

## Conservatism and monitoring by founding family owners\*

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Abstract

We study the role of conservatism in monitoring managers by founding family owners, the most predominant type of large, under-diversified shareholders in the U.S. We focus on the ownership of founding family members who are not CEOs. Unlike owners with diverse ownership or institutional investors, family owners have both the incentives and the means to monitor CEOs. While conservatism can facilitate monitoring, it might be less important for family firms given the direct monitoring of family owners. Therefore, it is unclear ex ante whether conservatism increases with the ownership of family members who are not CEOs. Using an accrual-based measure of conservatism, non-operating accruals, we find that conservatism is positively associated with non-CEO family ownership and non-CEO family directorship, consistent with conservatism facilitating family owners' monitoring of CEOs. However, we find the opposite when the founder still serves as the CEO. This is consistent with other family members' inability or unwillingness to monitor the founder CEO. The above results continue to hold after we control for CEO ownership, board independence, and outside director ownership. Our findings extend the recently developed literature on the monitoring role of conservatism.

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## 1. Introduction

Conservatism plays a central role in accounting theory and practice. Recent regulatory attempts to obtain the “neutrality of information” have led to a new wave of research studying the determinants of financial reporting conservatism. This body of work focuses largely on the contracting role of conservatism, particularly in debt contracting (e.g., Ahmed et al. 2002; Beatty et al. 2007; Zhang 2008). Another important role conservatism can play is to provide verifiable information to facilitate the monitoring of management by equity investors (e.g., Watts 2003a; Ball and Shivakumar 2005). By reporting bad news earlier, conservative accounting curbs managers’ tendency to overstate earnings and to invest in negative net present value projects.<sup>1</sup>

However, empirical evidence on the monitoring role of conservatism is sparse. LaFond and Roychowdury (2008, hereafter LR) document that as managerial ownership decreases, conservatism increases. They argue that when managerial ownership increases, the extent of agency problems is lower and thus the demand for conservatism is lower. Similarly, Wang (2006) find that some family firms are less conservative in financial reporting than non-family firms, consistent with the reduced agency problems between family owners and outside shareholders. Ahmed and Duellman (2007, hereafter AD) report that conservatism increases with board independence and outside director ownership, consistent with conservatism assisting board monitoring.

With the exception of Wang (2006), which is discussed in detail later, there is no evidence regarding whether conservatism assists dominant equity shareholders in monitoring managers. In this paper, we examine how conservatism interplays with large shareholders’ monitoring,

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<sup>1</sup> We base our study on the premise that conservatism helps equity investors monitor managers (Watts 2003a; Ball and Shivakumar 2005). While our results provide indirect evidence on the monitoring role of conservatism, we are not studying whether, or how, conservatism helps equity investors monitor managers. While an important research question that warrants future research, we believe such an investigation is outside of the scope of our current paper.

specifically, whether conservatism changes with the ownership and control of large shareholders. Relative to owners with diffuse ownership, large shareholders can monitor managers more effectively, either due to their presence on the Board of Directors or their general influence in the firm. Because conservative financial reporting has its own costs, i.e., “biased” financial reporting, direct monitoring by large shareholders might reduce the importance of conservatism. As a result, we would observe a negative impact of large shareholders’ ownership/control on conservatism. On the other hand, conservatism can help dominant shareholders evaluate managerial investment decisions by reflecting bad news in a more timely fashion. The monitoring role of conservatism is likely more important because large shareholders can use the information to influence managers’ decisions, such as cutting managers’ negative NPV pet projects. Diffuse shareholders might lack the power to influence managers’ decisions. This complementary relationship between direct monitoring and conservatism would give rise to a positive association between the two. Thus, ex ante it is unclear whether conservatism increases or decreases with the ownership/control of large shareholders.

In this paper, we focus on one group of large shareholders – family owners who are not the CEOs. Founding family owners are the most dominant type of large, under-diversified shareholder in the U.S. (Anderson, Duru, and Reeb 2008). Family firms account for approximately 46% of the S&P1500 firms and provide researchers a unique setting to examine the relationship between dominant shareholders and the monitoring role of conservative financial reporting. Founding family owners differ from both institutional owners and small investors with diffuse ownership in that family owners have both greater incentives and greater means to monitor managers (Chen, Harford and Li 2007). The greater incentives and means arise from family owners’ under-diversified equity holdings, their longer investment horizon,

and their greater influence on the operations of the firms. Furthermore, unlike institutional investors who may also have long-term investment horizons, family owners not only hold substantial equity in their firms, an average of 17% for S&P1500 firms, but also are influential decision makers: on average each family firm has two family members sitting on the board.

However, not all family members have the same interests. In family firms run by professional, non-family-member CEOs, family shareholders and other shareholders are unified in their mission to monitor managers. In these cases, family owners' significant ownership *empowers* them to influence corporate decisions, including financial reporting. In contrast, in family firms where a founder or a descendant serves as the CEO, while some family members are shareholders and monitors, others are CEOs and are being monitored. Thus it is important to separate non-CEO family members from family CEOs and accordingly in this paper we focus on the impact of the ownership and control of non-CEO family owners.

This focus is the key distinction between our study and Wang (2006). Among other things, Wang finds that family firms, primarily those run by professional CEOs, exhibit less persistent transitory losses, one measure of conservatism. Using indicator variables for family firms, he does not find any difference between family firms run by family members and non-family firms. Since the underpinning logic for the monitoring role of conservatism is the monitoring of managers, it is important to separate the monitors from those being monitored. In the case of family firms run by founders or descendants, the founder/descendant CEO is the target of monitoring and other family members are the monitors. When family CEOs' ownership increases, there is less need or ability for the other shareholders to monitor; whereas when other family member's ownership increases, there may be a stronger need/ ability to monitor the CEO. Therefore, when the family CEO is not separated from other family members, it is difficult to disentangle the effect of non-CEO shareholders' monitoring of managers.

In the empirical analyses, we use non-operating accruals developed and used in prior research (e.g., Givoly and Hayn 2000; Beatty et al. 2007) as our primary measure of conservatism, and non-CEO family members' equity holdings and board membership as our two measures to capture direct monitoring by non-CEO family owners.

We examine the impact of non-CEO family ownership/control on conservatism separately for family firms that are run by professional, non-family-member CEOs and family CEOs. This is because non-CEO family owners might not be effective monitors of family CEOs (particularly powerful founder CEOs) and/or because these family owners have similar interests as family CEOs (e.g., diverting corporate resources to other family business). We find that conservatism increases with non-CEO family ownership and non-CEO family directorship in both professional CEO and descendent CEO firms, consistent with conservatism facilitating the monitoring of the CEO by other family members in such firms. In contrast, we find the opposite in founder CEO firms: conservatism decreases with non-CEO family ownership and non-CEO family directorship. This is consistent with either other family members' inability to monitor powerful founders and/or the greater incentive alignment between founder CEOs and other shareholders. Our results continue to hold after controlling for CEO ownership (LR 2008) and board independence (AD 2007).<sup>2</sup>

Our study contributes to the existing literature on the monitoring role of conservatism for equity investors. First, our paper complements LR (2008) and AD (2007), who examine the association between conservatism, managerial ownership, and board structure, in that we

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<sup>2</sup> In addition to the monitoring role, accounting conservatism also serves to reduce expected litigation costs because of the asymmetric payoff of litigation (Watts 2003a). Family owners, due to their larger reputation concerns, their longer investment horizon, and their under-diversified holdings in their firms, have higher expected litigation costs than other shareholders. Thus the litigation role of conservatism would lead to the prediction of more conservative financial reporting in family firms. Our finding of differential association between conservatism and family ownership & control depending on whether we examine CEO or non-CEO family members and who serves as the CEO suggests that litigation story is not driving our results.

examine the association between conservatism and *dominant non-CEO* shareholders ownership and control. Second, we extend Wang (2006) by isolating the impact of non-CEO family owners' ownership and control from those of family CEOs. Thus, we offer a more detailed and more comprehensive analysis of the impact of various dimensions of founding families' ownership and control. Our results indicate that while the impact on conservatism of family CEO's ownership is negative, consistent with a lesser need to monitor high ownership family CEOs; the impact on conservatism of other family members' ownership is typically positive, consistent with other family members monitoring CEOs, except for founder CEO firms, where other family members do not appear to be able or willing to monitor the founder. These results reinforce the importance of separating the other family members (as monitors) from the CEOs that are being monitored.

The rest of the paper is organized as follows. Section 2 reviews prior literature and develops our hypotheses; Section 3 describes the sample and research design; Section 4 presents empirical results; Section 5 concludes.

## **2. Related Research and Hypothesis Development**

Watts (2003a, b) argue that one of the fundamental drivers of conservative accounting is the need for verifiable information to monitor managers. Managers may inflate earnings for their own benefit, such as increasing their compensation, investing in projects that have negative net present value but increase managers' compensation or social status, or hiding bad performance to enhance their job security. All these activities are costly to owners. Conservative accounting can help investors monitor managers, evaluate the quality of investments, and better allocate capital (Ball 2001; Watts 2003a; LR 2008). As a result, it curbs

managers' tendency to overstate earnings and to invest in negative net present value projects.<sup>3</sup>

Shareholders' desire for conservative accounting will be reflected in the firm's financial reporting decisions.

However, the monitoring role of conservatism has been left largely unexplored. LR (2008) examines the relationship between conservatism and managerial ownership; they interpret their results to be consistent with the demand of shareholders with diffuse ownership for conservative reporting decreasing as managers' incentives are more aligned with shareholders. AD (2007) find that conservatism increases with the number of independent directors on the board and the ownership of outside directors. This result indicates that board monitoring benefits from conservative financial reporting. Focusing on the agency conflicts between family owners, who are implicitly treated as insiders, and other shareholders, Wang (2006) finds that, relative to non-family firms, family firms run by professional CEOs are more conservative in reporting (i.e., they report less persistent transitory losses), whereas family firms run by family CEOs (including founders and descendents) are not different from non-family firms in conservatism.

In this paper, we investigate the role of conservatism in assisting dominant non-CEO shareholders in monitoring managers. Like Wang (2006), we examine founding family members. However, Unlike Wang (2006), we focus on the equity ownership and control of non-CEO family owners. As discussed in the introduction, failing to separate the monitoring shareholders (i.e., family owners who are not CEOs) from the family CEOs, who are being monitored, will confound the results and lead to ambiguous inferences.

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<sup>3</sup> Another driver of conservatism is concerns for litigation costs (Watts a, b). As mentioned earlier, our differential findings for family CEO ownership and non-CEO family ownership and for different types of family firms suggest that the litigation effect do not drive our results. Conservatism can also arise for taxation and regulation reasons. We do not focus on these potential drivers of conservatism because we do not expect the incentives to be systematically different between family and non-family firms and because, as argued in Watts (2003a), the evidence in support of these explanations is rather weak.

We believe founding family firms present a unique setting to study the monitoring role of conservatism for dominant non-CEO shareholders. Family owners are the most persistent and important group of large, under-diversified shareholders in the U.S. economy. Family firms are characterized by the founding family's concentrated ownership and active involvement in firm management. On average in our sample, founding families hold 17% of the outstanding equity and 22% of directorships. In addition, compared to other shareholders, including institutional investors, family owners have a longer investment horizon and are under-diversified. Prior research (e.g., Casson 1999; Anderson et al. 2003) argues that founding families view their ownership as an asset to pass on to their descendants, rather than wealth to consume during their lifetimes.<sup>4</sup> Compared to other shareholders, founding owners' fortunes are disproportionately tied up in their ownership of the firm. Therefore, family owners care more about long-term firm value and have stronger incentives to monitor CEOs. These distinguishing features ought to affect family firms' financial reporting choices, including the extent of accounting conservatism.

Whether conservative financial reporting can facilitate non-CEO family owners' monitoring of CEOs depends on whether conservatism and direct monitoring by family owners are substitutes or complements. On the one hand, in the presence of the separation of ownership and control, conservatism can help investors, including dominant shareholders like family owners, evaluate managerial investment decisions and curb managerial tendency to overstate earnings. Although family owners likely have more information about the firm than other shareholders, they still face an informational disadvantage when compared to the CEOs. Since family owners have greater incentives to monitor managers, the monitoring role of conservatism is particularly important. In addition, family owners' influence can help them use

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<sup>4</sup> For example, when William Lauder, grandson of the company founder of Estee Lauder, recently stepped down, he made the following comment: "I am committed to the company. It's the vast majority of my personal wealth and my family's personal wealth – and we fully expect to be actively involved with this company going forward (The *Wall Street Journal* Nov 9, 2007 'Lauder Scion Way Out, P&G Executive Way In')." "

the accounting information to influence managers' actions, such as stopping negative NPV projects. In comparison, other shareholders have weaker incentives and influence. Thus, this discussion implies a positive association between family ownership/control and conservatism. That is, direct monitoring and conservatism are complements.

On the other hand, relative to owners with diffuse ownership, family owners can monitor managers more directly, either due to their presence on the Board of Directors or the families' strong influence in the firm. Since conservatism comes with costs, e.g., 'biased' financial reporting, family owners might prefer less conservative financial reporting given their direct monitoring. Other shareholders likely free ride family owners' monitoring and also reduce their demand for conservatism. Following this logic, we would observe a negative relation between family ownership/control and conservatism. In this latter case direct monitoring and conservatism are substitutes. As a result, ex ante it is unclear whether conservatism increases or decreases with family ownership and/or control.

To sum up, whether non-CEO family owners monitor managers through conservatism depends on whether direct monitoring and conservatism are substitutes or complements. Taken together, the preceding discussion leads to the following non-directional prediction (in null form):

*H1: Ceteris paribus, conservatism in family firms is not associated with non-CEO family ownership/ directorship.*

The effectiveness of family monitoring likely varies with the identity of the CEO. In family firms run by professional CEOs, family owners are aligned with all other shareholders in their incentives to monitor managers. In addition, family owners' large equity holdings and presence on the Board of Directors also enable them to effectively influence corporate decisions, including financial reporting decisions. The impact of family presence on

conservatism may be different when family members serve as CEOs. This is because family CEOs, particularly founder CEOs, tend to be charismatic individuals whose vision and drive are the genesis of the firm and the family fortune. They are usually highly revered and tend to have overwhelming control, enjoying an undisputed and powerful status when it comes to decision making, perhaps including financial reporting decisions.<sup>5</sup> In extreme cases, founder CEOs have been known to dictate the reporting of manipulated earnings, leading to SEC enforcement actions against the firm (Dechow, Sloan, and Sweeney 1996).<sup>6</sup> Thus, founder CEOs, relative to other CEOs, can be so powerful as to make it possible for them to thwart outside shareholders', including other family members', attempts at monitoring via conservative accounting. The case for descendant CEOs may be closer to professional non-family CEOs than to founder CEOs, in the sense that descendant CEOs do not have as high a status as founder CEOs among family members. Therefore, we separately test H1 for family firms run by professional CEOs, descendant CEOs, and founder CEOs.

### **3. Sample and Research Design**

#### *3.1 Sample*

Our sample consists of 8,264 firm-years for 1,204 unique firms in the S&P 1500 index (S&P 500, S&P MidCap 400, and S&P SmallCap 600 indices) covering the ten-year period 1996-2005. These are the firms that have the required data on Compustat (for financial accounting information), CRSP (for stock return information), IBES (for analyst coverage

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<sup>5</sup> Anecdotal evidence on family firms, such as Viacom Inc., Fidelity Investments, and News Corp., illustrates the iron grips the founder CEOs have over their firms. For example, the 84-year old Sumner Redstone, chairman of Viacom, is well-known for shoving a succession of 'heirs apparent' (e.g., Frank Biondi, a well-regarded media veteran; Mel Karmazin, the former CBS chief executive; Tom Freston, one of MTV's founders; and his daughter Shari Redstone, who was named VP of the company after the departure of Karmazin) out of the door just when they seem poised to become credible successors, thus retaining his firm grip over the sprawling family-controlled media empire (see articles in WSJ, July 20, 2007 and The Financial Times, July 21, 2007).

<sup>6</sup> Adelphia offers an extreme case of a founder CEO manipulating earnings with the intention of misleading shareholders.

information), ExecuComp (for executive compensation and ownership), and Investor Responsibility Research Center (IRRC) (for ownership and board information).

Following prior research (e.g., Anderson and Reeb 2003), family firms refer to firms in which founders or their family members (by either blood or marriage) are key executives, directors, or blockholders.<sup>7</sup> While widely used in the literature, this definition might be viewed as rather ‘lenient’, particularly due to the lack of restriction on the level of family ownership. Thus in our empirical analysis, we also use family ownership directly.<sup>8</sup> We then classify family firms based on the identity of the CEO: Family CEO firms refer to those family firms in which a member from the founding family serves as the CEO. If the CEO is the founder (a descendant), we refer to the firm as founder (descendent) CEO firm; other family firms are referred to as professional CEO family firms.

Our collection of ownership and the founding family related information involves several steps. First, we start with ExecuComp and IRRC databases to identify key insiders (top executives and directors) for each company and compile ownership of each insider. Second, for each firm-year, we collect information about the founding family: the identity of founders, whether founders or their family members are actively involved (e.g., holding key executive positions, directorships, or large blocks of outstanding shares), and if they are actively involved, the ownership of the founding family. This step is completed by examining Hoover’s Company Records, company proxy statements and/or websites. Third, based on proxy statements, we compile the identities and ownership of blockholders other than insiders and founding family members. Lastly, we merge the above information with firm performance and characteristics

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<sup>7</sup> Note that our family firm classification and family ownership/control are verified and updated every year. In contrast, some prior studies rely on Business Week classifications of S&P 500 in one year and extend this classification to other years; this approach leads to misclassification for firms that change their status during the sample period.

<sup>8</sup> In an untabulated sensitivity test, we also use an alternative classification of family firms – firms where the members of the founding family have an equity ownership of 5% or higher. The tenor of the results is unaffected.

data from Compustat, CRSP, and IBES. Additional information about corporate governance and institutional ownership is collected from IRRC and CDA Spectrum, respectively.

### *3.2 Research Design*

#### *3.2.1 Measures of Accounting Conservatism*

Our primary measure of conservatism, NACC, is non-operating accruals averaged over the three years centered on the year of interest. Conservatism leads to lower cumulative reported earnings via slower revenue recognition, faster expense recognition, lower asset valuation, and higher liability valuation. These practices lead to more frequent and more negative accounting charges. Thus, firms with more conservative accounting choices exhibit more negative non-operating accruals, consisting primarily of items such as bad debt provisions (and their reversal), restructuring charges, the effect of changes in estimates, gains or losses on the sale of assets, asset write-downs, the accrual and capitalization of expenses, and the deferral of revenues and their subsequent recognition (Givoly and Hayn 2000).<sup>9</sup> We measure non-operating accruals as the difference between total accruals and operating accruals:

$$\begin{aligned} \text{Non-operating accruals} &= \text{Total accruals (before depreciation)} - \text{Operating accruals} \\ &= [(\text{Net Income} + \text{Depreciation}) - \text{Cash flow from operations}] - (\Delta \text{Accounts receivable} \\ &\quad + \Delta \text{Inventories} + \Delta \text{Prepaid expenses} - \Delta \text{Accounts payable} - \Delta \text{Taxes payable}). \end{aligned}$$

Givoly and Hayn (2000) argue that what constitutes conservatism in one period leads to ‘non-conservative’ results in subsequent periods (e.g., reversal of deferred asset valuation allowance). Thus, we take the average of non-operating accruals over three years centered on the year of interest to mitigate the effect of temporary accruals that reverse within a couple of years. Doing so more properly recognizes the multi-period nature of accounting choices.

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<sup>9</sup> Note that NACC captures conditional conservatism. For example, if the value of an asset drops due to a poor economic situation, the asset write-down is an accrual and is included in NACC.

We also replicate the main analyses using two alternative measures: the difference in the skewness between earnings and operating cash flows (Givoly and Hayn 2000; Beatty et al. 2007) and the stock-returns-based asymmetric timeliness measure developed in Basu (1997). The results using these two measures are consistent with those using the accruals measure. For ease of presentation we tabulate all the tests using the accruals measure.<sup>10,11</sup>

Prior research (e.g., Wang 2006) also uses the low persistence of transitory loss components in earnings developed in Basu (1997) to measure conservatism. As discussed in Ball and Shivakumar (2005, page 93), the time-series test of the timeliness of loss recognition in earnings has two potential limitations:<sup>12</sup>

*First, it cannot distinguish transitory gain or loss components of earnings from random errors in accruals (such as miscounting inventory) and from some types of earnings management (such as excess provisions that revert over time). All are transitory and cause negative serial dependence in income changes. Second, the model can only identify the existence of transitory components, and not whether their recognition is timely or untimely.*

We do the following to reduce the effects of the limitations. First, by using a three-year average, our accrual-based measures are less likely to capture random accrual errors or earnings management (which are transitory and likely reverse out within three years) and are more likely to identify timely recognition of bad news. Second, similar to Ball and Shivakumar, we employ accrual-based, rather than earnings-based, measures to exploit the likelihood that *timely* loss recognition occurs through accounting accruals (as opposed to cash flows).

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<sup>10</sup> Basu's measure is widely used in the literature, but it is also controversial. Prior research (e.g., Dietrich et al. 2007; Givoly et al. 2007) argue that the Basu measure is sensitive to the aggregation period, the occurrence of economic events, voluntary disclosure policy, and some econometric issues. In addition, in our research context we have to introduce many interaction terms when using the Basu measure, which results in potentially severe multicollinearity. As a result, we choose not to use the Basu measure in our primary analyses.

<sup>11</sup> We elect not to use the market-to-book ratio to measure conservatism in this project. First, this ratio includes economic rents (Roychowdhury and Watts 2007). Second, the ratio has been used to measure firm value in the family firm literature (e.g., Anderson and Reeb 2003; Villalonga and Amit 2006).

<sup>12</sup> Wang (2006) recognizes these limitations (see page 632) and cautions readers on interpreting his findings.

### 3.2.2 Regression Model

To test our hypotheses, we estimate the following basic model (at the firm-year level):

$$\begin{aligned} NACC_{i,t} = & \alpha + \beta_1 FAM_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 MB_{i,t} + \beta_4 LEV_{i,t} + \beta_5 LIT_{i,t} + \beta_6 ROA_{i,t} + \beta_7 RVOL_{i,t} \\ & + \beta_8 AC_{i,t} + \beta_9 INST_{i,t} + IndustryDummies + \varepsilon_{i,t} \end{aligned} \quad (1)$$

For ease of interpretation, we scale NACC by lagged total assets, expressed in percentage, and then multiply by minus one. Thus, more positive values indicate greater conservatism. FAM is alternatively (1) FAM\_OWN, non-CEO family ownership, and (2) FAM\_CTRL, the number of non-CEO family directors in family firms. Note that FAM is zero for non-family firms. We include control variables for other factors documented to be associated with conservatism.

Specifically:

- SIZE* = Year-end market value of equity (Compustat data # 25× #199); log transformation is used in regression analyses;
- MB* = Market to book ratio (Compustat data #25× #199/#60);
- LEV* = Leverage, measured as beginning leverage ratio ( $(\#9+\#34)/\#6$ );
- LIT* = Litigation indicator, coded as 1 if the firm falls into the industries with the following SIC codes: [2833, 2836], [3570, 3577], [3600, 3674], [5200, 5961], 7370;
- ROA* = Accounting performance, measured as earnings before extraordinary items (Compustat data #18) in year t scaled by lagged total assets (#6);
- RVOL* = Return volatility, measured as the standard deviation of daily stock returns (from CRSP) for year t;
- AC* = Analyst coverage, measured as the number of unique analysts issuing earnings forecasts for the firm (from IBES) during year t; log transformation ( $\ln(1+\text{analyst coverage})$ ) is used in regression analyses;
- INST* = Institutional ownership, measured as the aggregate percentage of shares held by institutional investors per CDA in year t.

We also include indicators for Fama and French (1997) industries to capture industry fixed effects because family and non-family firms differ in industry membership and because accrual recognition varies across industries.<sup>13</sup> To mitigate the effect of outliers, we truncate the top and

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<sup>13</sup> Family firms are also generally younger than non-family firms. Controlling for firm age in the sub-sample for which we have data on firm age, we find similar inferences.

bottom 1% of NACC and remove observations with studentized residuals greater than three, as in Givoly and Hayn (2000) and Zhang (2008).<sup>14</sup>

Since the above specification is a panel regression, the possibility of within-firm autocorrelation can lead to biased standard errors. Therefore, we estimate equation (1) as a cross-sectional regression for each year of the sample, report the time-series mean as the coefficient estimate and then compute autocorrelation-adjusted Fama-MacBeth (1973) standard errors using the method suggested by Pontiff (1996). Specifically, the time-series of the parameter estimates are regressed on a constant and the residuals are modeled as a first-order autoregressive process. The standard error of the constant term is used as the corrected standard error. As long as the first-order autoregressive process captures all of the serial dependence, these standard errors are not biased by serial correlation. In untabulated sensitivity tests, we include higher order autoregressive terms (up to the fifth order); none of the higher order autocorrelations is significant.

## **4. Empirical Findings**

### *4.1 Sample composition and descriptive statistics*

Table 1 presents our sample composition by firm type and industry. Panel A shows that of the 1,204 unique firms that belong to the S&P 1500 index in our sample, about one half are classified as family firms, and close to 46% of the sample firm-year observations are family firm observations. These statistics are consistent with prior research and attest to the significant presence of family firms in the economy. Within the sample of family firm-year observations, approximately 41% (1,533/3,763) are managed by professional CEOs hired from outside of the

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<sup>14</sup> Truncating at 0.5%, no truncation, or using different cut-off points for the studentized residuals do not change our inferences.

founding family, whereas close to 40% are managed by founder CEOs and the rest 20% are managed by descendent CEOs.

Panel B of Table 1 presents descriptive statistics on ownership and governance variables, separately for family and non-family firms. Within family firms, the average non-CEO family ownership is 12.2% and there are on average one non-CEO family member serving on the board of directors. Including the ownership of family CEOs, family ownership is on average 17.1% for family firms, and the founding family has greater ownership in family CEO firms (19.0%) than in professional CEO family firms (13.6%, untabulated). Average CEO ownership is about 0.5% for non-family firms and 4.5% for family firms. Ownership of outside blockholders is around 17.0% and it is higher in non-family firms than in family firms (18.6% vs. 15.2%). Around 81.7% of the firms have outside blockholders; this proportion is higher for non-family firms than for family firms (85% vs. 78%). On average, there are 9.5 directors and 66.5% of them are independent. Family firms have smaller and less independent boards. In addition, family firms have more total outside director ownership (6.2% vs. 1.7%) but less non-family outside director ownership (1.2% vs. 1.7%). All of the mean and median differences discussed above are significant at better than 0.05 level.<sup>15</sup>

Panel C of Table 1 tabulates the industry distribution. There are more family than non-family firms in Recreational Products, Printing and Publishing, Apparel, Rubber and Plastic Products, Construction, Personal Services, Transportation, Wholesale and Retail, Restaurants, and Trading. In contrast, non-family firms outweigh family firms in Chemicals, Steel Works, Machinery, Electronic Equipment, Petroleum and Natural Gas, Utilities, Measuring and Control

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<sup>15</sup> Family and non-family firms also differ in other dimensions of corporate governance. Untabulated statistics indicate that overall 6.3% of the firms in the S&P 1500 have dual class shares with such share structures found primarily in family firms (11.3% of family firms versus 2.1% of non-family firms have dual class shares). The G-score (Gompers et al. 2003) is around 9.4 for all firms, with family firms having a lower G-score (8.9), consistent with family power and control substituting for additional anti-takeover measures.

Equipment, and Business Supplies. We control for industry clustering by including industry indicator variables in our regression analysis.

We present the descriptive statistics of test variables in Table 2. Panel A shows that, consistent with prior research, our sample firms on average have negative non-operating accruals, indicating an overall level of conservatism in the sample (recall that NACC is multiplied by minus one). Panel B of Table 2 presents the Pearson correlation coefficients among the test variables. Though most of the correlation coefficients are significant, with the exception of the correlation between size, analyst following, and institutional holdings ( $\rho[\text{SIZE}, \text{AC}] = 0.415$ ,  $\rho[\text{AC}, \text{INST}] = 0.395$ ) and that between ROA and market-to-book ratio ( $\rho[\text{ROA}, \text{MB}] = 0.432$ ), they are generally fairly small and thus multicollinearity among variables does not appear to be an important issue.

#### *4.2 Regression results on hypothesis testing: The effect of non-CEO family ownership*

Table 3 presents our testing results using non-CEO family ownership to capture family direct monitoring. Recall that we multiply the non-operating accruals measure by negative one, so a greater value indicates greater conservatism. In Panel A, we estimate equation (1) using all observations, including both family and non-family firm observations. To ensure that our results are not driven by the difference between family and non-family firms, in Panel B we also conduct the analysis using only the 3,680 firm-year observations classified as family firm observations.

In column (1) of Panel A we use the non-CEO family ownership for all family firms, regardless of the identity of the CEOs, and in column (2) we separately examine the impact of non-CEO family ownership in professional CEO, founder CEO, and descendent CEO firms, relative to non-family firms. Column (1) documents a significantly positive coefficient on FAM\_OWN, suggesting that conservatism increases with ownership by founding family

members who are not CEOs. Column (2) shows that this positive relation holds in professional CEO ( $t=3.18$ ) and descendent CEO ( $t=3.47$ ) firms, whereas the coefficient on FAM\_OW in founder CEO firms is significantly negative ( $t=-3.08$ ).<sup>16</sup> Thus, relative to non-family firms, conservatism is increasing with non-CEO family ownership in both professional-CEO and descendent-CEO family firms, but decreasing with non-CEO family ownership in founder-CEO family firms.

In Panel B of Table 3 we restrict the sample to the 3,680 family-firm observations. The results in Panel B are very similar to those documented in Panel A: conservatism is increasing in non-CEO family ownership in both professional and descendent-CEO firms, whereas it is decreasing in non-CEO family ownership in founder CEO firms.

The contrast between the positive coefficient on non-CEO family ownership in descendent CEO firms and the negative coefficient for founder CEO firms is particularly interesting. This finding is consistent with anecdotal evidence confirming the unique powerful status that founders usually enjoy in their firms. In contrast, unlike the founder CEOs who create the family fortune, descendent CEOs do not enjoy undisputed power and status; other family members, through either their equity holdings or membership on the board of directors, monitor descendent CEOs using conservatism to safeguard their own interest.

The results on control variables indicate that large firms, firms with high market-to-book ratio, firms with low performance, firms with high volatility and firms with high institutional ownership are more likely to have large, negative accruals.

Taken together, the results in Table 3 indicate that conservative accounting facilitates the monitoring of managers by family members; thus direct monitoring by family owners and

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<sup>16</sup> When we lump the ownership by non-CEO family owners and family CEOs together and run the above regression, we find an insignificant coefficient on total family ownership. This reinforces the importance of separating ownership by non-CEO family owners from the ownership by family CEOs.

conservatism appear to behave as complements. However, the negative coefficient on non-CEO family ownership for founder CEO firms is consistent with both founders' ability to thwart investor attempt at monitoring via conservatism and/or other family owners' unwillingness to monitor founders, likely because founders' interests and other family members' are aligned.<sup>17</sup>

#### *4.3 Regression results on hypothesis testing: The effect of non-CEO family control*

In this section we analyze the impact of the control of non-CEO family members on the extent of financial reporting conservatism. We capture non-CEO family control using the number of non-CEO family directors. On average, there are one non-CEO family member serving on the board of directors, as reported in Table 1. In addition, over 23% of the professional CEO firms, 21 % of descendent CEO firms, and about 9% of founder CEO firms have two or more family directors. Table 4 reports the regression results. We replace the non-CEO family ownership (FAM\_OWN) with the number of non-CEO family directors (FAM\_CTRL) in equation (1), and run the regression on both the full sample (family and non-family firms) in Panel A and the family firm sample in Panel B. The results remain similar if we use an indicator to capture two or more non-CEO family directors.

Panel A of Table 4 reveals a very similar pattern to Panel A of Table 3: conservatism is increasing with the number of non-CEO family directors for the full sample, and for both professional CEO and descendent CEO firms. This result is consistent with conservative financial reporting facilitating family directors' monitoring of managers. The stronger their control for the board, the more conservative the financial reporting they prefer. In contrast, the coefficient on the non-CEO family director is significantly negative ( $t=-2.33$ ) in founder CEO

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<sup>17</sup> Given that much of the founders' wealth is passed on to spouses and the descendants, founders' entrenchment – embezzlement of corporate resources – likely benefit others as well. Equally likely, founders' interests are aligned with other shareholders. As a result, the agency conflict is low and the demand for conservative reporting by other shareholders is also low (LR 2008).

firms, consistent with either family members' inability or unwillingness to monitor founder CEOs even when they sit on the Board of Directors.

The within family firm results in Panel B of Table 4 reveal a similar pattern, though the coefficient on non-CEO family directors is no longer significant in descendent CEO firms.

#### *4.4 The effects of CEO ownership*

The previous two sections focus on either non-CEO family ownership or non-CEO family control. In this section we analyze whether our results in Tables 3 still hold after we control for the effect of CEO ownership and whether LR's (2008) results hold for both professional CEOs and family CEOs. Professional CEOs include professional CEOs in both family and non-family firms.

We start by replicating LR (2008) and report the results in column (1) of Table 5, using NACC to capture conservatism and using our list of control variables. Consistent with LR (2008), we obtain a significantly negative coefficient of -2.363 ( $t=-3.18$ ) on total CEO ownership. We then separately examine the effects of CEO ownership based on the CEO's identity, and find negative coefficients on all three CEO ownership variables, though the negative coefficient in column (1) appears to be driven primarily by the ownership of founder CEOs and to a less extent that of descendent CEOs. The coefficient on professional CEO ownership is negative, but not significant. This lack of significant results on professional CEO ownership is potentially driven by its small magnitude (see descriptive statistics reported in Table 1, Panel B).

In columns (3) and (4) we examine the effect of non-CEO family ownership after controlling for CEO ownership. Our results show a significantly positive association between non-CEO family ownership and NACC ( $t=2.22$ ,  $t=2.34$ ). The contrast between the positive

coefficient on non-CEO family ownership and the negative coefficient on CEO ownership is interesting: this contrast suggests that while non-CEO family members want more conservative financial reporting as their ownership stake increases, CEOs want the opposite.

In columns (5) and (6) we further break down the non-CEO family ownership by CEO identity into non-CEO family ownership in professional CEO, descendent CEO, and founder CEO firms, while still controlling for the effect of CEO ownership. The results on non-CEO family ownership are consistent with our main results in Table 3: NACC is increasing with non-CEO family ownership in professional and descendent CEO firms but decreasing with it in founder CEO firms.

Taken together, our results in Table 5 suggest that even after controlling for the association between conservatism and CEO ownership as documented by LR (2008), our results on the association between non-CEO family ownership and the extent of conservatism in family firms still hold. In addition, the results suggest that LR's findings on CEO ownership are primarily driven by family CEOs, who have much higher ownership than professional CEOs. These results also explain why Wang (2006) fails to find any difference in the extent of conservatism between family CEO firms and non-family firms. The difference between the two groups of firms reflects the net effect of non-CEO family ownership and family CEO ownership. Since these two variables may have opposite effects on conservatism, aggregating them together, or using an indicator variable in the case of Wang (2006), leads to insignificant results. This analysis indicates the importance of examining the separate effects of non-CEO family ownership and family CEO ownership.

#### *4.5 The effects of Board independence and outside director ownership*

Using data for 306 S&P500 firms from 1999-2001, Ahmed and Duellman (2007) document that conservatism increases with board independence and outside director ownership.

They argue that this is consistent with the stronger monitoring role of the board when board independence and outside director ownership increases.<sup>18</sup> In this section we investigate whether our results on the association between conservatism and non-CEO family equity ownership hold after controlling for board independence and outside director ownership.

Consistent with Ahmed and Dullman (2007), in column (1) of Table 6, we document that total outside director ownership is positively associated with conservatism, and the coefficient on board independence, though positive, is not significant at conventional levels. In columns (2) and (3), we isolate the effect of non-family outside director ownership by separately examining non-family outside director ownership and non-CEO family ownership.<sup>19</sup> In column (3) we further classify non-CEO family ownership based on the CEO identities. The results show that non-family outside director ownership is insignificant in explaining non-operating accruals in both specifications, while board independence becomes marginally significant and positive. Like professional CEO ownership, the lack of significant results for non-family outside director ownership is likely due to its small magnitude and low power of tests.

More importantly, our results on non-CEO family equity ownership variables remain unchanged: after we control for board independence and non-family outside director ownership, conservatism is increasing in family ownership in professional and descendent CEO firms but decreasing in founder CEO firms. In addition, the significant impact of outside directors seems to be driven by non-CEO family directors.

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<sup>18</sup> In contrast, using a larger and more recent sample (1,519 firms over the time period 2001 to 2004), LaFond and Roychowdhury (2008) find a negative association between conservatism and *total* director ownership, where total director ownership includes inside director ownership as well as outside director ownership.

<sup>19</sup> In family firms the category of ‘outside directors’ include family members who serve as non-executive directors.

## 5. Conclusion

Conservatism plays an important role in accounting theory and practice and has become the center of debate in recent years due to regulatory attempt to move to “neutrality”. In this paper we investigate the monitoring role of conservative financial reporting for a group of large, dominant shareholders – non-CEO family members. While studies examining the contracting role of conservatism abound, research on the monitoring role of conservatism is sparse. With the exception of Wang (2006), who use indicator variables to capture different types of family firms in his study of earnings quality, other studies focus on the monitoring by small investors with diffuse ownership (LR 2008) or the monitoring by the board of directors (AD 2007).

We focus on an important group of dominate shareholders – founding family owners. More than 46% of the firms in the S&P 1500 indices are family firms. Family owners hold substantial equity ownership in these firms (average family equity ownership is 17%). We separate the monitors from managers who are being monitored because family members can also serve as CEOs. That is, we focus on the ownership and control of those family members who do not serve as CEOs.

Relative to other shareholders, including institutional investors, family owners have both greater incentives and greater means to monitor managers. The greater incentives arise from family owners’ under-diversified shareholding and long investment horizon – their wealth tends to be disproportionately tied up in the firms, and their investment horizon generally spans generations. Family owners also have greater means to monitor managers due to their significant ownership and their significant presence on the board of directors. The relation between family direct monitoring and monitoring through conservatism depends on whether these two are complements or substitutes. In the presence of separation of management and ownership, non-CEO family owners can benefit from the monitoring role of conservatism and

we can observe a positive relation between non-CEO family ownership and conservatism. On the other hand, if family owners perceive conservatism to be costly as it can lead to biased financial reporting and they do not need to rely on conservative financial reporting to discipline managers, we would observe a negative relationship.

Using non-operating accruals as our proxy for conservatism, we find that conservatism is *increasing* in non-CEO family ownership and directorship in professional and descendent CEO firms but *decreasing* with non-CEO family ownership and directorship in founder CEO firms. This result is robust after we further control for the impact of CEO ownership, board independence, and non-family outside director ownership. Thus, our results indicate that family members view conservative reporting as a useful tool to discipline managers and its importance/use increases with family equity holdings and representations on the board. In contrast, family owners are either unwilling or unable to monitor founder CEOs, perhaps due to founder CEOs' unique powerful positions in the firms they started. This is consistent with both an incentive alignment argument that founder CEO's incentives are more aligned with other family members and other shareholders (LR 2008), and an entrenchment story when founders do not want to provide conservative reporting.

This paper contributes to the literature on conservatism by documenting the monitoring role of conservatism for family owners, the most predominant type of large, under-diversified shareholders in the U.S. As such, it highlights an important determinant of conservatism that is little studied in the literature: family ownership and control. Our results also highlight the importance of separating monitors from CEOs who are being monitored.

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**Table 1**  
**Sample Composition**

This table reports the composition of our sample, which consists of 8,264 firm-years from 1,204 firms in the S&P 1500 index (S&P 500, S&P MidCap 400, and S&P SmallCap 600 indices) covering the period 1996-2005.

*Panel A Sample composition*

	Number of firm-years	Percent	Number of firms	Percent
Total	8,264	100%	1,204	100%
<i>Composition by S&amp;P index</i>				
S&P 500	3,383	41.0%	426	35.4%
S&P Mid Cap 400	2,242	27.1%	330	27.4%
S&P Small Cap 600	2,639	31.9%	448	37.2%
<i>Composition by firm type</i>				
Family firms*	3,763	45.5%	606	50.3%
Non-family firms	4,501	54.5%	598	49.7%
<i>Composition of family firms by CEO type</i>				
Founder CEO firms	1,494	18.1%	302	25.1%
Descendent CEO firms	736	8.9%	99	8.2%
Professional CEO family firms	1,533	18.6%	205	17.0%

\* Family firms refer to firms where members of the founding family, either by blood or marriage, continue to hold positions in top management, are on the board, or are blockholders of the company.

**Table 1 (Continued)***Panel B Descriptive statistics of ownership variables and governance variables separately for family and non-family firms*

	All Firms			Family firms			Non-family firms		
	N	Mean	Median	N	Mean	Median	N	Mean	Median
Non-CEO family ownership	8,264	0.054	0.000	3,763	0.122	0.063	4,501	0.000	0.000
Non-CEO family directorship	8,264	0.528	0.000	3,763	1.170	1.000	4,501	0.000	0.000
Family ownership	8,264	0.078	0.000	3,763	0.171	0.093	4,501	0.000	0.000
CEO ownership	8,213	0.024	0.003	3,741	0.045	0.018	4,472	0.005	0.002
Outside blockholder ownership	8,264	0.170	0.154	3,763	0.152	0.135	4,501	0.186	0.170
Blockholders	8,264	0.817	1.000	3,763	0.780	1.000	4,501	0.847	1.000
Board size	8,264	9.517	9.000	3,763	9.215	9.000	4,501	9.770	10.000
Board independence	8,264	0.665	0.667	3,763	0.600	0.600	4,501	0.720	0.750
Total outside director ownership	8,110	0.037	0.005	3,680	0.062	0.011	4,430	0.017	0.003
Non-family outside director ownership	8,110	0.015	0.004	3,680	0.012	0.004	4,430	0.017	0.003

Definition of variables:

- Non-CEO Family ownership* = Proportion of shares owned by founding family members who are not the CEO in year t;
- Non-CEO Family directorship* = The number of founding family members who are not the CEO but are directors on the board in year t;
- Family ownership* = Proportion of shares owned by founding families in year t;
- CEO ownership* = Proportion of shares owned by CEOs in year t;
- Outside blockholder ownership* = Proportion of shares owned by non-family outside blockholders ( $\geq 5\%$ ) in year t;
- Blockholders* = The blockholder indicator variable, defined as 1 if there is an outside blockholder (i.e., a non-management, non-director, non-founding-family blockholder) in year t;
- Board size* = Board size in year t, measured as the number of directors on the board;
- Board independence* = Proportion of independent directors on the board; as in prior research, independent directors refer to those who are not corporate executives and have no business relationship with the company;
- Total outside director ownership* = Percentage of shares owned by all outside directors, including non-executive family directors, in year t;
- Non-family outside director ownership* = Percentage of shares owned by non-family outside directors in year t. This variable includes ownership of directors who are neither executives nor family members.

Note that all differences between family and non-family firms are significant at the 5% level or better.

**Table 1 (Continued)***Panel C Industry distribution of sample firm-years, by firm type*

Industry (per Fama and French 1997)	Non-family firms frequency	Family firms frequency	% of family firms
Food products	95	93	49%
Recreational products	20	46	70%
Entertainment	19	23	55%
Printing and publishing	30	90	75%
Consumer goods	94	95	50%
Apparel	69	90	57%
Healthcare	84	49	37%
Medical equipment	106	115	52%
Pharmaceutical products	162	151	48%
Chemicals	177	97	35%
Rubber and plastic products	20	29	59%
Construction materials	85	92	52%
Construction	48	65	58%
Steel works, etc.	100	42	30%
Machinery	239	123	34%
Electrical equipment	85	45	35%
Automobile and trucks	89	74	45%
Petroleum and gas	221	124	36%
Utilities	555	36	6%
Telecommunications	41	45	52%
Personal services	26	47	64%
Business services	378	326	46%
Computers	144	108	43%
Electronic equipment	270	357	57%
Measuring and control equipment	151	62	29%
Business supplies	145	71	33%
Transportation	104	151	59%
Wholesale	108	189	64%
Retail	218	365	63%
Restaurants, hotel, motel	67	112	63%
Banking	40	27	40%
Insurance	129	143	53%
Trading	93	128	58%
Other*	279	126	31%

\* Other industries include those industries that have less than 20 observations: Agriculture, Aircraft, Alcoholic beverages, Candy and soda, Coal, Defense, Fabricated products, Miscellaneous, Nonmetallic mining, Precious metals, Real estate, Shipbuilding and railroad equipment, Shipping containers, Textiles, and Tobacco products.

**Table 2**  
**Descriptive Statistics on Test Variables**

This table reports the descriptive statistics for the test variables for the full sample (8,264).

*Panel A Descriptive statistics of test variables*

	Mean	Std.	Q1	Median	Q3
NACC	0.527	3.661	-1.392	0.389	2.267
FAM_OWN	0.054	0.131	0.000	0.000	0.031
FAM_CTRL	0.528	0.935	0	0	1
SIZE	7.627	1.488	6.514	7.480	8.560
MB	3.463	3.124	1.679	2.472	4.036
LEV	0.225	0.171	0.070	0.219	0.342
LIT	0.230	0.421	0.000	0.000	0.000
ROA	0.067	0.078	0.027	0.059	0.105
RVOL	0.025	0.011	0.017	0.023	0.031
AC	9.318	7.878	3.000	8.000	14.000
INST	0.589	0.278	0.469	0.652	0.788

*Panel B Pearson correlation matrix for test variables\**

	NACC	SIZE	MB	LEV	LIT	ROA	RVOL	AC
SIZE	<b>0.028</b>							
MB	0.004	<b>0.304</b>						
LEV	0.009	0.012	<b>-0.089</b>					
LIT	<b>0.035</b>	<b>0.110</b>	<b>0.122</b>	<b>-0.198</b>				
ROA	<b>-0.209</b>	<b>0.116</b>	<b>0.432</b>	<b>-0.280</b>	<b>0.063</b>			
RVOL	<b>0.049</b>	<b>-0.108</b>	<b>0.114</b>	<b>-0.189</b>	<b>0.259</b>	<b>-0.105</b>		
AC	<b>0.058</b>	<b>0.415</b>	<b>0.259</b>	<b>-0.040</b>	<b>0.204</b>	<b>0.147</b>	-0.009	
INST	<b>0.064</b>	<b>-0.061</b>	<b>0.036</b>	<b>-0.068</b>	<b>0.089</b>	<b>0.054</b>	<b>0.038</b>	<b>0.395</b>

\*Numbers in bold indicate that the correlations are significant at the 5% level or better.

## Table 2 (Continued)

Notes to Table 2:

Definition of variables:

*NACC* = The average of non-operating accruals for three years centered on year *t*. Non-operating accruals each year is measured as:  
–  $100 \times \{ \text{Total accruals (before depreciation)} - \text{Operating accruals} \} / \text{lagged total assets}$   
=  $-100 \times \{ [(\text{Net Income} + \text{Depreciation}) - \text{Cash flow from operations}] - (\Delta \text{Accounts receivable} + \Delta \text{Inventories} + \Delta \text{Prepaid expenses} - \Delta \text{Accounts payable} - \Delta \text{Taxes payable}) \} / \text{lagged total assets}$ ;

*FAM\_OWN* = The proportion of shares held by non-CEO founding family members in year *t*;

*FAM\_CTRL* = The number of non-CEO founding family members who serve as directors in year *t*;

*SIZE* = Year-end market value of equity (Compustat data # 25× #199); log transformation is used in regression analyses;

*MB* = Market to book ratio (Compustat data #25× #199/#60);

*LEV* = Leverage, measured as beginning leverage ratio ( $(\#9 + \#34) / \#6$ );

*LIT* = Litigation indicator, coded as 1 if the firm falls into the industries with the following SIC codes: [2833, 2836], [3570, 3577], [3600, 3674], [5200, 5961], 7370;

*ROA* = Accounting performance, measured as earnings before extraordinary items (Compustat data #18) scaled by lagged total assets (#6);

*RVOL* = Return volatility, measured as the standard deviation of daily stock returns (from CRSP) for year *t*;

*AC* = Analyst coverage, measured as the number of unique analysts issuing earnings forecasts for the firm (from IBES) during year *t*; log transformation ( $\ln(1 + \text{analyst coverage})$ ) is used in regression analyses;

*INST* = Institutional ownership, measured as the aggregate percentage of shares held by institutional investors per CDA in year *t*.

**Table 3**  
**Hypothesis Testing Regression Results – ownership by non-CEO family members**

This table reports the average coefficients from 10 annual regressions (1996-2005) and the corresponding Fama-MacBeth t-statistics (in parentheses) adjusted for auto-correlation using the Pontiff (1996) method. The dependent variable is the negative of three-year average non-operating accruals times 100.

Model:

$$NACC_{i,t} = \alpha + \beta_1 FAM\_OWN_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 MB_{i,t} + \beta_4 LEV_{i,t} + \beta_5 LIT_{i,t} + \beta_6 ROA_{i,t} + \beta_7 RVOL_{i,t} + \beta_8 AC_{i,t} + \beta_9 INST_{i,t} + IndustryDummies + \varepsilon_{i,t} \quad (1)$$

*Panel A: Regression results using both family and non-family firm observations*

	(1)	(2)
	Non-CEO family ownership	Non-CEO family ownership in professional, founder, and descendent CEO firms
Intercept	-1.329 (-2.80)	-1.195 (-2.83)
Non-CEO family ownership	0.697 (2.88)	
Non-CEO family ownership in professional CEO family firms		1.492 (3.18)
Non-CEO family ownership in descendent CEO firms		0.793 (3.47)
Non-CEO family ownership in founder CEO firms		-0.982 (-3.08)
Size	0.096 (2.38)	0.083 (2.39)
Market-to-book ratio	0.123 (5.60)	0.121 (5.36)
Leverage	-0.293 (-0.55)	-0.307 (-0.56)
Litigation indicator	0.128 (0.66)	0.079 (0.41)
ROA	-10.668 (-42.18)	-10.607 (-43.65)
Return volatility	20.408 (2.51)	23.298 (2.68)
Analyst coverage	0.081 (1.08)	0.095 (1.37)
Institutional ownership	0.297 (1.56)	0.241 (1.29)
Industry indicators	YES	YES
N	8,264	8,264
Average adj. R <sup>2</sup>	0.119	0.118

**Table 3 (cont'd)***Panel B: Regression results using only family firm observations*

	(1)	(2)
	Non-CEO family ownership	Non-CEO family ownership in professional, founder, and descendent CEO firms
Intercept	-2.523 (-3.29)	-2.399 (-3.28)
Non-CEO family ownership	0.657 (1.98)	
Non-CEO family ownership in professional CEO family firms		1.297 (2.28)
Non-CEO family ownership in descendent CEO firms		0.958 (5.18)
Non-CEO family ownership in founder CEO firms		-0.911 (-2.60)
Size	0.225 (2.52)	0.215 (2.37)
Market-to-book ratio	0.128 (2.21)	0.136 (2.77)
Leverage	0.143 (0.27)	0.082 (0.17)
Litigation indicator	0.229 (0.84)	0.155 (0.60)
ROA	-12.987 (-8.89)	-13.152 (-11.18)
Return volatility	22.003 (1.47)	21.636 (1.55)
Analyst coverage	-0.020 (-0.04)	-0.014 (-0.11)
Institutional ownership	0.700 (1.30)	0.730 (1.28)
Industry indicators	YES	YES
N	3,680	3,680
Average adj. R <sup>2</sup>	0.161	0.157

Notes to Table 3:

Non-CEO family ownership (FAM\_OWN) is the proportion of shares held by non-CEO founding family members. See notes to Table 2 for definitions of other variables.

**Table 4**  
**Hypothesis Testing Regression Results – control by non-CEO family members**

This table reports the average coefficients from 10 annual regressions (1996-2005) and the corresponding Fama-MacBeth t-statistics (in parentheses) adjusted for auto-correlation using the Pontiff (1996) method. The dependent variable is the negative of three-year average non-operating accruals times 100.

Model:

$$NACC_{i,t} = \alpha + \beta_1 FAM\_CTRL_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 MB_{i,t} + \beta_4 LEV_{i,t} + \beta_5 LIT_{i,t} + \beta_6 ROA_{i,t} + \beta_7 RVOL_{i,t} + \beta_8 AC_{i,t} + \beta_9 INST_{i,t} + IndustryDummies + \varepsilon_{i,t} \quad (1)$$

*Panel A: Regression results using both family and non-family firm observations*

	(1)	(2)
	Non-CEO family control	Non-CEO family control in professional, founder, and descendent CEO firms
Intercept	-1.216 (-3.32)	-1.236 (-3.48)
# of Non-CEO family directors	0.099 (2.32)	
# of Non-CEO family directors in professional CEO family firms		0.219 (7.02)
# of Non-CEO family directors in descendent CEO firms		0.149 (3.47)
# of Non-CEO family directors in founder CEO firms		-0.178 (-2.33)
Size	0.092 (3.19)	0.083 (3.69)
Market-to-book ratio	0.120 (5.54)	0.121 (6.01)
Leverage	-0.320 (-0.54)	-0.208 (-0.31)
Litigation indicator	0.134 (0.57)	0.078 (0.22)
ROA	-11.052 (-34.19)	-10.793 (-34.78)
Return volatility	21.542 (2.42)	23.885 (2.63)
Analyst coverage	0.079 (1.10)	0.087 (1.27)
Institutional ownership	0.280 (1.43)	0.248 (1.18)
Industry indicators	YES	YES
N	8,110	8,110
Average adj. R <sup>2</sup>	0.119	0.120

**Table 4 (Continued)***Panel B: Regression results using only family firm observations*

	(1)	(2)
	Non-CEO family control	Non-CEO family control in professional, founder, and descendent CEO firms
Intercept	-2.260 (-4.09)	-2.387 (-3.91)
# of Non-CEO family directors	-0.027 (-0.67)	
# of Non-CEO family directors in professional CEO family firms		0.114 (2.09)
# of Non-CEO family directors in descendent CEO firms		0.033 (0.60)
# of Non-CEO family directors in founder CEO firms		-0.289 (-2.22)
Size	0.226 (2.63)	0.216 (2.66)
Market-to-book ratio	0.128 (2.32)	0.121 (2.41)
Leverage	0.507 (0.85)	0.451 (0.83)
Litigation indicator	0.226 (0.73)	0.123 (0.25)
ROA	-13.466 (-10.23)	-13.007 (-9.12)
Return volatility	19.377 (1.48)	23.148 (1.59)
Analyst coverage	-0.054 (-0.19)	-0.021 (-0.11)
Institutional ownership	0.699 (1.16)	0.694 (1.26)
Industry indicators	YES	YES
N	3,680	3,680
Average adj. R <sup>2</sup>	0.163	0.165

Notes to Table 4:

# Non-CEO family directors is the number of non-CEO founding family members who sit on the board of directors.

See notes to Table 2 for definitions of other variables.

**Table 5**  
**The Impact of Non-CEO Family Ownership vs. CEO Ownership:**  
**Reconciliation with LR (08)**

This table reports the average coefficients from 10 annual regressions (1996-2005) and the corresponding Fama-MacBeth t-statistics (in parentheses) adjusted for auto-correlation using the Pontiff (1996) method. The dependent variable is the negative of three-year average non-operating accruals times 100. Non-family CEO ownership is the proportion of shares owned by non-family CEOs (and is zero for family CEO firms). See notes to Table 2 for definitions of other variables. For parsimony results on control variables are not tabulated.

	(1)	(2)	(3)	(4)	(5)	(6)
	Total CEO ownership	Separate CEO ownership	Non-CEO family ownership and total CEO ownership	Non-CEO family ownership and separate CEO ownership	Separate non-CEO family ownership and total CEO ownership	Separate non-CEO family ownership and separate CEO ownership
Intercept	-0.993 (-2.54)	-0.990 (-2.84)	-1.132 (-2.52)	-1.154 (-2.82)	-1.180 (-2.83)	-1.164 (-2.74)
Non-CEO family ownership			0.635 (2.22)	0.682 (2.34)		
Professional CEO family firms: non-CEO family ownership					1.237 (2.09)	1.212 (2.10)
Descendent CEO firms: non-CEO family ownership					0.942 (5.49)	1.305 (5.29)
Founder CEO firms: non-CEO family ownership					-0.670 (-1.87)	-0.852 (-3.23)
Total CEO ownership	-2.362 (-3.18)		-2.488 (-3.18)		-2.067 (-2.77)	
Professional CEO ownership		-2.145 (-0.56)		-1.487 (-0.42)		-2.423 (-0.64)
Descendant CEO ownership		-4.282 (-1.83)		-4.643 (-1.91)		-5.381 (-2.22)
Founder CEO ownership		-2.020 (-2.63)		-2.129 (-2.74)		-1.392 (-1.65)
Control variables	YES	YES	YES	YES	YES	YES
Industry indicators	YES	YES	YES	YES	YES	YES
N	8,264	8,264	8,264	8,264	8,264	8,264
Average adj. R <sup>2</sup>	0.122	0.121	0.123	0.121	0.121	0.120

**Table 6**  
**The Impact of Non-CEO Family Ownership vs.**  
**Board Independence and Outside Director Ownership**

This table reports the average coefficients from 10 annual regressions (1996-2005) and the corresponding Fama-MacBeth t-statistics (in parentheses) adjusted for auto-correlation using the Pontiff (1996) method. The dependent variable is the negative of three-year average non-operating accruals times 100. For the definition of board independence, total outside director ownership, and non-family outside director ownership please refer to notes to Panel B of Table 1. See notes to Tables 2 for definitions of other variables. For parsimony results on control variables are not tabulated.

	(1)	(2)	(3)
	Board independence & outside director ownership	Adding non-CEO family ownership	Adding non-CEO family ownership by CEO type
Intercept	-1.328 (-2.79)	-1.548 (-2.54)	-1.477 (-2.50)
Board independence	0.304 (1.56)	0.468 (1.90)	0.409 (1.75)
Total outside director ownership	1.206 (1.91)		
Non-family outside director ownership		0.942 (0.47)	1.132 (0.55)
Non-CEO family ownership		0.812 (2.79)	
Professional CEO family firms: non-CEO family ownership			1.620 (2.96)
Descendent CEO firms: non-CEO family ownership			1.025 (7.01)
Founder CEO firms: non-CEO family ownership			-0.792 (-1.77)
Control variables	YES	YES	YES
Industry indicators	YES	YES	YES
N	8,110	8,110	8,110
Average adj. R <sup>2</sup>	0.120	0.120	0.119