: G3, L22, M14, M41

1. Introduction

Boards of directors are an important economic institution designed to help solve agency problems inherent in managing an organization (Hermalin and Weisbach, 2003). Shareholders attempt to reduce these agency problems by appointing outside directors with the knowledge and skills to monitor and advise managers.¹ An important role for these directors is to oversee and monitor firms' financial reporting and control systems. Most research examining the role of directors in overseeing financial control systems focuses on widely-held public firms (e.g., Beasley, 1996; Klein, 2002; DeFond, Hann, and Hu, 2005). In contrast, there is relatively little evidence about the monitoring role of directors in firms with concentrated ownership. Examining firms with concentrated ownership is important for at least two reasons.

First, these firms face a distinct set of agency problems to those faced by widely-held firms (Morck and Yeung, 2003). Second, firms with concentrated ownership are economically significant. Firms with these structures represent over 90% of all companies worldwide (Wooldridge, 2015), 33% of the S&P 500 firms (Anderson and Reeb, 2003; Chen et al, 2008), approximately 50% of large firms in Western Europe (Faccio and Lang, 2002; Zingales, 1995), and over 65% of all firms in East Asia.

Our objective in this paper is to examine the role of directors in monitoring financial reporting and internal control systems for firms with concentrated equity ownership structures. To identify the link between concentrated ownership and the role of directors in overseeing financial reporting and control systems, we focus on family ownership (relative to widely-held firms). Family-owned firms are natural candidates for studies examining concentrated ownership because

¹ See Hermalin and Weisbach (2003), Adams et al. (2010), Armstrong et al. (2010) for reviews of the board literature. Examples of papers include Fama and Jensen (1983), Raheja (2005), Boone et al. (2007), Drymiotes (2007), Linck et al. (2008), Harris and Raviv (2008), Goh (2009), and Lehn et al. (2009).

family owners typically hold large stakes in their firms. Furthermore, family firms are a prevalent form of concentrated ownership (Pagano and Roell, 1998; Anderson and Reeb, 2003). Family firms differ from widely held firms along multiple dimensions other than just ownership structure. In particular, families' large concentrated equity stakes allow them to hold senior manager and director posts, influence director hiring, investment and financing policies (Fama and Jensen, 1983; Cadman and Sunder, 2014), and generally to place their interests in front of the other stakeholders' interests (Ali et al., 2007; Chen et al., 2008; Villalonga and Amit, 2006; Li and Srinivasan, 2011; Franks et al., 2012).

The unique nature and dynamics of firms with concentrated family owners suggests family firms may demand independent directors with prior board experience in other family-controlled firms (Beasley, 1996; Coles et al., 2008).² Such directors – which we term “*family-friendly directors*” – can bring specialized counsel, advising, and monitoring skills that act to preserve or maximize shareholder wealth.³ Relative to other directors, family-friendly directors likely have superior insights about managerial succession, communication between a dominant inside shareholder and diversified outside shareholders, and monitoring of professional managers when family business owners take a less active role in the day-to-day operations of their firms (for example, see Ali et al., 2007; Chen et al., 2008; Anderson et al., 2012); suggesting that these directors act to maximize wealth for all shareholders and not just for family owners. Irrespective of their prior family-firm experience, directors likely have strong incentives to monitor the firm and its financial reporting and control system because the failure of these systems results in severe

² For example, a director serving on the board of the Campbell Soup Company (the Dorrance family owns over 41% of the firm's outstanding shares) potentially possesses unique knowledge about family ownership that could influence board advising and monitoring at Wal-Mart Stores, Inc. (the Walton family owns over 50% of the firm's shares).

³ Directors with specialized knowledge of family-owned firms may provide valuable advice on investment policies (James, 1999), tax policies (Chen et al., 2010), corporate diversification decisions (Faccio et al., 2011), risk-taking behavior (Gomez-Mejia et al., 2007), and market valuation (Morck et al., 1988).

reputational penalties (Srinivasan, 2005; Fich and Shivdasani, 2007; Kang, 2008).

Alternatively, family owners may prefer family-friendly directors because those directors implicitly allow the family to expropriate firm resources for their private benefit, consistent with Grossman and Hart (1986) and Hart and Moore (1990). In other words, directors with prior family firm experience are hired because they will provide lax oversight and monitoring of the family owners and other insiders, thereby allowing these controlling owners to enrich themselves at the expense of outside shareholders.

We collect a sample of 1,695 non-financial non-utility U.S. public firms over the 2001 to 2010 period of which approximately 34% are family-controlled firms. First, we investigate differences in family-friendly director hiring practices between family firms and non-family firms. Our results indicate that family firms hire 28% more family-friendly directors on average than non-family firms, after controlling for other firm characteristics. More than 48% (42%) of family firms (non-family firms) have at least one independent director with prior family firm experience. We also find similar but more pronounced results for the prevalence of family-friendly directors on a firm's audit committee. Over 75% of family firm audit committees have at least one director with prior family firm experience, while only 45.7% of non-family firms have at least one family-friendly director serving on the committee.

There are several plausible explanations for these findings, including that family owners seek directors with specific skill sets or some other difference in family and non-family firms that drives director choice. Given the self-selection between family firm status and family-friendly director presence, we use propensity-matched samples of firms that recruit family-friendly directors with firms that do not recruit family-friendly directors. This approach helps to ensure the firms with family-friendly directors in our main tests are similar to the firms without such directors

along a large set of observable dimensions and thus reduces the possibility that other factors drive the relation between family-friendly directors and our dependent variables.

Next, we conduct an event study to evaluate how market participants view the appointment announcement of directors to family firm and non-family firm boards. The source of identification in this event study stems from the comparison of market reactions to different *within-firm* changes in the board of directors. Consequently, this test holds the unobservable characteristics of the two types of firms constant, providing evidence on how investors compare the appointment of family-friendly directors across family firm and non-family firm boards. The results indicate that in family-controlled firms, outside investors view the appointment of family-friendly directors as net value-decreasing relative to the appointment of an independent director without prior family firm experience. Upon the appointment of a family-friendly (non-family-friendly) director to a family-controlled firm board, we document a cumulative abnormal return (CAR), on average, of -0.71% (0.08%); the 0.79% difference in CARs is statistically significant at conventional levels. In contrast, we find no statistical difference in the CARs for appointments of family-friendly directors (compared to non-family-friendly) to the boards of firms without family owners.

The director appointment CAR results appear inconsistent with the argument that family-friendly directors are hired for their monitoring abilities. Our next set of tests focus on whether limited monitoring by family-friendly directors manifests in the quality of the boards' governance over firms' financial reporting and control systems. Our findings indicate that the ratio of family-friendly directors on a board is positively associated with the likelihood of both actual and predicted financial misconduct as well as the issuance of internal control weakness reports. In economic terms, a one standard deviation increase in the family-friendly director ratio for family-controlled firms (relative to a matched sample of non-family firms) is associated with a 14.3%

higher probability that the firm will face enforcement for financial misconduct and a 25% higher likelihood of issuing an internal control weakness report. We also find that family-friendly directors bear a particularly strong relation to financial misconduct when they serve on the firm's audit committee.

Our next set of tests specifically focus on differences within family firms in terms of the influence of the founding-family. We consider the effects of director monitoring for firms with family and external CEOs, and for different magnitude of a family's power based on overall ownership or the presence of a dual-class ownership structure. All our tests indicate that family firm affinity for weak monitoring is greater when family members have substantial influence in the firm's day-to-day operations.

In additional analyses, we examine and find evidence that the effects of poor board monitoring over control systems is also linked to the magnitude of informed trading. Using abnormal short sales as a proxy for informed trading, we find that an increase of one family-friendly director on a family-controlled firm board is associated with a 15.8% increase in informed trading. In contrast, we find no evidence of a relation between family-friendly directors and informed trading for firms without family owners.

A natural question given the results on the monitoring role of family-friendly directors is how they fare in the director labor market. Our final set of analyses examines this issue. We collect details about the subsequent directorship appointments for family-friendly and non-family-friendly directors. Directors obtaining at least one family-firm board appointment in the current year tend to obtain *additional* family-firm board seats in the subsequent two years but *fewer* non-family firm board seats in the same two-year window. In contrast, directors obtaining non-family firm board appointments are significantly less likely to obtain family firm board appointments in

the following two years. These findings suggest family firm owners evaluate whether directors are likely to acquiesce to their preferences and appoint directors accordingly.

We attempt to address endogeneity concerns in a number of ways. First, as noted above, our tests rely on propensity matched samples of firms that do and do not hire family-friendly directors. This reduces concerns about omitted variables. Second, we further attempt to reduce concerns about omitted variables by using industry and year fixed-effects and an extensive set of firm-, industry-, director- and time- matching control variables. Third, we address concerns about reverse causality by ensuring that the family-friendly director board appointments occurs subsequent to financial misconduct. In sum, although our tests generally indicate that family-friendly directors are poor monitors of family firms' financial reporting and control systems, we caution that we cannot unambiguously claim causality.

Our study is likely to be relevant for investors, managers, boards, and auditors. In addition, our study is also important for two streams of research. First, our findings contribute to a literature that examines the effectiveness of boards as a corporate governance mechanism and in particular, the consequences of director specific skills and attributes (e.g., Beasley, 1996; Klein, 2002; Ryan and Wiggins, 2004; Ahmed and Duellman, 2007; Masulis and Mobbs, 2014, and Kim, Mauldin, and Patro, 2014). Our study complements this literature by focusing on the role and effectiveness of boards in firms with a distinctly different ownership and power structure to widely held firms.

Second, our study contributes to research about family owners' incentives and their influence on corporate governance mechanisms. Our findings suggest that family owners seek to limit the influence of independent directors in monitoring and overseeing the actions of corporate insiders (Leung, Richardson, and Jaggi, 2014; Srinidhi, He, Firth, 2014). In particular, our evidence suggests that family shareholders demand at least a subset of independent directors that

are submissive to their preferences and that this results in weaker governance and greater corporate misconduct.

Third, our findings are likely to be of interest to regulators and auditors. Auditors seeking to mitigate reputation and litigation costs as a result of corporate misconduct arguably need to evaluate prior director experience as our results suggest a link to engagement risk (Ettredge, Fuerherm, and Li, 2014) and limited oversight of potentially overconfident family firm founders (Schrand and Zechman, 2012).

2. Sample and Empirical Design

In Section 2.1 we discuss the data sources used in this paper. In Sections 2.2 to Section 2.4, we outline the empirical methodology used in our primary multivariate tests.

2.1 Data Sources

Our sample consists of the 2,000 largest non-finance, non-utility, publicly traded firms in Compustat (based on total assets) at the end of 2001 for a sample period from 2001 to 2010. For each of these firms, we use BoardEx to identify board members and collect historical data on directors' professional employment history, including current and former board and executive roles in firms with total assets of more than \$100 million. We identify family ownership characteristics of our sample firms based on Anderson et al. (2009) and Anderson et al. (2012) and obtain these data from Ronald Anderson's website.⁴ For family firms, we also collect data on CEO type and segregate these into founder CEOs, descendant CEOs (descendant of the founder is CEO),

⁴ The collection criteria for the family firm data are available at www.ronandersonprofessionalpage.net/data-sets.html. We determine family firms using a minimum ownership threshold of 5% of the firm's outstanding equity.

and professionally-managed family firms (in which an outside CEO is running the firm).⁵ We define family-friendly directors as those individuals with prior experience as founders, founders' descendants, hired executives, and/or independent board members in *other* family firms. Our rubric or definition thus captures the subset of independent directors with previous working knowledge of family firms as either an executive, board member and/or concentrated shareholder apart from their current family firm directorship.

Our final sample contains 1,695 firms (680 family firms and 1,217 non-family firms; note that 202 firms change their family firm status during our sample period).⁶ We control for survivorship bias by allowing these firms to exit and reenter the sample. Our sampling procedure provides 13,857 firm-year observations. Across our 1,695 firms, we identify 18,126 unique directors serving in family firms and non-family firms.

2.2 Determinants of Family-Friendly Director Appointments

We use the following specification to examine the determinants of family-friendly director presence on corporate boards:

$$FamilyFriendlyDir_{i,t} = \alpha + \beta_1 * Family Firm Dummy_{i,t} + \beta_x * X_{i,t} + \varepsilon_{i,t}. \quad (1)$$

FamilyFriendlyDir is set to one of three measures to capture family-friendly director presence on corporate boards: *Family-Friendly Director Ratio*, *Family-Friendly Director Number*, or *Family-Friendly Director Dummy*. *Family-Friendly Director Ratio* is a continuous variable defined as the number of family-friendly directors divided by the total number of board members. *Family-Friendly Director Number* is a discrete variable measuring the total number of family-friendly

⁵ Following Anderson and Reeb (2003) and Anderson et al. (2012), we obtain corporate history data from FundingUniverse.com, ReferenceforBusiness.com, Gale Business Resources, and Hoovers, and ascertain family firm founders and descendants, the family's subsequent lineage, and family member involvement with the firm from individual company websites and public filings.

⁶ Of the 680 family firms, the sample comprises 380 firms with a founder CEO, 192 with a descendant CEO, and 425 with a professional, outside CEO. The three groupings sum to more than 680 due to multiple CEO type changes for some family firms during the sample period.

directors on the board. *Family-Friendly Director Dummy* is an indicator variable set equal to one if the firm has at least one family-friendly director and set to zero otherwise. *Family Firm Dummy* is an indicator variable set equal to one if the firm is a family firm, and set to zero otherwise. X denotes a vector of control variables as described below and defined in Table 1.

We include controls for *Firm Size* (log of total assets), *R&D* (research and development expenditures scaled by total assets), *Leverage* (total long-term debt scaled by total assets), *ROA* (income before extraordinary items scaled by assets), *MtB* (the market value of equity divided by the book value of equity), *Volatility* (the standard deviation of monthly stock returns over the prior five years), and *Institutional_Ownership* (the percentage of common stock held by institutional investors at year end). We also include controls for *Board_Size* (log of the total number of directors), *Board_Independence* (the proportion of independent directors on the board at year end), *Director_Tenure* (average number of years that a firm's directors have served on the board), *Firm_Age* (the number of years since the firm first appears in Compustat), and *Analyst_Following* (the log number of analysts following the firm during the year), and the firm's corporate governance environment using the Bebchuk et al. (2009) Governance Index.⁷ We also control for different director expertise characteristics including educational pedigree (*Board_UnivPedigree*) based on the measure developed by Useem and Karabel (1986), professional experience based on the number of C-suite executive positions that board members have held during their careers (*Board_High_Position*), financial experience based on whether the director has previously held a position that requires accounting expertise (*Board_FinExpertise*), and the number of other board seats held by the board members (*Board_Seats*). We control for serial correlation and

⁷ The BCF index ranges from 0 to 6. We do not use the G-Index as in Gompers, Ishii, and Metrick (2003) because the RiskMetrics Governance database significantly adjusts their data collection on the provisions in 2006, creating incomparable measures across two periods. Subsample tests based on the G-Index yield very similar results.

heteroscedasticity using the Huber-White sandwich estimator (clustered at the firm-level) for the standard errors on the coefficient estimates. All specifications also include Fama-French industry and year fixed effects.

2.3 Self-Selection and Matched Sample

Family-friendly director representation possibly suffers from a self-selection bias. In other words, these directors do not randomly choose firms to join but rather consider accepting board positions on firms with certain characteristics. We thus undertake a multi-pronged strategy to mitigate concerns about self-selection sampling and omitted variable bias. First, we examine investors' reaction to the same set of family-friendly directors being appointed to *both* family firms and non-family firms. Second, we use propensity score matched samples to isolate the effect of family ownership structure from the effect of family-friendly directors.⁸ We match firm-year observations with and without family-friendly directors to mitigate the concern that our results are due to underlying factors that result in the selection and hiring of family-friendly directors. Importantly, our matching strategy differs from other papers examining family firms that typically match family firms to non-family firms that have similar characteristics. We match based on family-friendly directors. The dependent variable in the propensity-score matching process logit specification is an indicator variable set to one if the firm has family-friendly directors on their board and set to zero otherwise. We use the following variables as independent variables to match firms: *Family Firm Dummy*, *Firm Size*, *Leverage*, *ROA*, *MtB*, *Volatility*, *Institutional_Ownership*, *Board_Size*, *Board_Independence*, *Firm_Age*, *Analyst_Following*, *Family_Ownership*, *Founder-CEO Dummy*, and *Dual-class Dummy*. To obtain a sample of matched firms, we impose one-to-

⁸ For example, family firm ownership structure has a significant effect on mergers (Caprio et al., 2011; Shim and Okamuro, 2011) and family ownership and family control are related to abnormal short sales prior to earnings announcements (Anderson et al., 2012). If these firm properties are related to the presence of family-friendly directors, then the interpretation of our findings are subject to self-selection biases.

one matching, set a caliper of 0.1%, and a common support range of 0.1 to 0.9 with no replacement. In addition, in our multivariate tests using the matched sample firms, we include a large set of independent variables to measure observable characteristics such as family ownership, family firm CEO type, dual-class share structure, firm size and institutional ownership.

2.4 Financial Misconduct

We examine the link between family-friendly directors and financial misconduct using the following specification:

$$Fin_Misconduct_{i,t} = \alpha + \beta_1 * Family-Friendly\ Director\ Ratio_{i,t} + \beta_2 * Family\ Firm\ Dummy_{i,t} + \beta_3 * (Family\ Firm\ Dummy_{i,t} * Family-Friendly\ Director\ Ratio_{i,t}) + \beta_x * X_{i,t} + \varepsilon_{i,t}. \quad (2)$$

Fin_Misconduct is set to one of three proxies, consistent with prior studies that use multiple proxies to measure financial misconduct (e.g., Bonner et al., 1998; Erickson et al., 2004). Our first proxy is the issuance of an Accounting and Auditing Enforcement Release (*AAER*) against the firm by the Securities and Exchange Commission (SEC) based on data from Audit Analytics. Using the date of the first charge for financial misconduct and the period during which a firm engages in financial misconduct, we create an indicator variable *AAER* set equal to one for the alleged fraud years and set to zero otherwise.⁹ For the second proxy, we use a firm-year measure from Dechow et al. (2011) that captures a firm's propensity to engage in financial misconduct (*FScore*).¹⁰ Our third proxy is the disclosure of weaknesses in internal controls (ICW), following Doyle et al., (2007a, 2007b). We obtain ICW data from Audit Analytics for the 2004-2010 period. We find that over this period, 522 distinct sample firms receive an ICW opinion. There are a number of cases

⁹ It is plausible that our tests do not capture non-fraud firms (i.e., firms that are not subject to AAER action) that actually commit fraud but do not face enforcement actions from the SEC. This can occur because the SEC has limited resources and cannot investigate all possible instances of fraud (Feroz et al., 1991; Dechow et al., 2010). Thus, our sample likely understates incidences of accounting fraud (DeFond and Francis, 2005; Karpoff et al., 2008; Lennox and Li, 2014).

¹⁰ *FScore* is based on the model on page 61 in Dechow et al. (2011).

in which firms receive ICW opinions in multiple years. For these cases, we only retain the first ICW case.

Family-Friendly Director Ratio, *Family Firm Dummy*, and the control variables (X) are as previously defined. In addition to the control variables, noted in Section 2.2, we also account for additional factors that potentially affect firms' decisions to engage in financial misconduct. Dyck et al. (2010) suggest that higher analyst coverage leads to a greater likelihood of corporate misconduct.¹¹ We also control for *Auditor_Tenure* (number of years of current auditor auditing the firm) and whether the auditor is a Big N auditor (*Big4*). Lobo and Zhao (2013) find that longer auditor tenure is associated with lower audit quality. Big N auditors are related to a client's financial reporting quality due to their reputation concerns (DeAngelo, 1981; Francis and Krishnan, 1999).¹² We also control for the distance between the firm's headquarters and the nearest SEC regional office (*Distance_to_SEC*) based on Kedia and Rajgopal (2011).

We control for serial correlation and heteroscedasticity using the Huber-White Sandwich estimator (clustered at the firm-level) for the standard errors on the coefficient estimates. All specifications also include Fama-French industry and year fixed effects. We drop observations that were audited by Arthur Andersen as these firms may face greater scrutiny around the auditor's collapse. The propensity-score matching procedure results in a sample of 3,804 firm-year observations between 2001 and 2010 for the tests for *AAER* or *FScore*. The sample includes 377 family firms and 661 non-family firms. For the tests using *ICW* data from 2004 through 2010, the

¹¹ In robustness tests, we also control for the incentives of insiders using the total inside ownership, calculated as the total stock holdings of the top five executives and board members scaled by total shares outstanding. We obtain insider ownership data from the IRRC, Execucomp, and Capital IQ databases. We do not include this control in our main tests because family firms by definition have high levels of insider ownership. The correlation between insider ownership and the family firm dummy is 0.33. Our results do not alter if we include insider ownership in our tests.

¹² The BCF index ranges from 0 to 6. We do not use the G-Index as in Gompers, Ishii, and Metrick (2003) because the IRRC/RiskMetrics database significantly adjusts their data collection on the provisions in 2006, creating incomparable measures across two periods. Subsample test based on G-Index yields very similar results.

procedure results in a sample of 2,718 firm-year observations with 351 family firms and 637 non-family firms.

3. Descriptive Statistics and Determinants Tests

In Section 3.1, we discuss descriptive statistics. In Section 3.2 we outline the results from multivariate tests of the determinants of family-friendly director appointments.

3.1 Descriptive Statistics

Table 2 presents descriptive statistics. Panel A displays the mean, median, and standard deviation for the variables in the full sample (columns (1)-(3)), as well as mean values for subsamples of family firms and non-family firms in columns (4) and (5) respectively. Roughly 3.1% of all firm-year observations receive an *AAER*; 4.3% of family firm-year observations have an *AAER* relative to 2.3% of non-family firm-year observations and the difference is statistically significant at the 1% level. Next, the predicted *FScore* values are higher for family firms than for non-family firms but the difference is statistically insignificant. Similarly, the proportion of family firms with *ICW* opinions is also higher than that for nonfamily firms but the difference is statistically insignificant. We also find that family firms are significantly smaller than nonfamily firms (\$4.07 billion vs. \$6.37 billion), have significantly greater levels of *Abnormal Short Sales*, have significantly higher ROAs (7.6% vs. 7.1%), use significantly less debt than non-family firms (on average 7.4% less, or \$573 million), have significantly less R&D expenditures than non-family firms (2.1% of total assets for family firms relative to 4.1% of total assets for non-family firms), and are younger, have a smaller investment opportunity set, lower analyst following and holdings by institutional investors, smaller and less independent boards, all relative to non-family firms.

Family firms have significantly weaker governance – as proxied by traditional measures –

than non-family firms. All firms exhibit similar risk profiles as measured by stock return volatility. The average equity ownership for the top five highest paid executives significantly differs between family and non-family firms. Aggregate holdings of the top five executives in a family firm is 10.4% on average, while that for non-family firms, is 2.40% on average.

About 49% of the full sample of firms has at least one family-friendly director serving on the board, but family firms make sufficiently greater use of these directors; the typical family firm has more than one (1.09) family-friendly director on the board, while non-family firms have about 0.69 family-friendly directors on their boards. The difference between family-friendly director representation on family- and non-family firms is significant at the 1% level.

In Table 2 Panel B we present director characteristics for the full sample (columns (1)-(3)). The average director tenure on a board is 8.5 years. Directors are about 60 years old on average, serve on approximately two publicly-traded corporate boards and two private-firm boards, and have a network size (as measured by the total number of social ties) of about 518. Next, approximately 16.7% of the directors have a degree from prominent university and 44.2% have previously held C-suite positions. In addition, 16.8% of directors have prior accounting related expertise, and directors hold nearly two other board seats on average. We segregate the full director sample into family-firm boards (column (4)) and non-family firm boards (column (5)). Notably, directors on family firm boards are slightly older, sit on more boards, and have larger networks (589.5 vs. 459.6) than directors on non-family firm boards. In contrast, family firm directors are less likely to have degrees from prestigious universities, to have had C-suite experience, or executive financial expertise.

Panel C in Table 2 presents summary statistics for family-friendly directors relative to other independent directors (non-family-friendly directors) across family and non-family firm boards.

Directors in family firms serve longer than directors in non-family firms and this holds for both family-friendly and non-family-friendly directors. Next, for family firms, the female director ratio, director social network size, as well as the number of directors with external board seats have smaller values relative to non-family firms, irrespective of whether the directors are family-friendly or non-family-friendly. We find that family-friendly directors serving on family firm boards are older relative to family-friendly directors serving on non-family firm boards. In contrast, non-family-friendly directors serving on family firm boards are younger than non-family-friendly directors on non-family firm boards.

Finally, in Table 2 Panel D, we present the top 10 Fama-French industries represented in our sample after partitioning based on whether the sample firm has at least one family-friendly director on their board. The results indicate that the industry distribution among the groups is quite similar, suggesting that there is a low likelihood that differences in industry membership drive our results.

3.2 Determinants Analyses: Are Family Firms More Likely to Hire Family-friendly Directors?

In Table 3, we examine whether directors with prior family firm experience are more likely to be recruited by family firms relative to non-family firms. The results indicate that for all three measures of family-friendly directors, family firms are statistically more likely to appoint these directors to their boards. This finding is consistent with the univariate evidence in Table 2. In Table 3 column (1), we find that family firms hire 28% more family-friendly directors on average than non-family firms, after controlling for other firm characteristics. We calculate this as the coefficient on *Family Firm Dummy* (0.024) divided by the mean value of *Family-Friendly Director Ratio* (8.6%).

In columns (2) and (3), we find similar results using two alternative measures of family-

friendly director representation on boards. The first alternative measure is the number of family-friendly directors and the second is an indicator variable to capture the presence of at least one family-friendly director on a board. In economic terms, family firms have 26% more family-friendly directors relative to non-family firms and a 95% higher probability of having a family-friendly director than a non-family firm. Overall, these results clearly indicate that family firms have significantly greater presence of independent directors with prior family firm experience.

4. Monitoring Roles of Family-Friendly Directors

In this section, we examine the role of family-friendly directors in promoting and protecting the interests of the firm's shareholders by examining the link between family-friendly directors and proxies for monitoring and advising activities. In Section 4.1, we discuss how investors react to family-friendly director appointments. In Section 4.2, we examine the link between the monitoring role of directors and corporate misconduct across multiple proxies of financial misconduct and governance over internal control systems. In Section 4.3 we consider whether differences in family control has a moderating effect on the link between family directors and financial misconduct and governance over internal control systems.

4.1 Investor Reaction to Family-Friendly Director Appointments

We next investigate investors' reactions to board appointments of family-friendly directors, relative to independent directors without previous family firm involvement. In our analysis, firms fall into family and nonfamily firm categories. Similarly, independent directors fall into family-friendly and non-family-friendly. The segregation across firm type and director type leads to four possible combinations: (i) family firm hiring a family-friendly director, (ii) family firm hiring an independent director, (iii) nonfamily firm hiring a family-friendly director, and (iv) non-family

firms hiring an independent director. To hold firm characteristics constant in our analysis, we use BoardEx to identify director appointments within our sample firms that appoint both a family-friendly and non-family-friendly director to their board within a three-year period. By using a relatively short window, we mitigate concerns that unobserved heterogeneity or reverse causality may influence our results.¹³ In total, 234 firms hire both director types within a three-year window during our sample period. Of these 234 firms, 104 are family firms and 130 are nonfamily firms. The family firms hire 77 family-friendly directors and 52 non-family-friendly directors. The non-family firms hire 81 family-friendly directors and 46 non-family-friendly directors. Note that as firms can appoint more than one family-friendly and/or non-family-friendly director in any given time window, our sample consists of an unequal number of these director appointment. We measure CARs as the daily stock return minus the predicted daily return based on a market model from the director appointment announcement day (day t) through four days after the director announcement day ($t+4$).

We present average CARs for the four possible combinations in Table 4. First, holding firm type constant, we compare capital market consequence between family-friendly and non-family-friendly directors. For the appointment of family-friendly directors to family firms, we observe an average CAR of -0.71%. However, when independent directors receive appointments to family firms, we observe a CAR of 0.08%. The difference of 0.79% is significant at the 5% level, which suggests that investors perceive those directors with prior experience on family firms and those without playing different roles and providing varying levels of monitoring and governance for family firms. As an additional benchmark, we assess market reactions to the

¹³ In untabulated sensitivity analyses we find that our results are qualitatively unchanged if we identify firms that appoint both a family-friendly and non-family-friendly director to their board within a two-year window or a four-year window.

appointment of family-friendly and independent directors to non-family firms. We find no evidence of a statistically significant difference in CARs around the appointment of family-friendly and independent directors to non-family firms.

For the group of family-friendly directors appointed to both family firms and non-family firms (i.e., holding the director constant), we observe that the appointment to a family firm yields a CAR of -0.71%. The same director appointed to a non-family firm results in an average CAR of 0.47%. The difference in CARs of 1.18% is significant at the 5% level, suggesting that investors perceive that family-friendly directors playing different roles in firms with and without family owners.¹⁴ Finally, we also examine CAR announcements for the appointment of non-family-friendly directors to family firms and non-family firms. The CARs for the appointment of these directors is positive on average; for family firms (non-family firms) the average CAR is 0.08% (0.53%). The difference in CARs of 0.45% is significant at the 10% level.

Our findings can be interpreted as an average effect of matching between director type and firm type. In particular, negative market reactions around the appointment of family-friendly directors arguably arise due to investor views about these directors' value-destroying effects in terms of monitoring and/or advising roles.

4.2 Financial Misconduct and Family-Friendly Directors

An important role for directors is to provide monitoring and governance of the firm's financial reporting and internal control processes. We examine whether family firms place family-friendly directors on the board because of their unique knowledge in family owner oversight or alternatively, due to lax monitoring skills and/or acquiescence to family owners.

¹⁴ Further tests show that the negative stock reaction around family-friendly director appointments on family boards is more pronounced in the most opaque family firms, suggesting that the information environment exacerbates family-friendly directors to engage in lax monitoring. We measure firm transparency or opaqueness following Anderson et al. (2009).

Panel A in Table 5 displays multivariate regressions results from tests for our first measures of financial misconduct: *AAER* and *FScore*. Columns (1) – (3) (columns (4) – (6)) present results from regressions using *AAER* (*FScore*) as the dependent variable. The coefficient estimates in columns (1) the standalone *Family-friendly Director Ratio* is positive and significant (z -statistics > 2.45), indicating a positive link between the proportion of these directors on the board and the likelihood that the firm receives an AAER. In economic terms for column (1), a one standard deviation increase in the *Family-friendly Director Ratio* is associated with a 13.6% greater chance of receiving an AAER.

The findings for the standalone *Family Firm Dummy* indicate that, consistent with the literature, family firms are on average more likely to face SEC enforcement actions for financial misconduct relative to non-family firms (Anderson et al., 2016). The results in columns (1) - (3), show that family firms suffer from significantly more incidences of financial misconduct. In economic terms, our results indicate that family firms have a 34.3% - 97.2% higher probability of facing enforcement for financial reporting misconduct relative to non-family firms.

The mix of family firms with family-friendly directors appears to be a particularly poor combination. Notably, the results in column (2) in Table 5 indicate that family firms suffer from even greater incidences of financial misconduct as family-friendly director representation on their boards increases. The interaction term between the *Family Firm Dummy* and the *Family-friendly Director Ratio* captures the incremental effect of these directors on corporate misconduct in family firms. A one standard deviation increase in the family-friendly director ratio, holding all else constant, results in an incremental 7.6% increase in the probability that a family firm receives an AAER for financial misconduct.

Audit committees play a critical role in ensuring the financial reporting integrity of firms.

In column (3) in Panel A of Table 5, we present results from tests of the relation between financial misconduct and family-friendly directors who specifically serve on the audit committee. The results again indicate that family firms engage in greater financial misconduct than non-family firms. Family firms suffer from significantly more incidences of detected fraud (coeff. = 0.972; z-statistic = 1.80). The coefficient for *Family-friendly Director Ratio (AC)* has a positive and significant coefficient estimate (coeff. = 0.652; z-statistic = 2.22), suggesting that as the proportion of family-friendly directors on the audit committee increases, the greater the probability that the firm will face enforcement for financial misconduct. Supporting our earlier results on the full board, we find that when family-friendly directors are on the audit committee of family firm boards, they are associated with a greater prevalence of financial misconduct than other director types. The interaction term between the family firm dummy and audit-committee family-friendly director representation (*Family-friendly Director Ratio (NonAC) * Family Firm Dummy*) exhibits a positive and significant coefficient, suggesting that family firms suffer from more detected fraud than non-family firms when these directors serve on the audit committee.

The *NonAC Family-friendly Director Ratio* variable captures the marginal effect of the non-audit committee family-friendly directors relative to the effect from the audit committee. The coefficient is positive and statistically insignificant (z-statistic = 1.22), which suggests that family-friendly directors on the audit committee, rather than family-friendly directors on the overall board, primarily explain the relation between family-friendly directors with financial misconduct. The interaction term between *Family Firm Dummy* and non-audit committee family-friendly director representation on the audit committee also bears a positive but statistically insignificantly coefficient estimate, which suggests family firms and non-family firms do not experience different levels of detected financial misconduct when these directors serve functions other than serving on

the audit committee.

In columns (4) – (6) of Table 5, we present results from tests in which the dependent variable is *FScore*. The overall evidence is largely consistent with the findings in columns (1) – (3). We find that family firms are, on average, associated with a higher propensity to engage in financial misconduct relative to non-family firms, although the difference is statistically insignificant (t -statistic < 1.43). We also find that the standalone *Family-friendly Director Ratio* is significant and positive in columns (4) – (5), confirming the results in columns (1) – (2). Finally, in column (6), we find that the interaction term between the family firm dummy and audit-committee family-friendly director representation variables exhibits a positive and significant coefficient estimate, suggesting that family firms have a higher probability of future financial misconduct than non-family firms when family-friendly directors serve on the audit committee. A one standard deviation increase in the audit committee family-friendly director ratio is associated with a 10% higher *FScore*. In addition, we find no evidence that *Family-friendly Director Ratio (NonAC)* is associated with *FScore*. In untabulated analyses, we replicate our tests after substituting the *Family-friendly Director Ratio* with *Family-friendly Director Number* or *Family-friendly Director Dummy*. The results reflect those in Table 5 and provide qualitatively similar inferences.

In Panel B, we present tests of the link between family-friendly directors and monitoring over a firm's control systems. We proxy for the quality of monitoring using the disclosure of a material weakness in internal controls. The overall evidence indicates that the family-friendly director ratio on a board or audit committee is positively associated with the disclosure of weaknesses in internal controls. In column (1), we show that family firms on average have a statistically higher incidence of internal control weaknesses than non-family firms at the 10% level.

In columns (2) and (3), the interaction term between the family firm dummy and the family-friendly director ratio is positive and statistically significant. This finding suggests that the positive relation between family-friendly director presence and the disclosure of material weakness in internal controls is more pronounced in family firms than in non-family firms. Furthermore, the results in column (3) indicate that the effect appears to be driven by family-friendly director representation on the audit committee. The results in column (3) suggest a one standard deviation increase in the family-friendly director ratio on family firm audit committees is associated with a 10% higher probability that a firm discloses a material weakness in internal controls. Findings from *F*-tests indicate that the combined family firm effect and family-friendly director effect is statistically significant in all specifications.

Finally, the control variables across the various specifications in Panels A and B in Table 5 yield coefficient estimates consistent with prior research.¹⁵ Overall, the analysis of family-friendly directors serving on the audit committee provides evidence largely supportive of that found for the full board across all the specifications in Table 5. Family-friendly directors appear to be poor monitors of firms' financial reporting and control systems and in deterring insiders from engaging in corporate misconduct and their monitoring abilities appear to be particularly poor in family firms.

4.3 Family Characteristics and the Role of Family-Friendly Directors

Family owners can further influence both the firm's incentives to engage in corporate misconduct and its information environment by maintaining active control of the CEO position. (Anderson and Reeb, 2003; Wang, 2006; Villalonga and Amit, 2006; Bertrand et al., 2008). For instance, a family member serving as CEO can provide non-officer/non-director family members

¹⁵ Multicollinearity does not appear to significantly affect our interpretation of coefficient estimates; a VIF test indicates that the mean variance inflation factor (VIF) is 1.60.

or other outsiders with access to private information about firm activities.

In Table 6, we focus on the link between family director ratio on family firm boards and governance over financial reporting and control systems. In Panel A and Panel B, we examine whether active family control versus passive family control affects the role of family-friendly directors (for family firms). Active family control denotes either the founder or a founder's descendant serving in the CEO position. Passive family control constitutes an outside professional manager serving as CEO in a family firm. In Panel C, we examine whether monitoring by family-friendly directors varies across between high and low family ownership groups. We classify family firms in which the family owns more than (less than) the sample median (i.e., 20%) of the outstanding stock as *High Ownership (Low Ownership)* firms. In Panel D, we examine whether a dual-class stock system (*Dual-Class*) in family firms affects the probability of corporate misconduct, relative to single-class stock (*Single-Class*) family firms. All the financial misconduct specifications (i.e., tests in which the dependent variable is either *AAER* or *FScore*) use the ratio of family-friendly directors serving on the audit committee. While all specifications include a full set of control variables as described in the primary analyses, we have not tabulated the coefficients on these variables in the interests of brevity.

The results in Panels A and B indicate that the positive relation between family-friendly directors and financial misconduct or informed trading appears to be concentrated in firms where founders and descendants serve as CEO. For instance, in column 1 for family firms in which the CEO is the founder, a one standard deviation increase in the family-friendly director ratio is associated with a 22% increase in the probability of an AAER. In contrast, for professional managers serving as CEOs in family firms, the results indicate no significant relation between family-friendly directors and any measure of corporate misconduct.

In Panel C, we find that the coefficient on *Family Director Ratio* is statistically significant for the partition of family firms in both the High Family Ownership and Low Family Ownership groups, but the effect is approximately twice as large for the High Family Ownership firms. In economic terms, a one standard deviation increase in the family-friendly director ratio is associated with a 33.5% (14.9%) increase in the probability that a High (Low) Ownership family firm receives an AAER. This finding also holds when the dependent variable is set to capture predicted misconduct (column 2) or *Abnormal Short Sales* (column 3).

Finally, in Panel D, tests for firms with either dual-class or single-class stock indicate a positive relation between the family-friendly director ratio and financial misconduct, but the dual-class specification has an economic effect that is more than twice as large as that for the single class specification. For a one standard deviation increase in family-friendly director ratio, *Dual-Class* firms (*Single-Class* firms) have a 69% (22.3%) higher probability of receiving an AAER. We find a similar pattern from the results of tests examining the effects of family-friendly director presence on informed trading using *Abnormal Short Sales* (in columns 3 and 6 for Dual-class and Single-class firms respectively). The effect of family-friendly directors on informed trading is roughly three times larger in high ownership family firms than in low ownership family firms. Overall, the results suggest that family-friendly directors do not appear to deter financial misconduct when family members actively manage the firm.

4.4. Reverse Causality Concerns

A possible explanation for our results is that family-friendly directors are recruited in order to address weak monitoring and control systems within the firm. Recent evidence suggests that firms engage in multi-pronged efforts to repair their reputations following accounting restatements (Chakravarthy et al., 2014). In other words, it is possible that our findings suffer from reverse

causality. Evidence from multiple sets of tests suggest this is unlikely to be the case because the results from the tests examining investors' reactions to the appointment of family-friendly directors and the future board opportunities of these directors (discussed below) cumulatively support the argument of lax oversight and monitoring rather than these directors being recruited after corporate misconduct (turnaround specialists). To further address reverse causality concerns, we undertake additional multivariate tests to examine whether family-friendly directors receive board seats prior to corporate misconduct.

Results from an untabulated logit specification in which we examine family-friendly director representation on the board or audit committee in one or two years prior to corporate misconduct (i.e., $t-1$ or $t-2$) indicate that family-friendly directors held their board or audit committee seats before the revelation of financial misconduct as measured using *AAER*. We find similar results for tests using the likelihood of fraud (*FScore*) and the issuance of an *ICW* as the proxies for governance over financial reporting. Overall, the results indicate that on average, family-friendly director presence on boards or audit committees predates the incidences of corporate misconduct.

5. Additional Evidence on the Monitoring Role of Family Friendly Directors

Our results from family-friendly board appointments coupled with the *AAER*, *FScore*, and *ICW* analysis point towards these directors being lax monitors of family firms' financial reporting and control systems. We examine whether directors lax monitoring is limited to financial reporting systems by examining an alternative metric for corporate misconduct, informed trading. A positive relation between the ratio of directors that are family-friendly directors and informed trading in family-friendly firms supports the argument that family-friendly directors are systematically poor

monitors of family owners.

We examine the link between family-friendly directors and corporate misconduct using the following OLS specification:

$$\begin{aligned} \text{Abnormal Short Sales}_{i,t} = & \alpha + \beta_1 * \text{Earnings_Shock}_{i,t} + \beta_2 * \text{Family-Friendly Director Ratio}_{i,t} \\ & + \beta_3 * (\text{Earnings_Shock}_{i,t} * \text{Family-Friendly Director Ratio}_{i,t}) + \beta_X * X_{i,t} + \varepsilon_{i,t}. \end{aligned} \quad (3)$$

We estimate equation (3) separately for family and non-family firms to ease interpretation arising from three-way interaction terms (family firm, family-friendly director, and earnings shock). In an additional test discussed below, we find qualitatively similar results from a specification using the three-way interaction term.

We use *Abnormal Short Sales* as a proxy for informed trading. We measure abnormal short sales over the 30-day window prior to a negative quarterly earnings announcement (e.g., Anderson et al., 2012). The measure is computed as [(firm *i*'s average daily short sales in the 30-day window prior to a quarterly earnings announcement (day *t*-30 to *t*-1) divided by average daily short sales for the year outside of all earnings announcement windows) – 1]. Daily short sales are daily short sale volume divided by daily stock trading volume.

*Earnings_Shock*_{*i,t*} is the unexpected quarterly earnings in quarter *q* for firm *i* measured as the residual term from the following regression:

$$\text{EPS}_{i,q} = \alpha + \beta_1 * \text{EPS}_{i,q-1} + \beta_2 * \text{EPS}_{i,q-4} + \beta_3 * \text{EPS}_{i,q-8} + \varepsilon_{i,t}, \quad (4)$$

where *EPS*_{*i,q*} is reported earnings per share in announcement quarter *q*, and historical EPS is reported earnings per share in the prior quarter (*q*-1), four quarters ago (*q*-4), and eight quarters ago (*q*-8) using quarterly earnings announcements from Compustat.

Family-Friendly Director Ratio and the control variables are as previously defined. The sample for the empirical test is determined using a propensity score matching process using the procedure in section 2.2; this results in a sample of 292 firm-year observations with 165 unique

family firms and 583 firm-quarter observations with 332 unique non-family firms. To account for serial correlation and heteroscedasticity, the standard errors of the coefficient estimates are adjusted using the Huber-White Sandwich estimator (clustered at the firm-level). All specifications include quarter and industry fixed effects.

Table 7 Panel A presents the empirical results from tests of Equation (3). The dependent variable in all specifications is *Abnormal Short Sales* for the 30-day window prior to a firm's negative earnings announcement shock. We highlight three notable points. First, we find that the coefficient for the *Shock* variable is positive and statistically significant at the 10% level in columns (1) and (2) for family and non-family firms respectively, indicating that all firms exhibit greater abnormal short selling prior to negative earnings shocks. Second, the coefficients on *Family-friendly Director Ratio* across columns (1) and (2) indicate that the link between *Abnormal Short Sales* prior to negative earnings shocks and family-friendly director representation on the board is positive and statistically significant only for the family firm sample.¹⁶ For family firms, a one standard deviation increase in the *Family-friendly Director Ratio* is associated with increases in *Abnormal Short Sales* of 14.9%.¹⁷

Third, the coefficient on the interaction term *Shock * Family-friendly Director Ratio* captures the incremental effect of the family-friendly director ratio on *Abnormal Short Sales* for a given shock. The results suggest that abnormal short sales are increasing in the *Family-friendly Director Ratio* only for family firms, holding the *Shock* variable constant. For instance, a \$0.10 increase in the magnitude of an earnings shock results in a 10.2% increase in *Abnormal Short Sales* for a family firm and a 3.5% increase for a non-family firm. In column (3), we present the results

¹⁶A Chow test indicates that the family-friendly director effect is significantly larger in family firms than in non-family firms.

¹⁷ We calculate this increase as: $0.111 * 0.129 / 0.098 = 14.9\%$.

of combining the subsamples used for the multivariate results in columns (1) and (2). Although economic interpretation of a three-way interaction term is problematic, the overall inferences are similar to those for columns (1) and (2).¹⁸ Finally, the control variables in all specifications yield coefficient estimates consistent with prior research.

In Panels B, C, and D, we focus on the link between family director ratio specifically on family firm boards and informed trading behavior. The results in B indicate that the positive relation between family-friendly directors and informed trading appears to be concentrated in firms where founders and descendants serve as CEO. In Panel C, we find that the coefficient on *Family Director Ratio* is positive and statistically significant for the partition of family firms in both the High Family Ownership and Low Family Ownership groups, but the effect is approximately twice as large for the High Family Ownership firms. In Panel D, we examine and find that the effects of family directors is pronounced in firms with a dual-class stock system (*Dual-Class*), relative to single-class stock (*Single-Class*) family firms. Overall, the results support the notion that that family-friendly directors in family firms also exhibit relatively poor monitoring skills with respect to informed trading.

6. Implications of Family-Firm Board Appointments for Directors

In this section, we consider the labor market consequences for directors who are appointed to and accept board seats on family firms and non-family firms. In particular, we examine whether current period board appointments to a family firm or a non-family firm affects *future* board appointments. Table 8 presents the results for director appointments to a family firm or non-family firm board in the current year and number of subsequent directorships received in the following

¹⁸ In untabulated analyses, we replace *Family-Friendly Director Ratio* with *Family-friendly Director Number* or *Family-Friendly Director Dummy*. The results are similar to the tabulated findings.

two years. The results indicate that family-friendly directors (non-family-friendly directors) appointed to a family board in the current year increase their future family firm directorships by 0.60 (0.27) seats, on average, over the subsequent two years. The difference of 0.33 is significant at the 1% level. In contrast, family-friendly directors receive significantly fewer non-family board seats in the following two years relative to non-family-friendly directors (0.80 vs. 0.94) over the same period. We find similar results when family-friendly and non-family-friendly directors receive non-family firm directorships in the current year. Overall, the results provide insights into how director appointments affect the demand for director services, and the notion that family firms gravitate towards particular types of directors.

7. Conclusion

Corporate directors play an important role in monitoring and ratifying firms' financial reporting and control systems. We investigate whether equity ownership structure influences a firm's decision in choosing the types of skills and expertise that directors bring to the boardroom by examining a large sample of widely-held and family-controlled firms. The unique issues involved in monitoring and advising these firms, relative to widely held firms, suggests the existence of a specialized labor market for directors in family-controlled firms. We term independent directors with prior experience working in *other* family firms as family-friendly directors.

We find that family firms hire more family-friendly directors relative to widely held firms. Market-based tests that rely on within-firm comparisons indicate that for family firms, investors view the appointments of these directors as net value decreasing versus hiring independent directors without family firm experience.

Directors hold a fiduciary responsible to monitor and advise senior management to the benefit of the firm's shareholders. Consequently, we investigate the relation between family-friendly directors and proxies of corporate misconduct. We document a positive relation between the proportion of family-friendly directors on family firms and both predicted and observed financial misconduct, the issuance of internal control weakness reports, and informed trading. Interestingly, these same directors appear to have relatively less impact on such outcomes in non-family firms, passively managed, or low family ownership family firms. Overall, our evidence suggests that family firms tend to hire "reliable" directors who help protect family interests.

Finally, we examine the effects of family firm appointments from the point of view of the market for independent directors. We find that after obtaining a family firm directorship, family-friendly directors appear more (less) likely to gain additional family firm (non-family) directorships relative to non-family-friendly directors.

Our study has implications for researchers and regulators. In addition, our study is likely to be of interest to auditors who have incentives to prevent fraud to avoid litigation and reputational costs, and also to capital market participants who are better able to comprehend the implications of family-friendly director appointments. Future research opportunities include examining whether these family-friendly directors play a valuable advisory role for family firms, in spite of their poor monitoring.

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Table 1 Variable Definitions

| Dependent Variables | |
|---|---|
| <i>AAER</i> | An indicator variable set to one if the firm has received an AAER for financial misconduct in that year and set to zero otherwise. |
| <i>FScore</i> | A firm-year continuous variable measuring a firm's propensity to engage in financial misconduct based on Dechow et al. (2011). |
| <i>ICW</i> | An indicator variable set to one if a firm's auditor issues an internal control weakness opinion for the firm in that year, and set to zero otherwise |
| <i>Abnormal Short Sales</i> | [Daily average short sales during the (t-30 to t) window prior to a firm's quarterly earnings announcement and divided by daily average short sales during the non-window days] minus 1. |
| <i>CAR</i> | The cumulative abnormal return from day t to t+4 where t is the date of the family-friendly director appointment announcement. The expected return is based on a market model for the 365 calendar days prior to the announcement date. |
| Primary Independent Variables | |
| <i>Family-friendly Director</i> | A director who has prior work experience in a family firm either as an owner, an executive, or a director. |
| <i>Family-friendly Director Ratio</i> | A firm-year continuous variable measuring the number of family-friendly directors divided by the total number of board members. |
| <i>Family-friendly Director Number</i> | A firm-year variable measuring the number of family-friendly directors on the board. |
| <i>Family-friendly Director Dummy</i> | An indicator variable set to one if the firm has at least one family-friendly director and set to zero otherwise. |
| <i>Family-friendly Director Ratio (AC)</i> | A firm-year continuous variable measuring the number of family-friendly directors who serve on the audit committee divided by the total number of board members who serve on the audit committee. |
| <i>Family-friendly Director Ratio (NonAC)</i> | A firm-year continuous variable measuring the number of family-friendly directors who do not serve on the audit committee divided by the total number of board members who do not serve on the audit committee. |
| Other Variables | |
| <i>Age</i> | The average director age in years. |
| <i>Analyst_following</i> | Log of the total number of analysts that issue at least one earning per share forecast during the year. |
| <i>Auditor_Tenure</i> | Log of the number of years that the firm has used the current auditor. |
| <i>Big4</i> | An indicator variable set to one if the firm's auditor is one of the Big 4 audit firms (KPMG, PricewaterhouseCoopers, Deloitte, Ernst & Young) and set to zero otherwise. |
| <i>BlockDum</i> | An indicator variable set to one if the acquirer has at least one institutional investor with a 5% common equity stake during the year and set to zero otherwise. |
| <i>Board_Independence</i> | The number of independent directors divided by the total number of directors, both measured at year end. |

| | |
|--------------------------------|---|
| <i>Board_Size</i> | The log of the total number of directors on the board at year end. |
| <i>Board_FinExpertise</i> | Percentage of board members that are considered "experts", where experts are those who currently hold or have held the position of CFO, CPA/CFA, controller, comptroller, treasurer or any other position that are financial reporting related. |
| <i>Board_Seats</i> | Number of external (additional) board seats for board member. |
| <i>Board_UnivPedigree</i> | The proportion of board members that have obtained degrees from prominent undergraduate or MBA programs based on the Useem and Karabel (1986) measure. |
| <i>Board_High_Position</i> | The average number of high-level positions (defined as higher than vice president) that the board members have obtained during their career. |
| <i>Company_Boards</i> | The average number of external publicly traded company boards held by a director during that year. |
| <i>Descendent_CEO</i> | An indicator variable set to one if a family descendant is the CEO and set to zero otherwise. |
| <i>Director_Tenure</i> | Firm year measure of the average number of years on the board by all board members. |
| <i>Distance_to_SEC</i> | The log of the number of miles between the firm's headquarters and the nearest SEC regional office. |
| <i>Dual-class Dummy</i> | An indicator variable for firms with dual-class stock system. |
| <i>Earnings_Shock</i> | Unexpected quarterly earnings in quarter q for firm i measured as the residual term from the following regression: $EPS_{i,q} = \alpha + \beta_1 * EPS_{i,q-1} + \beta_2 * EPS_{i,q-4} + \beta_3 * EPS_{i,q-8} + \varepsilon_{i,t}$ (4) where $EPS_{i,q}$ is reported earnings per share in announcement quarter q , and historical EPS is reported earnings per share in the prior quarter ($q-1$), four quarters ago ($q-4$), and eight quarters ago ($q-8$) using quarterly earnings announcements from Compustat. |
| <i>Fam_Own</i> | The proportion of common equity owned by the family members. |
| <i>Family Firm Dummy</i> | An indicator variable set to one if the firm is a family firm, and set to zero otherwise. |
| <i>Firm_Age</i> | The logged number of years since the firm first appears in the Compustat database. |
| <i>Firm Size</i> | Log of total assets. |
| <i>Female</i> | An indicator variable set to one if the director is female, and set to zero otherwise. |
| <i>Founder_CEO</i> | An indicator variable set to one if the family founder is the CEO, and set to zero otherwise. |
| <i>Governance_Index</i> | The Governance Index measure from Gompers et al. (2003). |
| <i>Institutional_Ownership</i> | The percentage of total stock held by institutional investors at year end. |
| <i>Lag_ROA</i> | ROA in year $t-1$. |
| <i>Leverage</i> | Total long-term debt divided by total assets. |
| <i>MtB</i> | The market value of common equity divided by book value of common equity. |
| <i>Network_Size</i> | A director's number of network connections at year-end. A network connection is defined as a historical social tie with another director. |

| | |
|-----------------------|---|
| <i>Outsider_CEO</i> | <i>An indicator variable set to one if the family firm CEO is a not a family member, and set to zero otherwise.</i> |
| <i>Private_Boards</i> | The average number of private company board seats held by the director. |
| <i>R&D</i> | R&D expenditure divided by total assets. |
| <i>ROA</i> | Income before extraordinary items divided by total assets. |
| <i>Volatility</i> | Standard deviation of monthly stock return over the prior five years. |

Table 2 Summary Statistics for Full Sample

In this table, we present summary data for the sample used in empirical tests. Panel A presents sample mean and median descriptive data for all firms and by family firm or non-family firm classification. Panel B presents director characteristics for the full sample of directors and for partitions of directors based on service across family firm or non-family firms.

Panel A: Firm Characteristics by Firm Type

| | Mean | Median | Std. Dev. | Family Firms | Non-family Firms | T-test |
|--|--------|--------|-----------|--------------|------------------|----------|
| <i>AAER</i> | 0.031 | 0.000 | 0.172 | 0.043 | 0.023 | 3.62*** |
| <i>FScore</i> | 1.018 | 0.948 | 0.520 | 1.027 | 1.010 | 1.17 |
| <i>ICW</i> | 0.056 | 0.000 | 0.231 | 0.059 | 0.055 | 1.46 |
| <i>Abnormal Short Sales</i> | 0.089 | 0.050 | 0.331 | 0.098 | 0.080 | 2.15** |
| <i>Firm size (\$million)</i> | 5,587 | 1,188 | 24,603 | 4,070 | 6,371 | 4.95*** |
| <i>Leverage</i> | 0.203 | 0.175 | 0.191 | 0.188 | 0.210 | 6.63*** |
| <i>ROA</i> | 0.073 | 0.081 | 0.105 | 0.076 | 0.071 | 2.85*** |
| <i>Volatility</i> | 0.030 | 0.026 | 0.018 | 0.030 | 0.030 | 0.60 |
| <i>Institutional_Ownership</i> | 0.743 | 0.792 | 0.210 | 0.647 | 0.792 | 38.77*** |
| <i>R&D</i> | 0.034 | 0.001 | 0.068 | 0.021 | 0.041 | 16.15*** |
| <i>MtB</i> | 2.710 | 2.107 | 3.308 | 2.411 | 2.865 | 7.22*** |
| <i>Firm_Age (in years)</i> | 48.620 | 37.000 | 36.260 | 44.726 | 50.589 | 9.01*** |
| <i>Analyst_Following</i> | 12.423 | 10.000 | 8.320 | 10.605 | 13.276 | 16.22*** |
| <i>Governance_Index</i> | 2.143 | 2.000 | 1.446 | 1.813 | 2.276 | 14.03*** |
| <i>Insider_Ownership</i> | 0.051 | 0.029 | 0.118 | 0.104 | 0.024 | 40.64*** |
| <i>Board_Size</i> | 9.082 | 9.000 | 2.396 | 8.808 | 9.220 | 9.59*** |
| <i>Board_Independence</i> | 0.727 | 0.714 | 0.160 | 0.654 | 0.763 | 40.50*** |
| <i>Distance_to_SEC</i> | 7.028 | 7.366 | 1.456 | 6.950 | 7.067 | 4.10*** |
| <i>Family-friendly director ratio</i> | 0.086 | 0.000 | 0.113 | 0.115 | 0.071 | 23.00*** |
| <i>Family-friendly director number</i> | 0.820 | 0.000 | 1.147 | 1.088 | 0.685 | 19.85*** |
| <i>Family-friendly director dummy</i> | 0.487 | 0.000 | 0.500 | 0.565 | 0.448 | 13.07*** |
| <i>Family-friendly director ratio (AC)</i> | 0.558 | 0.600 | 0.316 | 0.758 | 0.457 | 59.33*** |
| <i>Family-friendly director ratio (Non-AC)</i> | 0.353 | 0.310 | 0.244 | 0.461 | 0.299 | 39.50*** |

Panel B: Director Characteristics by Firm Type

| | Mean | Median | Std. Dev. | Family Firms | Non-family Firms | T-test |
|---------------------------|---------|---------|-----------|--------------|------------------|----------|
| <i>Tenure</i> | 8.518 | 6.300 | 7.981 | 8.489 | 8.544 | 1.27 |
| <i>Age</i> | 59.755 | 60.000 | 9.007 | 60.919 | 58.824 | 40.36** |
| <i>Female (%)</i> | 0.104 | 0.000 | 0.305 | 0.106 | 0.103 | 1.18 |
| <i>Company Boards (#)</i> | 2.018 | 2.000 | 1.400 | 2.264 | 1.822 | 55.42*** |
| <i>Private Boards (#)</i> | 2.116 | 1.000 | 2.048 | 2.250 | 1.984 | 15.02*** |
| <i>Network_Size</i> | 517.896 | 356.000 | 536.351 | 589.502 | 459.587 | 43.34*** |
| <i>High Education</i> | 0.167 | 0.000 | 0.373 | 0.150 | 0.174 | 17.27*** |
| <i>High Position</i> | 0.442 | 0.000 | 0.497 | 0.417 | 0.452 | 19.03*** |
| <i>Expertise</i> | 0.168 | 0.000 | 0.374 | 0.156 | 0.173 | 12.35*** |
| <i>Seats</i> | 1.808 | 1.000 | 2.328 | 1.577 | 1.898 | 37.55*** |

Panel C: Family and Non-family-friendly Directors Characteristics across Family and Nonfamily Firms

| | Family-friendly Directors | | | Nonfamily-friendly Directors | | |
|---------------------------|---------------------------|-----------------|----------------|------------------------------|-----------------|----------------|
| | Family Firm | Non-family Firm | <i>T</i> -test | Family Firm | Non-family Firm | <i>T</i> -test |
| <i>Tenure</i> | 9.738 | 7.497 | 33.51*** | 11.477 | 7.647 | 53.92*** |
| <i>Age</i> | 61.296 | 60.620 | 8.61*** | 57.662 | 59.178 | 19.25*** |
| <i>Female (%)</i> | 0.093 | 0.115 | 8.26*** | 0.099 | 0.104 | 1.94* |
| <i>Company Boards (#)</i> | 1.975 | 2.492 | 40.82*** | 1.500 | 1.920 | 36.73*** |
| <i>Private Boards (#)</i> | 2.155 | 2.320 | 6.57*** | 1.846 | 2.021 | 6.44*** |
| <i>Network Size</i> | 479.307 | 676.530 | 40.36*** | 333.347 | 497.922 | 38.03*** |
| <i>High Education</i> | 0.116 | 0.163 | 21.28*** | 0.183 | 0.177 | 3.23*** |
| <i>High Position</i> | 0.408 | 0.440 | 10.22*** | 0.426 | 0.454 | 11.92*** |
| <i>Expertise</i> | 0.151 | 0.178 | 11.53*** | 0.160 | 0.171 | 6.24*** |
| <i>Seats</i> | 2.071 | 3.180 | 64.95*** | 1.104 | 1.598 | 49.43*** |

Panel D: Top Industry Representations By Firm Type

| Among firms with Family-friendly Directors (%) | | Among firms without Family-friendly Directors (%) | |
|--|--------------|---|--------------|
| Business Services | 12.41 | Business Services | 10.99 |
| Retail | 8.74 | Electronic Equipment | 9.16 |
| Electronic Equipment | 6.72 | Retail | 8.63 |
| Machinery | 5.79 | Petroleum and Natural Gas | 5.13 |
| Computers | 5.54 | Machinery | 4.92 |
| Chemicals | 4.20 | Pharmaceutical Products | 4.80 |
| Wholesale | 4.20 | Wholesale | 4.56 |
| Communication | 4.11 | Transportation | 3.74 |
| Pharmaceutical Products | 3.79 | Chemicals | 2.93 |
| Petroleum and Natural Gas | 3.45 | Measuring and Control Equipment | 2.73 |
| <i>Total</i> | <i>58.95</i> | <i>Total</i> | <i>57.59</i> |

Table 3 Determinants of Family-Friendly Directors

This table presents results of the determinants of the ratio, number, and presence of family-friendly directors on boards of directors. All variables are defined in Table 1. We use Huber-White Sandwich estimators clustered at the firm level. All specifications include industry and year fixed effects. Statistical significant at 10%, 5%, and 1% is denoted by *, **, and ***, respectively.

| Dependent variable: | (1) | (2) | (3) |
|--------------------------------|--------------------------------|---------------------------------|--------------------------------|
| | Family-Friendly Director Ratio | Family-Friendly Director Number | Family-Friendly Director Dummy |
| <i>Constant</i> | -0.110*** (-2.70) | -4.626*** (-5.23) | - (-4.39) |
| <i>Family Firm Dummy</i> | 0.029*** (4.49) | 0.610*** (4.85) | 0.951*** (6.07) |
| <i>Firm Size</i> | 0.000 (0.16) | 0.024 (0.53) | 0.114* (1.86) |
| <i>R&D</i> | 0.027 (0.53) | 0.687 (0.78) | 1.005 (0.82) |
| <i>Leverage</i> | 0.005 (0.45) | 0.211 (1.20) | 0.573* (1.83) |
| <i>ROA</i> | -0.031** (-2.12) | -0.119 (-0.47) | -0.266 (-0.46) |
| <i>MtB</i> | 0.000 (0.30) | 0.006 (0.79) | 0.011 (0.83) |
| <i>Volatility</i> | -0.002 (-0.12) | -0.115 (-0.47) | -0.096 (-0.17) |
| <i>Institutional_Ownership</i> | -0.016* (-1.83) | -0.262 (-1.53) | -0.192 (-0.60) |
| <i>Board_Size</i> | 0.010* (1.67) | 0.983*** (7.36) | 1.195*** (4.76) |
| <i>Board_Independence</i> | 0.027 (1.29) | 0.355 (0.81) | 1.009 (1.28) |
| <i>Board_FinExpertise</i> | 0.029 (1.33) | 0.333 (0.73) | 1.516* (1.77) |
| <i>Board_Seats</i> | 0.011*** (7.30) | 0.217*** (7.08) | 0.315*** (6.45) |
| <i>Board_UnivPedigree</i> | 0.057** (2.50) | 1.637*** (3.34) | 1.106** (2.05) |
| <i>Board_High_Position</i> | -0.017 (-0.66) | -0.801* (-1.69) | -1.630 (-1.63) |
| <i>Director_Tenure</i> | -0.002*** (-2.68) | -0.030** (-2.08) | -0.037* (-1.75) |
| <i>Firm_Age</i> | 0.001* (1.75) | 0.024* (1.77) | -0.014 (-0.82) |
| <i>Analyst_Following</i> | 0.005* (1.79) | 0.039 (0.70) | 0.076 (0.71) |
| <i>Governance_Index</i> | -0.001 (-1.41) | -0.007 (-0.31) | -0.045 (-1.31) |

| | | | |
|--------------------------------|--------|--------|--------|
| Industry & Year Fixed Effects? | Yes | Yes | Yes |
| Observations | 10,092 | 10,092 | 10,092 |
| Adjusted R ² | 0.110 | 0.159 | - |
| Pseudo R ² | - | - | 0.121 |

Table 4 Market Reaction to Board of Director Appointment Announcements

This table presents the market reactions to the appointment announcement of family-friendly director and non-family-friendly directors. Market reaction is measured as the cumulative abnormal return (CAR) from day t to day $t+4$, where t is the date of the appointment announcement. CAR is the raw daily return minus market return. We restrict the appointments of directors by family and non-family firms within a three-year window of each for the same director. Statistical significant at 10%, 5%, and 1% is denoted by *, **, and ***, respectively.

| | <i>Family-friendly Director</i> | <i>Nonfamily-friendly Director</i> | <i>T-test</i> |
|-----------------------|---------------------------------|------------------------------------|---------------|
| <i>Family Firm</i> | -0.71% | 0.08% | 2.30** |
| <i>Nonfamily Firm</i> | 0.47% | 0.53% | 0.68 |
| <i>T-test</i> | 2.39** | 1.75* | |

Table 5 Family-Friendly Directors and Corporate Misconduct

This table presents logistic regression and OLS regression results regressing proxies for corporate misconduct and monitoring of internal control on the family firm director ratio on boards and audit committees. In Panel A, we present results when the dependent variable is a measure of actual or expected financial misconduct. In Panel B, we present results when the dependent variable is the disclosure of an internal control weakness. All variables are defined in Table 1. We use Huber-White Sandwich estimators clustered at firm level in OLS regressions. All specifications include industry and year dummies. Standard errors are in parentheses and marginal effects are in brackets. Statistical significance at 10%, 5%, and 1% is indicated by *, **, and ***, respectively.

Panel A: Family Firm Directors and Fraud: logit and OLS regression results

| Dependent variable: | (1) | (2) | (3) | (4) | (5) | (6) |
|---|--------------------------|--------------------------|---------------------------|----------------------|----------------------|----------------------|
| | AAER | | | FScore | | |
| <i>Constant</i> | 0.573 (0.19) | 0.734 (0.25) | 0.327 (0.11) | 1.148*** (4.22) | 1.228*** (4.51) | 1.888*** (4.11) |
| <i>Family-friendly Director Ratio</i> | 0.593**[0.136] (2.45) | 0.343[0.156] (1.50) | - | 0.233* (1.82) | 0.401** (2.32) | - |
| <i>Family Firm Dummy (β_1)</i> | 0.343*[0.343] (1.89) | 0.435*[0.435] (1.90) | 0.972*[0.972] (1.80) | 0.041 (1.42) | 0.017 (1.33) | 0.022 (1.30) |
| <i>Fam. Firm Dummy * Fam.-friendly Dir. Ratio (β_2)</i> | - | 2.656**[0.092] (2.46) | - | - | 0.289 (1.11) | - |
| <i>Family-friendly Director Ratio (AC)</i> | - | - | 0.652**[0.151] (2.22) | - | - | 0.355** (1.99) |
| <i>Family-friendly Director Ratio (AC) * Family Firm Dummy (β_3)</i> | - | - | 3.112***[0.091] (2.78) | - | - | 0.156** (2.23) |
| <i>Family-friendly Director Ratio (NonAC)</i> | - | - | 0.502 (1.22) | - | - | 0.117 (0.67) |
| <i>Family-friendly Director Ratio (NonAC) * Family Firm Dummy</i> | - | - | 1.726 (1.02) | - | - | 0.078 (0.90) |
| <i>Size</i> | 0.311* (1.82) | 0.326* (1.80) | 0.288* (1.83) | 0.068*** (5.02) | 0.066*** (5.10) | 0.062*** (5.06) |
| <i>R&D</i> | 1.622 (0.60) | 1.702 (0.90) | 1.728 (0.67) | -0.711*** (-2.66) | -0.725*** (-2.67) | -0.742*** (-2.70) |
| <i>Leverage</i> | -0.650 (-0.85) | -0.622 (-0.91) | -0.592 (-0.80) | -0.055 (-0.70) | -0.058 (-0.82) | -0.057 (-0.71) |
| <i>ROA</i> | -2.502* (-1.70) | -2.278 (-1.36) | -2.109 (-1.42) | -0.811*** (-5.53) | -0.810*** (-5.50) | -0.809*** (-5.51) |
| <i>MtB</i> | 0.012 (0.55) | 0.018 (0.67) | 0.021 (0.86) | 0.004* (1.69) | 0.004 (1.57) | 0.004 (1.52) |
| <i>Volatility</i> | 2.220* (1.80) | 1.892* (1.88) | 2.266* (1.77) | 0.280* (1.79) | 0.276* (1.77) | 0.287* (1.88) |
| <i>Institutional_Ownership</i> | -0.211 (-0.31) | -0.199 (-0.35) | -0.421 (-0.52) | -0.232*** (-3.22) | -0.222*** (-3.25) | -0.227*** (-3.28) |

| | | | | | | |
|--------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| <i>Board_Size</i> | -0.071 (-0.88) | -0.050 (-0.66) | -0.062 (-0.70) | 0.000 (0.06) | 0.000 (0.00) | 0.000 (0.03) |
| <i>Board_Independence</i> | -2.893*** (-2.77) | -2.789*** (-3.03) | -2.672*** (-2.60) | -0.211** (-2.05) | -0.210** (-2.09) | -0.219** (-2.02) |
| <i>Board_FinExpertise</i> | -3.981** (-2.26) | -4.095** (-2.29) | -3.743** (-2.07) | -0.039 (-0.29) | -0.026 (-0.19) | -0.030 (-0.22) |
| <i>Board_Seats</i> | -0.344** (-2.10) | -0.346** (-2.11) | -0.319** (-2.00) | -0.005 (-0.52) | -0.007 (-0.74) | -0.005 (-0.47) |
| <i>Board_UnivPedigree</i> | -2.668* (-1.82) | -2.687* (-1.82) | -2.516* (-1.72) | -0.361*** (-3.26) | -0.368*** (-3.35) | -0.356*** (-3.50) |
| <i>Board_High_Position</i> | 1.094 (0.47) | 1.024 (0.43) | 1.578 (0.61) | 0.253 (1.35) | 0.239 (1.29) | 0.229 (1.22) |
| <i>Director_Tenure</i> | 0.003 (0.05) | 0.005 (0.07) | 0.007 (0.09) | -0.005 (-1.00) | -0.004 (-1.01) | -0.004 (-1.06) |
| <i>Firm_Age</i> | -0.050 (-1.05) | -0.047 (-1.13) | -0.050 (-1.05) | -0.000 (-0.06) | -0.000 (-0.06) | -0.000 (-0.02) |
| <i>Auditor_Tenure</i> | 0.091 (0.77) | 0.074 (0.46) | 0.100 (0.92) | -0.023* (-1.72) | -0.023* (-1.73) | -0.023* (-1.71) |
| <i>Big4</i> | 0.055 (0.37) | 0.068 (0.22) | 0.083 (0.70) | -0.044 (-0.67) | -0.045 (-0.70) | -0.045 (-0.72) |
| <i>Analyst_Following</i> | -0.002 (-0.11) | -0.002 (-0.11) | -0.001 (-0.03) | -0.007*** (-3.89) | -0.007*** (-3.90) | -0.007*** (-3.92) |
| <i>Distance_to_SEC</i> | -0.082 (-0.80) | -0.085 (-0.92) | -0.111 (-0.91) | -0.003 (-0.32) | -0.003 (-0.28) | -0.003 (-0.45) |
| <i>Governance_Index</i> | 0.266** (2.46) | 0.212** (2.37) | 0.246** (2.35) | 0.003 (0.37) | 0.003 (0.35) | 0.002 (0.31) |
| F-test: | | | | | | |
| $\beta_1 + \beta_2 = 0$ | - | 15.69*** | - | - | 2.76* | - |
| $\beta_1 + \beta_3 = 0$ | - | - | 21.60*** | - | - | 12.23*** |
| Industry & Year Fixed Effects? | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 3,408 | 3,408 | 3,408 | 3,408 | 3,408 | 3,408 |
| Pseudo R ² | 0.153 | 0.154 | 0.171 | - | - | - |
| Adjusted R ² | - | - | - | 0.286 | 0.287 | 0.299 |

Panel B: Internal Control Weaknesses

| Dependent variable: | (1) | (2) | (3) |
|--|-------------------------|--------------------------|--------------------------|
| | ICW | | |
| <i>Constant</i> | -10.233*** (-3.66) | -8.521*** (-4.00) | -7.239*** (-3.39) |
| <i>Family-friendly Director Ratio</i> | 1.212[0.180] (1.26) | 1.590**[0.242] (2.30) | - |
| <i>Family Firm Dummy (β_1)</i> | 0.192*[0.192] (1.82) | 0.452*[0.452] (1.77) | 1.399*[1.399] (1.86) |
| <i>Family Firm Dummy * Family-friendly Director Ratio (β_2)</i> | - | 1.782*[0.066] (1.90) | - |
| <i>Family-friendly Director Ratio (AC)</i> | - | - | 0.355**[0.103] (2.12) |
| <i>Family-friendly Director Ratio (AC)* Family Firm Dummy (β_3)</i> | - | - | 0.968**[0.051] (2.20) |
| <i>Family-friendly Director Ratio (NonAC)</i> | - | - | -0.437 (-0.60) |
| <i>Family-friendly Director Ratio (NonAC)* Family Firm Dummy</i> | - | - | 0.822 (0.85) |
| <i>Size</i> | -0.040 (-0.42) | -0.050 (-0.55) | -0.038 (-0.35) |
| <i>R&D</i> | -3.111 (-1.50) | -3.523* (-1.76) | -3.334* (-1.75) |
| <i>Leverage</i> | -0.650 (-1.22) | -0.635 (-1.15) | -0.609 (-0.99) |
| <i>ROA</i> | -5.009*** (-4.45) | -5.023*** (-4.51) | -4.892*** (-4.32) |
| <i>MtB</i> | 0.040 (1.32) | 0.041 (1.33) | 0.042 (1.35) |
| <i>Volatility</i> | 1.003 (0.89) | 1.116 (1.02) | 0.996 (0.82) |
| <i>Institutional_Ownership</i> | 0.833 (1.33) | 0.892 (1.32) | 0.867 (1.43) |
| <i>Board_Size</i> | -0.822* (-1.76) | -0.855* (-1.69) | -0.722 (-1.23) |
| <i>Board_Independence</i> | -0.411 (-0.50) | -0.509 (-0.55) | -0.578 (-0.69) |
| <i>Board_FinExpertise</i> | -1.231 (-1.17) | -1.293 (-1.23) | -1.375 (-1.30) |
| <i>Board_Seats</i> | -0.059 (-0.69) | -0.060 (-0.70) | -0.060 (-0.71) |
| <i>Board_UnivPedigree</i> | -0.310 (-0.39) | -0.287 (-0.35) | -0.313 (-0.38) |
| <i>Board_High_Position</i> | -1.035 (-0.84) | -1.135 (-0.92) | -1.025 (-0.83) |
| <i>Director_Tenure</i> | -0.012 (-0.33) | -0.013 (-0.38) | -0.008 (-0.35) |
| <i>Firm_Age</i> | -0.042 (-1.32) | -0.043 (-1.33) | -0.045 (-1.50) |

| | | | |
|--------------------------------|----------------------|----------------------|----------------------|
| <i>Auditor_Tenure</i> | -0.180 (-1.44) | -0.180 (-1.42) | -0.177 (-1.46) |
| <i>Big4</i> | 0.533 (1.24) | 0.482 (1.10) | 0.423 (1.10) |
| <i>Analyst_Following</i> | -0.434*** (-2.62) | -0.420** (-2.52) | -0.418** (-2.36) |
| <i>Governance_Index</i> | -0.333*** (-3.56) | -0.335*** (-3.58) | -0.330*** (-3.67) |
| F-test: | - | 10.56*** | - |
| $\beta_1 + \beta_2 = 0$ | | | |
| $\beta_1 + \beta_3 = 0$ | - | - | 14.76*** |
| Industry & Year Fixed Effects? | Yes | Yes | Yes |
| Observations | 2,718 | 2,718 | 2,718 |
| Pseudo R ² | 0.131 | 0.132 | 0.134 |

Table 6 Family Characteristics and Family Firm Directors

This table presents results from regressions of the family firm director ratio on various measures of corporate misconduct. The regressions are for family firms and partitioned based on family firm characteristics. Panel A present results for tests in which family firms are partitioned based on whether the CEO is a founder, descendant, or outsider. In Panel B, we partition family firms based on whether family ownership is ‘high’ or ‘low’. In Panel C, we partition family firms based on whether family firms have single or dual class shares. All variables are defined in Table 1. We use Huber-White Sandwich estimators clustered at the firm level in OLS regressions. Standard errors are in parentheses. Statistical significance at 10%, 5%, and 1% is indicated by *, **, and ***, respectively.

Panel A: CEO Type and Financial Misconduct

| Dependent variable: | Founder CEO | | Descendant CEO | | Outsider CEO | |
|---------------------------------------|-------------|--------|----------------|---------|--------------|---------|
| | AAER | FScore | AAER | FScore | AAER | FScore |
| <i>Family-friendly Director Ratio</i> | 1.766* | 0.967* | 6.567** | 2.109** | -1.166 | -0.046 |
| | (1.82) | (1.73) | (2.53) | (2.35) | (-1.40) | (-0.70) |
| Controls Included? | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry & Year Fixed Effects? | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of Observations | 1,292 | 1,292 | 1,530 | 1,530 | 1,462 | 1,462 |
| Pseudo R ² | 0.402 | - | 0.766 | - | 0.172 | - |
| Adjusted R ² | - | 0.322 | - | 0.450 | - | 0.288 |

Panel B: High vs. Low Family Ownership

| Dependent variable: | High Family Ownership | | Low Family Ownership | |
|---------------------------------------|-----------------------|---------|----------------------|--------|
| | AAER | FScore | AAER | FScore |
| <i>Family-friendly Director Ratio</i> | 2.562*** | 0.096** | 1.228* | 0.050* |
| | (2.76) | (2.52) | (1.82) | (1.85) |
| Controls Included? | Yes | Yes | Yes | Yes |
| Industry & Year Fixed Effects? | Yes | Yes | Yes | Yes |
| Number of Observations | 1,700 | 1,700 | 1,700 | 1,700 |
| Pseudo R ² | 0.265 | - | 0.264 | - |
| Adjusted R ² | - | 0.328 | - | 0.320 |

Panel C: Dual-class vs. Single-class

| Dependent variable: | Dual-class | | Single-class | |
|---------------------------------------|------------|---------|--------------|--------|
| | AAER | FScore | AAER | FScore |
| <i>Family-friendly Director Ratio</i> | 5.672** | 0.172** | 1.978* | 0.052* |
| | (2.15) | (2.43) | (1.70) | (1.80) |
| Controls Included? | Yes | Yes | Yes | Yes |
| Industry & Year Fixed Effects? | Yes | Yes | Yes | Yes |
| Number of Observations | 816 | 816 | 2,584 | 2,584 |
| Pseudo R ² | 0.482 | - | 0.250 | - |
| Adjusted R ² | - | 0.347 | - | 0.320 |

Table 7 Family-Friendly Directors and Informed Trading

Panel A presents results from OLS regressions of abnormal short sales prior to negative shock earnings announcement on the family firm director ratio. The regressions in Panels B – D are for family firms only and partitioned based on family firm characteristics. Panel B present results for tests in which family firms are partitioned based on whether the CEO is a founder, descendant, or outsider. In Panel C, we partition family firms based on whether family ownership is ‘high’ or ‘low’. In Panel D, we partition family firms based on whether family firms have single or dual class shares. All variables are defined in Table 1. We use Huber-White Sandwich estimators clustered at the firm level in OLS regressions. All specifications include industry and quarter fixed effects. Standard errors are in parentheses. Statistical significance at 10%, 5%, and 1% is indicated by *, **, and ***, respectively.

Panel A: Multivariate Tests of Informed Trading

| Firm type: | Family Firms | Non-family Firms | All Firms |
|--|----------------------|---------------------|----------------------|
| Dependent variable: | Abnormal Short Sales | | |
| <i>Constant</i> | 1.185* (1.78) | 0.762* (1.71) | 0.986* (1.91) |
| <i>Shock</i> | 0.130* (1.77) | 0.095* (1.72) | 0.102* (1.72) |
| <i>Family-friendly Director Ratio</i> | 0.111** (2.02) | 0.082 (0.88) | 0.035 (0.43) |
| <i>Family Dummy</i> | - | - | 0.030 (1.15) |
| <i>Family Dummy * Shock</i> | - | - | 0.189 (1.22) |
| <i>Family Dummy * Family-friendly Director Ratio</i> | - | - | 0.112 (0.65) |
| <i>Shock * Family-friendly Director Ratio</i> | 0.102** (2.21) | 0.035 (1.02) | 0.051 (1.52) |
| <i>Family Dummy * Family-friendly Director Ratio * Shock</i> | - | - | 0.288** (2.13) |
| <i>Fam_own</i> | -0.177 (-0.90) | - | -0.105 (-0.62) |
| <i>Hire_hand</i> | -0.100** (-2.09) | - | -0.102* (-1.76) |
| <i>Size</i> | -0.092*** (-2.66) | -0.037* (-1.87) | -0.045*** (-2.66) |
| <i>R&D</i> | -0.746 (-0.80) | -0.109 (-0.32) | -0.555* (-1.71) |
| <i>Leverage</i> | 0.188 (0.90) | 0.007 (0.11) | 0.023 (0.35) |
| <i>ROA</i> | -0.100 (-0.40) | -0.011 (-0.05) | -0.209 (-1.19) |
| <i>MtB</i> | -0.009 (-1.22) | -0.003 (-0.66) | -0.005 (-1.02) |
| <i>Volatility</i> | 1.762 (1.43) | 0.466 (0.79) | 0.943 (1.57) |
| <i>Institutional_Ownership</i> | -0.020 (-0.17) | -0.265** (-2.20) | -0.176* (-1.80) |
| <i>Board_Size</i> | -0.071 (-0.62) | -0.015 (-0.26) | -0.008 (-0.17) |
| <i>Board_Independence</i> | -0.577* (-0.62) | -0.502 (-0.26) | -0.233 (-0.17) |

| | | | |
|-----------------------------------|---------|---------|---------|
| | (-1.68) | (-0.92) | (-0.60) |
| <i>Board_FinExpertise</i> | -0.178 | -0.021 | -0.060 |
| | (-0.55) | (-0.10) | (-0.35) |
| <i>Board_Seats</i> | -0.001 | -0.007 | -0.001 |
| | (-0.06) | (-0.37) | (-0.10) |
| <i>Board_UnivPedigree</i> | -0.170 | -0.016 | -0.067 |
| | (-0.74) | (-0.10) | (-0.51) |
| <i>Board_High_Position</i> | -0.340 | -0.146 | -0.250 |
| | (-0.94) | (-0.47) | (-1.21) |
| <i>Director_Tenure</i> | -0.009 | -0.001 | -0.002 |
| | (-1.11) | (-0.10) | (-0.50) |
| <i>Firm_Age</i> | -0.006 | -0.001 | -0.004 |
| | (-0.85) | (-0.27) | (-0.90) |
| <i>Analyst_Following</i> | -0.082 | -0.001 | -0.033 |
| | (-1.22) | (-0.95) | (-1.11) |
| <i>Governance_Index</i> | 0.033 | 0.020 | 0.020** |
| | (1.30) | (1.60) | (2.11) |
| Industry & Quarter Fixed Effects? | Yes | Yes | Yes |
| Observations | 292 | 583 | 875 |
| Adjusted R ² | 0.243 | 0.122 | 0.080 |

Panel B: CEO Type and Informed Trading

| | Founder CEO | Descendant CEO | Outsider CEO |
|---|-------------------------|-------------------------|-------------------------|
| <i>Dependent variable:</i> | Abnormal Short Sales | Abnormal Short Sales | Abnormal Short Sales |
| <i>Family-friendly Director Ratio</i> | 0.145* | 0.172** | -0.104 |
| | (1.82) | (2.03) | (-1.45) |
| <i>Shock * Family-friendly Director Ratio</i> | 0.701* | 1.135** | -0.105 |
| | (1.80) | (2.36) | (-1.35) |
| Controls Included? | Yes | Yes | Yes |
| Industry & Quarter Fixed Effects? | Yes | Yes | Yes |
| Number of Observations | 231 | 275 | 358 |
| Adjusted R ² | 0.482 | 0.720 | 0.528 |

Panel C: High vs. Low Family Ownership

| | High Family Ownership | Low Family Ownership |
|---|-----------------------|----------------------|
| <i>Dependent variable:</i> | Abnormal Short Sales | |
| <i>Family-friendly Director Ratio</i> | 0.578* (1.92) | 0.328* (1.73) |
| <i>Shock * Family-friendly Director Ratio</i> | 1.377* (1.85) | 0.332 (1.15) |
| Controls Included? | Yes | Yes |
| Industry & Quarter Fixed Effects? | Yes | Yes |
| Number of Observations | 432 | 432 |
| Adjusted R ² | 0.577 | 0.255 |

Panel D: Dual-class vs. Single-class

| | Dual-class | Single-class |
|---|----------------------|------------------|
| <i>Dependent variable:</i> | Abnormal Short Sales | |
| <i>Family-friendly Director Ratio</i> | 0.933*** (2.69) | 0.232* (1.76) |
| <i>Shock * Family-friendly Director Ratio</i> | 0.943** (2.01) | 0.189 (1.12) |
| Controls Included? | Yes | Yes |
| Industry & Quarter Fixed Effects? | Yes | Yes |
| Number of Observations | 275 | 589 |
| Adjusted R ² | 0.566 | 0.313 |

Table 8 Director Career Consequences Test

This table presents univariate tests examining the acquisition of board seats on family firms and on nonfamily firms in $t+1$ and $t+2$ for family-friendly directors and nonfamily-friendly directors that receive board seats in year t . All variables are defined in Table 1. Statistical significant at 10%, 5%, and 1% is denoted by *, **, and ***, respectively.

| | Director Has Net Increase in Family Board Directorship(s) in Year t | | | Director Has Net Increase in Non-family Board Directorship(s) in Year t | | |
|---|---|------------------------------------|---------------|---|------------------------------------|---------------|
| | <i>Family-friendly Director</i> | <i>Nonfamily-friendly Director</i> | <i>T-test</i> | <i>Family-friendly Director</i> | <i>Nonfamily-friendly Director</i> | <i>T-test</i> |
| Change in number of Family Board Directorship(s) from $t+1$ to $t+2$ | 0.60 | 0.27 | 31.12*** | 0.52 | 0.24 | 30.69*** |
| Change in number of Nonfamily Board Directorship(s) from $t+1$ to $t+2$ | 0.80 | 0.94 | -10.49*** | 0.92 | 1.02 | -7.55*** |