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### Conservatism and Equity Ownership of the Founding Family

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## **Conservatism and Equity Ownership of the Founding Family\***

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## **Conservatism and Equity Ownership of the Founding Family**

### **Abstract**

We investigate the impact of founding family ownership on accounting conservatism. Family ownership is characterized by large, under-diversified equity stake and long investment horizon. These features give family owners both the incentives and the ability to implement conservative financial reporting to reduce legal liability and mitigate agency conflicts with other stakeholders. Since CEOs can have different incentives toward conservatism, we focus on ownership of non-CEO founding family members in our investigation. We find that conservatism increases with non-CEO family ownership, supporting our prediction. This relationship becomes insignificant in family firms with founders serving as CEOs, either due to founder CEOs' incentives to implement more conservative financial reporting or their power to thwart non-CEO family owners' demand for conservatism. Overall, our paper adds to the literature on the impact of founding family ownership on firms' financial reporting policy. Our findings are consistent with the recent evidence in the family firm literature that founding families exhibit substantial incentives to reduce agency and litigation costs and to maximize firm value.

Key words: Family firms, conservatism, family ownership, family control

JEL classification: M41, D8, G32

## 1. Introduction

Conservatism has played an important role in accounting theory and practice over the past several decades.<sup>1</sup> Although studies on the impact of debt-contracting on conservatism abound (e.g., Ahmed *et al.*, 2002; Beatty *et al.*, 2008; Zhang, 2008), very few have examined the role of equity ownership. In this paper we explore how characteristics of an important group of equity owners, founding family owners, affect financial reporting conservatism.

Prior research proposes two key drivers of conservatism: agency costs and litigation costs (e.g., Basu, 1997; Watts, 2003a; Ball and Shivakumar, 2005; Armstrong, Guay, and Weber, 2010). We expect that the unique characteristics of family ownership will lead to greater incentives for family owners to demand conservative financial reporting, because family owners stand to lose more from potential agency costs and litigation costs. First, potential agency problems between shareholders and debt holders and between dominant and other shareholders can lead to *ex ante* price protection by debt holders and shareholders (e.g., high interest rates, stringent loan terms, liquidation of shares) and consequently higher cost of capital. Because founding family ownership is characterized by high ownership stake, multi-generation investment horizon, and a lack of diversification, family owners bear higher costs arising from these agency conflicts. To mitigate these agency costs, family owners have greater incentives to desire and implement conservative financial reporting.<sup>2</sup>

Second, compared to other shareholders, family owners have greater litigation concerns because they bear more litigation cost due to their concentrated and under-diversified holdings in the firm and the multi-generation nature of their holdings (Anderson and Reeb, 2003a; Chen,

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<sup>1</sup> Givoly and Hayn (2000) report that since 1960's, conservatism has been increasing over time.

<sup>2</sup> In fact, prior research has demonstrated that founding family owners are willing to forgo tax savings in order to prevent price discount from shareholders – as tax planning activities can be perceived by other shareholders as family owners extracting rent (Chen *et al.*, 2010).

Chen, Cheng, 2008). Thus, the greater incentives to mitigate litigation concerns also lead family owners to desire and implement conservative financial reporting.

Besides the greater incentives, family owners have the power to influence financial reporting. The large equity ownership of family owners and the fact that many family owners are involved in the daily operation of firms either as managers or as board members give rise to a greater ability to implement more conservative financial reporting.<sup>3</sup>

We note two distinguishing features of our study. First, since our primary interest lies in whether the level of conservatism varies systematically with family ownership, we do not distinguish between conditional conservatism (asymmetric timeliness of reflecting bad news versus good news) and unconditional conservatism (predetermined understatement of the book value of net assets). Though there is no consensus yet on whether contracting induces only conditional conservatism or both conditional and unconditional conservatism (e.g., Watts, 2003a; Ryan, 2006; Qiang, 2007), it is well accepted that litigation concerns induce both conditional and unconditional conservatism. Consistent with our focus on the total level of conservatism, we use non-operating accruals developed and used in prior research (e.g., Givoly and Hayn, 2000; Beatty *et al.*, 2008) as our primary measure of conservatism. This measure captures both conditional (e.g., impairment charges on long-term assets to reflect bad news) and unconditional conservatism (e.g., the immediate expensing of pension for employees hired to work on research and development) (Garcia-Lara *et al.*, 2009, 2010).

Second, the family ownership of interest is the ownership stake held by non-CEO founding-family members. As discussed in more details later, family CEOs can be different from other founding family owners when it comes to accounting conservatism. Prior research

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<sup>3</sup> Prior research documents that shareholders with larger ownership stakes held for longer periods are the ones that are most likely to engage in influencing managerial effort and firm policy (e.g., Gaspar, Massa, and Matos, 2005; Chen, Harford, and Li, 2007).

(LaFond and Roychowdhury, 2008) finds that conservatism decreases with CEO ownership, opposite to what we hypothesize for non-CEO family ownership; combining the potentially opposite effects of family CEO ownership and non-CEO family ownership will introduce bias and reduce the power of the test, making the results difficult to interpret. Focusing on non-CEO family ownership allows us to isolate the impact of non-executive family ownership on conservatism. This focus also helps distinguish our study from prior research which fails to document a significant impact of total family ownership on conservatism (Wang, 2006) and allows us to further explore whether founder CEO affects the association between conservatism and non-CEO family ownership.

We empirically test the association between non-CEO family ownership and the extent of conservative financial reporting using a sample of 8,264 firm-years from 1,204 unique firms in the S&P 1500 index over 1996-2005. The findings are consistent with our prediction that accounting conservatism is increasing in non-CEO family ownership. Our results continue to hold after controlling for CEO ownership, board independence, and director ownership and when we conduct the analyses within family firms. In separate analyses, we also document that family ownership dominates large institutional ownership (alternatively measured as holdings by top 5 institutional investors, dedicated institutional investors, and long-term institutional investors) in impacting the level of conservatism.

We also test the impact of founder CEOs on the strength of the relation between non-CEO family ownership and conservatism. The existence of founder CEOs can negatively impact the strength of this relation. Founder CEOs can implement more conservative accounting to reduce agency conflicts or litigation costs, thus rendering the effect of non-CEO family ownership less important. Alternatively, powerful founder CEOs may overwrite others' demand for more conservative financial reporting, again leading to a weaker association between non-CEO family

ownership and conservatism. Our empirical analyses indicate that the presence of a founder CEO indeed weakens the relationship between non-CEO family ownership and conservatism. We also find some support that this is largely due to incentive alignment between founder CEOs and shareholders, instead of founder CEOs abusing their power.

Our paper contributes both to the literature on conservatism and the literature on the impact of founding family ownership on corporate decisions and firm value. First, our evidence lends support to the argument that accounting conservatism is desired by shareholders who have stronger incentives to reduce potential litigation costs and agency costs, the two fundamental drivers of conservatism (Watts, 2003a, 2003b).<sup>4</sup> Our study complements studies that document a negative relation between CEO ownership and conservatism (LaFond and Roychowdhury, 2008) and a positive relation between conservatism and ownership of directors and certain institutional investors (Ahmed and Duellman, 2007; Ramalingegowda and Yu, 2012).

Second, our paper contributes to the growing literature on founding family owners' impact on firm performance, financial reporting, and tax reporting practices (e.g., Anderson and Reeb, 2003a; Ali *et al.*, 2007; Chen *et al.*, 2008; Chen *et al.*, 2010). Founding family owners are the most dominant type of large, under-diversified shareholders in the U.S. (Anderson, Duru, and Reeb, 2009). On average, family owners hold 17% of the equity in family firms, and family firms account for 46% of S&P 1500 firms. The findings in our study are consistent with the evidence documented in this literature. Contrary to the popular belief that founding family ownership in public firms leads to wealth expropriation by family members, our results

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<sup>4</sup> We extend Wang (2006) who studies earnings quality in family firms and finds that family firms have less persistent transitory losses. We isolate family ownership from CEO ownership and document that CEO ownership and non-CEO family ownership exhibit opposite impacts on conservatism. These opposite results reinforce the importance of separating the ownership of the other family members from that of CEOs: CEO ownership primarily proxies for agency problems between managers and shareholders, while non-CEO family ownership captures family members' concerns with litigation risk, debt costs, and investors' perception of family entrenchment. Our findings highlight how the complexities of the ownership structure of modern corporations influence conservatism.

reinforce the overall evidence that family owners have substantial incentives to mitigate agency and litigation costs and to maximize firm value.

The rest of the paper is organized as follows. Section 2 reviews prior literature and develops our hypothesis. Section 3 describes the sample and variable measurement. Section 4 presents research design and empirical results. Section 5 describes additional analyses and Section 6 concludes.

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

We base our empirical exploration on the theoretical premise articulated in Watts (2003a, 2003b). In his reviews of the conservatism literature, Watts posits that agency costs and shareholder litigation are the two most important drivers of conservatism. The costs arising from agency conflicts and litigation concerns are ultimately borne by shareholders. These costs can be particularly severe for family owners, who have long investment horizon and large ownership stake and are under diversified. Unlike other shareholders, family owners' wealth is disproportionately tied up in their firms and they cannot easily diversify their holdings.<sup>5</sup> Founding families' equity holdings usually span multiple generations; the average age of our sample of family firms is about 50 from the year when the firm was incorporated. Such a unique position gives family owners stronger incentives, *ex ante*, to implement mechanisms, such as conservative financial reporting, to mitigate agency costs and legal liability. Below we discuss these drivers of conservatism and how founding family characteristics are related to these drivers, and develop our hypothesis on family ownership and conservatism. As mentioned in the introduction, our discussion will focus on the influence of non-CEO family ownership.

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<sup>5</sup> Family owners' wealth is usually disproportionately tied up in their own firms. For example, when William Lauder, grandson of the company founder of Estee Lauder, 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')."



## 2.1 Drivers of conservatism

### 2.1.1 Agency conflicts

Agency conflicts lead to price protection that gives rise to a higher cost of capital. Family owners stand to lose the most from such price protection due to their substantial holdings and the under-diversified nature of their holdings. As such, *ex ante* they have greater incentives to desire conservative financial reporting to mitigate such agency costs.

**Equity-debt holder agency cost concerns.** It is well-established in the accounting literature that debt holders prefer conservative financial reporting to guard their investments against distributions to shareholders such as cash payouts in the form of dividends or share repurchases, or against the increased riskiness of the firm's assets through the firm's various investment decisions (e.g., Watts and Zimmerman, 1986). In response to such potential conflicts with shareholders, debt holders price protect themselves by charging a higher interest rate, imposing more stringent terms, or choosing not to lend at all. Watts (2003a) argues that shareholders have incentives, *ex ante*, to use contracting mechanisms, such as conservatism, to mitigate debt holders' price protection.

The costs of debt holders' price protection can be particularly severe for family owners, who hold disproportionately large shares in the firm and whose ownership is under-diversified. We thus expect family owners to have greater incentives to demand and implement conservatism to mitigate such agency costs.

**Owner-manager agency cost concerns.** Another agency conflict shareholders face is with managers. Managers may not be forthcoming with bad news that is detrimental to their own interests (e.g., information about bad projects and poor performance). Conservatism constrains managers' ability to defer reporting bad news and inflate earnings and as a result, it can help mitigate the owner-manager agency conflict (Watts, 2003a; Ball and Shivakumar,

2005). Findings of several recent papers are largely consistent with this prediction. For example, LaFond and Roychowdhury (2008) find that conservatism decreases with managerial ownership, an inverse proxy for owner-manager conflict. LaFond and Watts (2008) document that as the information asymmetry between owners and managers increases, conservatism also rises.

Again with substantial wealth at risk, family owners have greater incentives to guard their wealth from being eroded by opportunistic managers, leading to family owners' preferences for more conservative accounting. It is possible, however, that family owners can address the agency problems more effectively through other means, such as stronger monitoring, so that family ownership itself may not lead to greater demand for conservatism to help address owner-manager conflicts.

**Dominant-small shareholder agency cost concerns.** A less-studied, yet important, agency conflict is the conflict between dominant and other shareholders. Dominant shareholders, due to their large holdings, have more opportunities to extract rent at the expense of other shareholders (e.g., through empire building, perk consumption and earnings manipulation). In turn, other shareholders have incentives to price protect themselves against potential rent extraction by dominant shareholders (Shleifer and Vishny, 1986). Such price protection can come in the form of price discount or liquidation of shares held in the firm (Edmans and Manso, 2009). Thus this agency conflict also induces demand for conservatism, since conservatism can help alleviate empire building and earnings manipulation and reduce the cost of this agency conflict.

Family owners can be perceived as having greater incentives and opportunities to benefit themselves at the expense of other shareholders.<sup>6</sup> We argue that due to the long-term and under-diversified nature of their holdings, family owners have greater incentives to mitigate this perception of other shareholders by implementing conservative financial reporting. Consistent with this argument, empirical research provides support for the contention that family owners are willing to forgo tax savings in order to mitigate other shareholders' perception of potential rent extraction by family owners (Chen *et al.*, 2010).

In sum, agency conflicts between various stakeholders lead to *ex ante* price protection by debt holders and shareholders. The potential higher cost of capital arising from price protection is ultimately borne by shareholders and it impacts family owners more negatively due to their large and under-diversified ownership. As a result, family owners have incentives to *ex ante* desire conservatism to mitigate these agency costs.

### 2.1.2 *Litigation cost concerns*

Accounting research has long documented that litigation concern under the 1933 Securities Act encourages conservatism because litigation is much more likely when earnings and net assets are overstated than when understated (Beaver, 1998). Conservative financial reporting, by requiring a higher verification standard for gains than for losses, is more likely to generate an understatement of net assets. Furthermore, timely loss recognition under conservatism reduces firms' liability exposure (Basu, 1997; Holthausen and Watts, 2001).

Consistent with these predictions, Basu (1997) finds significant increases in conservatism in the

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<sup>6</sup> Anecdotal evidence shows that founding family members may engage in earning manipulations or misappropriate firm resources for personal use. Adelphia offers an extreme example of family rent extraction. In 2002 three members of the Rigas family that founded Adelphia Communications Corp were arrested and charged with looting the sixth-largest U.S. cable-television company "on a massive scale" (<http://online.wsj.com/article/SB1027516262583067680.html>). The Rigases were charged with hiding \$2.3 billion in debt and stealing company cash to put in their own pockets. The founder John Rigas was found to have ordered 17 company cars and asked the company to purchase 3,600 acres of timberland at a cost of \$26 million to preserve the pristine view outside his Coudersport home. In 2004 John Rigas and his son Timothy Rigas were convicted of conspiracy, bank fraud and securities fraud for looting the cable company and duping its investors.

two high-litigation periods, 1967-1975 and 1983-1990. In a cross-country setting, Ball, Kothari, and Robin (2000) document that conservatism is lower in countries with lower litigation risk. More recently, Blunck (2009) shows that higher *ex ante* litigation risk results in more conservative financial reporting and that after controlling for *ex ante* litigation risk, more conservative financial reporting is associated with fewer litigations and higher dismissal rates of filed lawsuits.

Shareholders ultimately bear the costs associated with lawsuits, including both the direct costs of attorney fees and settlement costs and, more importantly, the indirect costs of the loss in share value following litigations, management time and effort diverted to handle litigation, and reputation damage. Founding family owners, who are usually among the largest shareholders in the firm, stand to lose more and thus have greater incentives to *ex ante* limit their legal liability through conservatism. In addition, Coffee (2006) argues that in the event of litigation shareholders who stay invested end up paying shareholders who no longer invest in the firm. Consistent with family owners' greater concerns with litigation costs, Chen *et al.* (2008) find that family firms are more forthcoming with earnings warnings compared to other firms. Lastly, family owners' wealth is disproportionately tied up in a firm, further strengthening their incentives to seek a reporting regime that limits litigation risk.

Taken together, the above discussion suggests that because of large ownership stake, family owners have greater preferences for conservative financial reporting so as to reduce litigation cost and to mitigate agency costs that arise from equity-debt holder conflicts and dominant-small shareholder conflicts. The agency costs that arise from owner-manager conflict may not concern family owners because family owners can help alleviate such conflict through direct monitoring. Long investment horizon and a lack of portfolio diversification amplify family owners' preferences for conservatism.

The same ownership characteristics that give rise to family owners' greater incentives to demand conservatism also give rise to their greater ability, vis-à-vis other shareholders, to influence managers to implement conservative financial reporting. The recent development in the family firm literature indicates that family owners can influence corporate decisions (e.g., earnings quality, voluntary disclosure, tax planning) even when they do not hold the CEO position. Thus, we formulate our first hypothesis, in alternative form, as follows:<sup>7</sup>

*H1: Ceteris paribus, conservatism is positively associated with non-CEO family ownership.*

## *2.2 Conservatism in the presence of founder CEOs in family firms*

The discussions above highlight two conditions for the positive association between family ownership and conservatism: (1) family owners' preference for greater conservatism due to litigation concerns and other stakeholders' price protection, and (2) family owners' ability to influence financial reporting. Many family firms still have founders as CEOs. The presence of founder CEOs in family firms has the potential to significantly influence the strength of the association between non-CEO family ownership and conservatism.

Prior research and anecdotal evidence suggest that the presence of founder CEOs in family firms can lead to two different scenarios – founder CEO power and founder CEO incentive alignment. Under the first scenario, founder CEOs' incentives are not well aligned with those of other family owners and other shareholders. Instead, founder CEOs use their overwhelming control and power in the firm to advance their own interests, potentially at a cost to firm value.

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<sup>7</sup> Critics of conservatism argue that conservatism allows firm managers to build hidden reserves that they can reverse into future earnings, thus conservative accounting is actually 'aggressive'. Watts (2003a) directly addresses this criticism – future earnings are higher not because these earnings are aggressive, but because these earnings are verified and thus of higher quality (Watts 2003a, page 215). We also note that such criticism is unlikely to hold for founding family owners. The collective empirical evidence to date has shown that family firms have higher-quality earnings (e.g., Wang, 2006). Thus, we do not believe that founding family owners have incentives to understate earnings in one period so as to reverse the reserves back into earnings two or three years in the future to benefit themselves.

At the same time, founder CEOs, relative to other CEOs, can be powerful enough to thwart stakeholders', including other family owners', demand for conservative accounting. Indeed, founder CEOs usually hold an undisputed and powerful status when it comes to decision making, including financial reporting decisions.<sup>8</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). That is, condition (2) as mentioned above, family owners' ability to influence financial reporting, is less likely to be satisfied. Therefore, under this scenario, the association between non-CEO family ownership and conservatism becomes weaker. The impact of founder CEOs themselves on the level of conservatism is likely to be negative, since founder CEOs wish to pursue their own interest without the hindrance of conservatism.

Under the second scenario, founder CEOs' incentives are well aligned with those of other family owners and other shareholders. Compared to descendent CEOs or CEOs hired from outside of the founding family, founder CEOs are likely far more concerned about the legacy of the family name and the sustainability of the enterprises they started. Existing empirical evidence shows that firms run by founder CEOs exhibit better performance than firms run by other CEOs (Villalonga and Amit, 2006). These arguments imply that founder CEOs can have stronger incentives to implement conservatism to reduce litigation and agency costs compared to other CEOs. Thus, condition (1) as discussed above, other family owners' preference for greater conservatism becomes less important, since founder CEO firms will exhibit a higher extent of conservatism regardless of the level of other family members' ownership. The impact

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<sup>8</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).

of founder CEOs themselves on the level of conservatism under this scenario is likely to be positive.

The above discussions imply that while the direction of the impact of founder CEOs on conservatism is unclear, under both the founder CEO power scenario and the founder CEO incentive alignment scenario, the impact of non-CEO family ownership on conservatism is likely weaker when founders are CEOs. Thus, our second hypothesis is as follows:

*H2: Ceteris paribus, the positive relation between non-CEO family ownership and conservatism is weaker in the presence of founder CEOs.*

Note that the above hypothesis focuses on how the association between non-CEO family ownership and conservatism is affected by the presence of founder CEOs. The impact of founder CEOs on the level of conservatism is ambiguous (negative under the founder CEO power scenario and positive under the founder CEO incentive alignment scenario) and hence we do not present a formal hypothesis. Nevertheless, we test this empirically to help us gain additional insights. For instance, if founder CEO firms on average display a higher level of conservatism, then a weaker association between non-CEO family ownership and conservatism is likely a result of incentive alignment rather than a result of founder CEOs thwarting demand for conservatism.

### *2.3 Conditional and unconditional conservatism*

We do not distinguish between conditional and unconditional conservatism in our paper. Conditional conservatism refers to the more timely recognition of bad news than good news in earnings and it is an *ex post* concept and news-dependent. In contrast, unconditional conservatism involves an *ex ante* commitment made by firms to recognize book value of net assets that are below their expected market value during their life time (Ryan, 2006).

We make no distinction between the two types of conservatism for three reasons. First, our investigation centers on the total level of conservatism, including both conditional and unconditional conservatism. Second, while many researchers believe that the distinction between conditional and unconditional is clear cut and only conditional conservatism is useful for contracting (e.g., Basu, 1997; Qiang, 2007), others (e.g., Watts, 2003a; Ryan, 2006) emphasize verifiability more and news-dependence less and argue that unconditional conservatism is also important. Thus, one might argue that while litigation concerns clearly lead to both conditional and unconditional conservatism, agency concerns can also lead to both types of conservatism (Watts, 2003a; Ryan, 2006). Third, Ryan (2006) conjectures that unconditional conservatism can be a far larger contributor to overall conservatism than conditional conservatism. In addition, conditional conservatism can be pre-empted by unconditional conservatism (Beaver and Ryan, 2005; Qiang, 2007).

Taken together, and especially given that our research focus is on the total level of conservatism, we believe that our research setting does not call for a distinction between conditional versus unconditional conservatism. As such, empirically we employ a measure that captures both conditional and unconditional conservatism. We discuss our measure of conservatism in more detail in the next section.

### **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 from Compustat (for financial accounting information), CRSP (for stock return information), IBES (for analyst coverage



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

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. We obtain such information from Hoover's Company Records, company proxy statements, and/or company websites. Third, we merge the above information with firm performance and characteristics data from Compustat, CRSP, and IBES. Additional information about corporate governance and institutional ownership is collected from IRRC and CDA Spectrum, respectively.

Based on the collected information, we follow prior research (e.g., Anderson and Reeb, 2003a) in defining family firms: family firms refer to firms in which founders or their family members (by either blood or marriage) are key executives, directors, or blockholders (defined as those with higher than 5% ownership). We also identify family firms where the founders are CEOs. In this paper, we measure family ownership as the ownership of family members who are not CEOs of the company. We choose this definition as prior research finds that CEO ownership, an inverse proxy for owner-manager agency conflicts, is negatively correlated with conservatism (LaFond and Roychowdury, 2008). We focus on non-CEO family ownership in order to capture family owners' concerns with litigation risk and agency costs that arise from equity-debt holder and large-small shareholder conflicts.

### *3.2 Research design*

### 3.2.1 *Measures of accounting conservatism*

Watts (2003a) defines conservatism as follows: “Conservatism refers to the cumulative financial effects represented in the balance sheet and to income or earnings cumulated since the firm began operation.” We adopt this definition in choosing our empirical proxy for conservatism.<sup>9</sup>

Our primary measure of conservatism, NACC, is non-operating accruals averaged over the three years centered on the year of interest, as developed in Givoly and Hayn (2000). NACC consists of items such as restructuring charges, the effect of changes in estimates, and asset write-downs. 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. We measure non-operating accruals as the difference between total accruals and operating accruals following Givoly and Hayn (2000), who document that cumulative operating accruals increase over time whereas cumulative non-operating accruals decrease over time. This measure of conservatism captures both conditional and unconditional conservatism, consistent with our conceptual focus on total conservatism.

To mitigate the concern that our accrual measure captures random accrual errors or earnings management (which are transitory and likely reverse within a short period of time), we take the average of non-operating accruals over three years centered on the year of interest.

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<sup>9</sup> Penman and Zhang (2002) adopt a similar definition of conservatism: “By conservative accounting we mean choosing accounting methods and estimates that keep the book value of net assets relatively low. Therefore, LIFO accounting for inventories is conservative relative to FIFO (if inventory costs are increasing); expensing research and development (R&D) expenditures rather than capitalizing and amortizing them is conservative; depreciation methods that consistently use short estimated asset lives (so as to record depreciation in excess of economic depreciation) are conservative; and policies that consistently overestimate allowance for doubtful accounts, sales returns, or warranty liabilities are conservative.”

Doing so more properly recognizes the multi-period nature of accounting choices.<sup>10</sup> We also replicate the main analyses using the difference in the skewness between earnings and operating cash flows (Givoly and Hayn, 2000; Beatty *et al.*, 2008) and other alternative measures. We discuss the results using these alternative measures in Section 5.

### 3.2.2 Regression model

To test our hypotheses, we estimate the following regressions:

$$NACC_{i,t} = \alpha + \beta_1 FAM_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 MB_{i,t} + \beta_4 ROA_{i,t} + \beta_5 OCF_{i,t} + \beta_6 RET_{i,t} + \beta_7 RVOL_{i,t} + \beta_8 LEV_{i,t} + \beta_9 AC_{i,t} + \beta_{10} INST_{i,t} + IndustryDummies + \varepsilon_{i,t} \quad (1)$$

$$NACC_{i,t} = \alpha + \beta_1 FAM_{i,t} + \beta_2 FOUNDER_{i,t} + \beta_3 FAM_{i,t} \times FOUNDER_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 MB_{i,t} + \beta_6 ROA_{i,t} + \beta_7 OCF_{i,t} + \beta_8 RET_{i,t} + \beta_9 RVOL_{i,t} + \beta_{10} LEV_{i,t} + \beta_{11} AC_{i,t} + \beta_{12} INST_{i,t} + IndustryDummies + \varepsilon_{i,t} \quad (2)$$

For ease of interpretation, we scale NACC by lagged total assets, express it in percentage, and then multiply it by minus one. Thus, more positive values of NACC indicate greater conservatism. FAM is defined as non-CEO family ownership (FAM\_OWN). We also use an alternative measure to capture family influence, the number of non-CEO family directors in family firms (FAM\_CTRL). Note that FAM is zero for non-family firms. A positive  $\beta_1$  is consistent with H1: conservatism is increasing with non-CEO family ownership and board presence. In equation (2), we add an indicator variable for founder CEO (FOUNDER), coded as one for family firms run by founder CEOs, and its interaction with family ownership to test whether founder CEOs differentially impact the level of reporting conservatism in family firms. A negative (positive)  $\beta_3$  implies that the positive association between non-CEO family

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<sup>10</sup> We elect not to use the market-to-book ratio to measure conservatism in this paper. First, this ratio includes economic rents (Roychowdhury and Watts, 2007). Second, this ratio has been used to measure firm value in the prior family firm studies (e.g., Anderson and Reeb, 2003a; Villalonga and Amit, 2006).

ownership and conservatism is weaker (stronger) for founder CEO firms than for other family firms.

The choice of control variables follows prior research and the measurement of these variables is as follows:

- 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);
- ROA* = Accounting performance, measured as earnings before extraordinary items (Compustat data #18) scaled by lagged total assets (#6);
- OCF* = Cash flows from operations (#308) scaled by lagged total assets (#6);
- RET* = Buy and hold stock return in the fiscal year;
- RVOL* = Return volatility, measured as the standard deviation of daily stock returns (from CRSP) for year t;
- LEV* = Leverage, measured as beginning-of-year leverage ratio ( $[\#9+\#34]/\#6$ );
- AC* = Analyst coverage, measured as the number of analysts issuing earnings forecasts for the firm during year t; log transformation ( $\ln(1+\text{analyst coverage})$ ) is used in regression analyses;
- INST* = Institutional ownership, measured as the percentage of shares held by institutional investors in year t.

Prior research suggests that conservatism likely varies with firm size. Given that family firms are on average smaller, we include firm size (*SIZE*) as a control. Although prior research has not demonstrated a clear link between investment opportunities and conservatism, we nevertheless include market-to-book ratio (*MB*) to control for the potential impact of growth and investment opportunities on reporting conservatism.<sup>11</sup> We include a control for firm performance, *ROA*, since existing research demonstrates systematic performance difference between family and non-family firms (Anderson and Reeb 2003a). Including *ROA* mitigates the concern that the documented difference in reporting conservatism is a by-product of firm performance difference. However, *ROA* can be mechanically related to *NACC* because both are outcome measures from the financial reporting process. Thus, we also include operating cash flows (*OCF*) and stock returns (*RET*) as additional firm performance measures.

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<sup>11</sup> A potential concern is that our growth measure, *MB*, is affected by accounting performance metrics. Thus in a robustness test we replace *MB* with percentage growth in sales. Our results remain unchanged.

We also entertain the possibility that family firms might exhibit different level of conservatism due to differences in the riskiness of investments between family and non-family firms. Risky investments can *ex post* lead to more asset write-downs and restructuring charges, which are captured by our conservatism measure NACC. If family firms tend to engage in riskier investments than non-family firms, it can induce a spurious positive association between family ownership and NACC. However, Shleifer and Vishny (1986) observe that large, undiversified shareholders tend to be more risk averse. In addition, Anderson and Reeb (2003b) document insignificant differences in equity risk (systematic or idiosyncratic) between family and non-family firms. Thus, we do not expect differences in the riskiness of investments to drive our results. Nonetheless, we include return volatility (RVOL) to mitigate the concern that the observed difference in NACC is influenced by differences in the riskiness of investments.

Prior research finds that debt-contracting affects conservatism (e.g., Ahmed *et al.*, 2002; Beatty *et al.*, 2008; Zhang, 2008). Following prior studies, we use leverage (LEV) to proxy for this effect. We also include analyst coverage (AC) and institutional holdings (INST) to mitigate concerns that firms exhibit systematically different conservatism as a response to monitoring from analysts and institutional investors. In a later section (section 5.3) we provide more in-depth analysis of the impact of concentrated institutional shareholdings on conservatism.

Because family and non-family firms differ in industry membership and because accrual recognition varies across industries, we include indicators for Fama and French (1997) industries to capture industry fixed effects.<sup>12,13</sup> To mitigate the influence of outliers, we truncate

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<sup>12</sup> Prior research usually includes an industry based litigation risk indicator to control for the impact of litigation concerns on reporting conservatism. Since we include industry fixed effects, this litigation indicator is already embedded.

<sup>13</sup> Family firms are on average younger than non-family firms. The average age (the number of years from the founding of the firm) is 48 for family firms and 73 for non-family firms. We include the log transformation of firm age as an additional control variable and our results are similar. We do not include firm age in the main regression because doing so reduces sample size and there is no well-accepted argument why conservatism should vary with firm age/maturity.

the top and 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 model specifications are panel regressions, within-firm autocorrelation can lead to biased standard errors. Therefore our t-statistics are calculated based on standard errors adjusted for firm and year clustering, as recommended by Petersen (2009).<sup>15</sup>

## 4. Empirical Findings

### 4.1 Sample composition and descriptive statistics

Table 1 presents our sample composition and descriptive statistics. Panel A shows that of the 1,204 unique firms in our sample, about half are classified as family firms, and close to 46% of the sample firm-year observations are from family firms. These statistics are consistent with prior research and attest to the significant presence of family firms in the U.S. economy. Among the family firm-year observations, approximately 41% (1,533/3,763) are managed by professional CEOs hired from outside the founding family, whereas close to 40% are managed by founder CEOs and the rest 20% are managed by descendant 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 is on average one non-CEO family member serving on the board of directors.<sup>16</sup> Including the ownership of family CEOs, family ownership is on average 17.1% for family firms. Average CEO ownership is about 0.5% for non-family firms and 4.5% for family firms. On average, there are 9.5 directors and 66.5% of them are independent. Family

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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.

<sup>15</sup> We also estimate cross-sectional regressions for each year of the sample, calculate the time-series mean of the coefficient estimate and then compute autocorrelation-adjusted Fama-MacBeth (1973) standard errors using the method suggested by Pontiff (1996). The results are similar to those reported.

<sup>16</sup> Untabulated results show that the number of board seats held by non-CEO family members ranges from zero to six.

firms have smaller and less independent boards. In addition, family firms have higher total outside director ownership (6.2% vs. 1.7%) but lower non-family outside director ownership (1.2% vs. 1.7%).<sup>17</sup> All of the mean and median differences between family and non-family firms discussed above are significant at the 0.05 level or better.

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, Electronic Equipment, Transportation, Wholesale and Retail, Restaurants, and Trading. In contrast, non-family firms outweigh family firms in Healthcare, Chemicals, Steel Works, Machinery, Electrical Equipment, Petroleum and Gas, Utilities, Measuring and Control Equipment, and Business Supplies. We control for industry clustering by including industry indicator variables in our regression analysis.

We present the descriptive statistics and correlations 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 for the test variables. The correlations between NACC and family ownership and control variables are insignificant at the conventional levels. The family ownership and control variables (FAM\_OWN and FAM\_CTRL) are highly correlated with a correlation coefficient of 0.546. Consistent with prior research, family ownership and control variables are negatively correlated with firm size, leverage, analyst coverage, and institutional ownership, and positively correlated with firm performance. Though most of the correlation coefficients among other independent variables are significant, the coefficients are fairly small with the exception of the correlation

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<sup>17</sup> The definition of ‘outside directors’ in existing research generally includes non-executive directors who are family members. We use this definition to be comparable to prior research, but in a later analysis we also isolate outside directors who are non-family members to more clearly distinguish between family and non-family director holdings.

between ROA, market-to-book ratio, and OCF ( $\rho[\text{ROA}, \text{MB}] = 0.432$ ,  $\rho[\text{ROA}, \text{OCF}] = 0.648$ ) and that between analyst coverage and institutional ownership ( $\rho[\text{AC}, \text{INST}] = 0.630$ ). One should keep these correlations in mind when interpreting the results on these variables.

#### *4.2 Regression results on the effect of non-CEO family ownership and control*

Table 3 presents our test results using non-CEO family ownership (FAM\_OWN) and non-CEO family directorship (FAM\_CTRL) to capture family ownership and control. Recall that we multiply the non-operating accruals measure by negative one, so a greater value of NACC indicates greater conservatism. We estimate equation (1) using all observations, including both family and non-family firm observations, as well as using only the family firm observations.<sup>18</sup>

In Panel A we use the non-CEO family ownership (FAM\_OWN) to test H1. Column (1) reports the results using the full sample and Column (2) reports the results using only the family firm observations. Column (1) shows a significantly positive coefficient on FAM\_OWN ( $t=3.24$ ), suggesting that conservatism increases with the ownership of founding family members who are not CEOs, consistent with H1.<sup>19</sup> Column (2) restricts the sample to the family-firm observations. The results are very similar to those in Column (1): conservatism increases with non-CEO family ownership.

The results on the control variables indicate that large firms and firms with high market-to-book ratio, low ROA, high operating cash flows, high stock returns, and high volatility are more likely to have large, negative accruals. The coefficients on leverage, analyst coverage, and

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<sup>18</sup> Restricting the analysis to family firm observations also helps mitigate potential concerns of survivorship bias. If better performing firms are more likely to remain as family firms, it will lead to better performance in family firms than in non-family firms. At the same time, note that the survivorship bias is more likely to impact firm performance/value than firms' financial reporting choices and we have already controlled for performance in the regressions.

<sup>19</sup> Note that to the extent that family firms exhibit better performance than non-family firms (e.g., Anderson and Reeb 2003a) and given that our NACC measure is negatively correlated with ROA (Table 2, Panel B), we would expect to find family firms to be less conservative than non-family firms, contrary to our finding. This further suggests that it is unlikely that our results are driven by performance differences between family and non-family firms.



institutional ownership are largely insignificant. One possible reason for the lack of significant results for leverage is that leverage may not be a good proxy for debt contracting costs.

To illustrate that family CEOs differ from non-CEO family owners in their preferences for conservatism and to highlight the importance of isolating non-CEO family ownership, columns (3) and (4) of Panel A report the results using total family ownership, including both CEO and non-CEO family ownership. Not surprisingly, the coefficient on total family ownership is not significant (at best marginally significant in Column (3)). This result confirms the importance of separating ownership by non-CEO family owners from ownership by family CEOs.

In Panel B we replace non-CEO family ownership (FAM\_OWN) with the number of non-CEO family directors (FAM\_CTRL) as an alternative proxy for family influence. On average, there is one non-CEO family member serving on the board of directors, as reported in Table 1. The results remain similar if we use an indicator to capture two or more non-CEO family directors.

The results in Panel B are similar to those in Panel A. Conservatism increases with the number of non-CEO family directors for the full sample. Thus, the stronger family owners' influence on the board, the more conservative the financial reporting. The coefficient on FAM\_CTRL in Column (2) (within family firms) is insignificant at conventional levels, likely due to the low variation in the number of non-CEO family directors within the family firm sample.

We also estimate equation (1) using the number of family directors, including family CEO, and report the results in columns (3) and (4) of Panel B. The results are similar to those based on non-CEO family directors.

#### *4.3 Regression results on the effect of founder CEOs*

While the last section documents a significantly positive relationship between non-CEO family ownership and the extent of financial reporting conservatism, this relationship can be weaker in the presence of a founder CEO, as stated in H2. To test H2, we estimate equation (2) over the full sample and the family-firm subsample, using FAM\_OWN and FAM\_CTRL as alternative proxies for founding family influence. We focus on the interaction between these two proxies and a founder CEO indicator. The results are presented in Table 4.

Panel A shows that the coefficient on FAM\_OWN continues to be significantly positive, consistent with the results in Table 3. More importantly, the coefficient on the interaction term  $FAM\_OWN \times FOUNDER$  is significantly negative in both the full sample and the family-firm subsample. This negative interaction term renders the net impact of non-CEO family ownership on conservatism insignificant in founder CEO firms ( $t=-1.00$  and  $-0.65$  for the full sample and the family-firm subsample). When we replace FAM\_OWN with FAM\_CTRL in Panel B of Table 4, we find qualitatively similar results.

It is worth noting that the coefficients on the Founder CEO indicator are always positive, though only significantly positive in Panel B of Table 4 when we use FAM\_CTRL in place of FAM\_OWN. This result is more consistent with founder CEOs sharing family owners' desires to curb litigation concerns and the perception of family entrenchment, and conservative financial reporting serving as one way to achieve that goal; it is less consistent with founder CEOs using their power to entrench themselves and thwarting other family owners' demand for conservatism. As discussed in the hypothesis development section (Section 2.2), if founder CEOs are entrenched and do not wish to be constrained by conservative financial reporting, the coefficient on the founder CEO indicator (FOUNDER) will be negative. On the other hand, if founder CEOs' incentives are well-aligned with those of other owners, they would desire more conservative financial reporting out of litigation cost and agency cost concerns and the

coefficient on FOUNDER will be positive. The positive coefficient on FOUNDER seems to indicate that founder CEOs are well-aligned with other shareholders in their incentives to seek conservative financial reporting.

## **5. Additional Analyses**

### *5.1 The effect of CEO ownership*

In this section we analyze whether our results in Tables 3 and 4 still hold after we control for the effect of CEO ownership. For parsimony we omit the reporting of control variables going forward. We tabulate the results using the full sample and non-CEO family ownership for simplicity, while noting that the results of all additional analyses for the family-firm subsample or using the non-CEO family control measure are qualitatively similar.

We start by replicating LaFond and Roychowdury (2008) and report the results in Column (1) of Table 5. Consistent with LaFond and Roychowdury (2008), we obtain a significantly negative coefficient ( $t=-3.46$ ) on total CEO ownership. In Column (2) we examine whether non-CEO family ownership still has a positive impact on conservatism after controlling for CEO ownership. Consistent with H1 and Table 3's findings, the coefficient on non-CEO family ownership is significantly positive. The contrast between the positive coefficient on non-CEO family ownership and the negative coefficient on CEO ownership suggests that while non-CEO family members want more conservative financial reporting, CEO ownership is negatively correlated with conservatism, since agency costs of owner-manager conflicts are reduced with high CEO ownership (LaFond and Roychowdury, 2008).<sup>20</sup>

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<sup>20</sup> The opposite signs on non-CEO family ownership and CEO ownership also help explain why Wang (2006) fails to find any difference in the extent of conservatism (proxied by less persistent transitory losses in his paper) between family CEO firms and non-family firms. The difference between the two groups of firms reflects the combined effects of non-CEO family ownership and family CEO ownership on conservatism. Since these two variables have opposite effects on conservatism, aggregating them together, or using an indicator variable as in

In Column (3) we include the founder CEO indicator and the interaction between non-CEO family ownership and the founder CEO indicator. We again document a significantly negative coefficient on the interaction between non-CEO family ownership and the founder CEO indicator. Thus, our primary results from Table 3 and Table 4 continue to hold. Note also that the significantly positive coefficient on the Founder CEO indicator is consistent with our findings in Table 4.

Taken together, Table 5 suggests that even after controlling for CEO ownership, our results on the association between non-CEO family ownership and the extent of conservatism in family firms still hold.

### *5.2 The effects of board independence and outside director ownership*

Using data for 306 S&P 500 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. In contrast, using a larger and more recent sample (1,519 firms over the 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. In this section we investigate whether our results on the association between non-CEO family ownership and conservatism hold after controlling for board independence and outside director ownership.

Consistent with Ahmed and Duellman (2007), in Column (1) of Table 6, we document that total outside director ownership is marginally positively associated with conservatism, and the

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Wang (2006), leads to insignificant results. This re-enforces the importance of examining the effects of non-CEO family ownership and CEO ownership separately.

coefficient on board independence, though positive, is not significant at conventional levels. Since in family firms the category of ‘outside directors’ includes family members who serve as non-executive directors, 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. In Column (3) we further interact non-CEO family ownership with the founder CEO indicator. The results show that non-family outside director ownership is insignificant in both specifications, while board independence is marginally significant and positive in one specification. The lack of significant results for non-family outside director ownership is likely due to its small magnitude and the resulting low power of tests.

More importantly, our results on non-CEO family ownership remain unchanged: after we control for board independence and non-family outside director ownership, conservatism in family firms increases with non-CEO family ownership but this association is weakened with the presence of founder CEOs.

### *5.3 The effect of concentrated institutional ownership*

We argue that family ownership dominates institutional ownership in influencing financial reporting conservatism, since family owners have longer investment horizons and less diversified holding hence stronger incentives to reduce litigation and agency costs. Family owners also have greater abilities at influencing firm policies than institutional investors since family owners are more actively involved in running the firm as directors. We empirically test this conjecture by examining the impact of concentrated institutional ownership on conservatism, since the institutional investors with higher holdings and/or longer investment horizons are the ones that are most likely to exert significant influence on firms’ financial reporting decisions.

We measure concentrated institutional ownership using the following three alternative proxies: the percentage of holdings by the top 5 institutional owners, by dedicated institutional owners (Bushee, 1998), and by long-term institutional owners (Gasper *et al.*, 2005). We also include other institutional ownership, the difference between total institutional ownership and concentrated institutional ownership, in the regressions for completeness. We thus drop the control variable of total institutional ownership (INST) from the regressions. The results are reported in Table 7. Table 7 shows that none of the coefficients on the three proxies for concentrated institutional holdings are significant at conventional levels. In contrast, our results on non-CEO family ownership continue to hold. In sum, the results confirm that family ownership dominates institutional ownership in influencing accounting conservatism.

#### *5.4 Alternative measures of conservatism*

In our primary empirical analyses we use non-operating accruals (NACC) to capture the extent of conservatism in financial reporting. We also employ alternative ways to measure conservatism. We discuss them below.

##### *5.4.1 The difference in the skewness of earnings and cash flows*

We replicate the primary analyses using the difference in the skewness of earnings and cash flows, to corroborate our findings. This measure has been used in prior research (Givoly and Hayn, 2000; Beatty *et al.*, 2008) to capture the extent of conservatism. The intuition behind this measure is that conservatism will lead to greater left-skewness in the distribution of earnings, relative to the distribution of cash flows, since firms take large negative charges to reflect bad news. We measure the skewness of cash flows and earnings over three-year time periods centered on the year of interest. Specifically, skewness is defined as  $y = E(x - \mu)^3 / \sigma^3$ , where  $\mu$  and  $\sigma$  are the mean and standard deviation of the  $x$  distribution, where  $x$  is ROA or CFO/Assets. We capture the difference between the skewness of earnings and cash flows by

taking the difference:  $SKEW = \text{skewness}(ROA) - \text{skewness}(CFO/Assets)$ . Similar to the NACC measure, we 1) multiple the skewness difference by  $-1$  so that greater values of SKEW indicate greater conservatism, 2) truncate the top and bottom 1% of the SKEW measure and remove observations with studentized residuals greater than 3. Our results (untabulated; available upon request) using SKEW are weaker than, but qualitatively similar to, those obtained using NACC.

#### 5.4.2 *Conservatism measured using the Basu (1997) approach*

A widely-used measure of conservatism in the literature is the Basu asymmetric timeliness measure (Basu, 1997), which captures conditional conservatism. Using Basu's measure can be problematic in our setting for two reasons. First, we are interested in the total level of conservatism, not just conditional conservatism, because litigation cost concerns induce both conditional and unconditional conservatism (Watts, 2003a; Qiang, 2007). Second, the factors that drive differential demand for conservatism also drive differences in voluntary disclosure (e.g., litigation costs). For example, firms concerned with litigation costs are more likely to disclose bad news early and they are also more likely to exhibit higher conservatism. In such a case, Givoly *et al.* (2007) find that the Basu measure will understate the degree of conservatism.

The second issue is particularly problematic in our setting, because family firms exhibit different voluntary disclosure behavior from other firms (Ali *et al.*, 2007; Chen *et al.*, 2008). For example, Chen *et al.* (2008) find that family firms, out of greater concerns for litigation, are more likely to give earnings warnings than other firms. In addition, in our research context we have to introduce many interaction terms when using the Basu measure, which results in potentially severe multicollinearity problems.

Nevertheless, we estimate the Basu regression with multiple interaction terms using our non-CEO family ownership variable. Untabulated results (available upon request) show that none of the interaction terms that reflect the impact of non-CEO family ownership on

conservatism is significant at conventional levels, likely due to the inherent issues discussed above.

## **6. Conclusion**

In this paper, we study the impact of founding family ownership on conservatism. We argue that founding family owners' large ownership stake, undiversified holdings, and long investment horizon give rise to their greater concerns over two key drivers of conservatism – agency and litigation costs.

The agency conflicts between equity and debt holders and between family owners and other shareholders can lead to potential price protection from debt holders and other shareholders. The substantial stake of family owners means that these owners stand to bear a large share of the costs of such price protection and the costs of litigation. Family owners therefore have strong incentives to demand conservative financial reporting in order to reduce legal liability and mitigate agency costs. In addition, family owners are actively involved in the firm as directors so that they have abilities to influence financial reporting policies. Thus we expect to find that conservatism increases with family equity ownership. In our empirical tests we focus on the ownership of non-CEO family owners. We also use the number of non-CEO family directors as an alternative proxy for the founding family's influence.

The motivation for the focus on non-CEO family owners is two-fold. First, family firms constitute a significant part of the U.S. economy: more than 46% of the firms in the S&P 1500 index are family firms and non-CEO family owners hold substantial equity ownership in these firms (average ownership is 12%) and on average have one seat on the board of directors. Their ownership and influence make them an ideal candidate to examine the impact of large shareholders on conservatism. Existing studies have focused primarily on the debt contracting



role of conservatism whereas research on the role of equity ownership in influencing conservatism is sparse. Second, by separating the ownership of other family members from the ownership of CEOs, we are able to draw clear inference on the impact of large owners who are not managers.

Since our focus is on the total level of conservatism, we use non-operating accruals as our proxy for conservatism, as this measure captures both conditional and unconditional conservatism. We find that conservatism is *increasing* in non-CEO family ownership and directorship, consistent with our prediction. However, this positive association is ameliorated in founder CEO firms. Further analysis reveals that founder CEO firms tend to exhibit a greater extent of conservatism, thus rendering the ownership of other family members less critical in the implementation of conservatism.

These results still hold after we further control for the impact of CEO ownership, board independence, director ownership, and the ownership of other large shareholders, such as institutional investors with large shareholdings and/or long investment horizons. Thus, our results indicate that conservatism's importance/use increases with family equity holdings and representations on the board.

This paper contributes to the literature on conservatism by examining a little-studied determinant of conservatism: ownership and control by founding family members, the most predominant type of large, under-diversified shareholders in the U.S. Our investigation also extends the family firm literature and our evidence is consistent with the findings of this larger literature: instead of extracting rents from other stakeholders, family owners demonstrate substantial incentives to mitigate agency conflicts and prevent firm value reduction.

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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%
Descendant 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 (higher than 5% ownership) of the firm.

**Table 1 (Continued)***Panel B: Descriptive statistics of ownership and board 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
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;*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 (firm-years)	Family firms (firm-years)	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**

The sample consists of 8,264 firm-years from 1,204 firms in the S&P 1500 index over 1996-2005. This table reports the descriptive statistics for the test variables.

*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	0.000	0.000	1.000
SIZE	7.627	1.488	6.514	7.480	8.560
MB	3.463	3.124	1.679	2.472	4.036
ROA	0.067	0.078	0.027	0.059	0.105
OCF	0.109	0.074	0.062	0.102	0.150
RET	0.175	0.432	-0.096	0.126	0.370
RVOL	0.025	0.011	0.017	0.023	0.031
LEV	0.225	0.171	0.070	0.219	0.342
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 NACC and the test variables\**

	NACC	FAM_OWN	FAM_CTRL	SIZE	MB	ROA	OCF	RET	RVOL	LEV	AC
FAM_OWN	-0.018										
FAM_CTRL	-0.009	<b>0.546</b>									
SIZE	<b>0.033</b>	<b>-0.098</b>	<b>-0.079</b>								
MB	0.004	<b>-0.029</b>	-0.010	<b>0.363</b>							
ROA	<b>-0.209</b>	0.016	<b>0.028</b>	<b>0.143</b>	<b>0.432</b>						
OCF	<b>0.203</b>	0.017	<b>0.038</b>	<b>0.113</b>	<b>0.355</b>	<b>0.648</b>					
RET	<b>-0.025</b>	-0.008	-0.006	<b>-0.121</b>	<b>-0.082</b>	<b>0.206</b>	<b>0.126</b>				
RVOL	<b>0.049</b>	-0.021	-0.016	<b>-0.233</b>	<b>0.114</b>	<b>-0.105</b>	<b>-0.049</b>	<b>-0.064</b>			
LEV	0.010	<b>-0.047</b>	<b>-0.054</b>	<b>0.099</b>	<b>-0.089</b>	<b>-0.280</b>	<b>-0.230</b>	-0.020	<b>-0.189</b>		
AC	<b>0.037</b>	<b>-0.087</b>	<b>-0.064</b>	<b>0.426</b>	<b>0.197</b>	<b>0.120</b>	<b>0.129</b>	0.019	0.021	<b>-0.038</b>	
INST	<b>0.064</b>	<b>-0.042</b>	<b>-0.073</b>	-0.004	<b>0.036</b>	<b>0.054</b>	<b>0.068</b>	<b>0.031</b>	<b>0.038</b>	<b>-0.068</b>	<b>0.630</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 in 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* = Log transformations of year-end market value of equity (Compustat data # 25 × #199);

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

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

*OCF* = Cash flows from operations (#308) scaled by lagged total assets (#6);

*RET* = Buy and hold stock return in the year;

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

*LEV* = Leverage, measured as beginning-of-year leverage ratio ([#9+#34]/#6);

*AC* = Analyst coverage, measured as the number of analysts issuing earnings forecasts for the firm 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**  
**Regression Results – Ownership and Control by Non-CEO Family Members**

The sample consists of 8,264 firm-years from 1,204 firms in the S&P 1500 index over 1996-2005. The regression model is as follows:

$$NACC_{i,t} = \alpha + \beta_1 FAM_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 MB_{i,t} + \beta_4 ROA_{i,t} + \beta_5 OCF_{i,t} + \beta_6 RET_{i,t} + \beta_7 RVOL_{i,t} + \beta_8 LEV_{i,t} + \beta_9 AC_{i,t} + \beta_{10} INST_{i,t} + IndustryDummies + \varepsilon_{i,t}, \quad (1)$$

The dependent variable (NACC) is the negative of three-year average non-operating accruals times 100. FAM is non-CEO family ownership (FAM\_OWN) in panel A and non-CEO family control (FAM\_CTRL) in panel B. See notes to Table 2 for definitions of variables. Firm and year clustered t-statistics are reported in parentheses.

*Panel A: Regression results using family ownership*

	Using non-CEO family ownership: Testing H1			Using total family ownership, including ownership by family CEOs	
	Predicted signs	The full sample (1)	Within family firms (2)	The full Sample (3)	Within family Firms (4)
Intercept		-3.577 (-6.35)	-4.532 (-6.21)	-3.478 (-6.34)	-4.421 (-6.22)
FAM_OWN	+	<b>0.581</b> <b>(3.24)</b>	<b>0.621</b> <b>(2.35)</b>	0.225 (1.84)	0.192 (0.97)
SIZE		0.125 (2.35)	0.224 (2.84)	0.121 (2.70)	0.226 (3.87)
MB		0.069 (3.85)	0.087 (5.14)	0.071 (5.11)	0.088 (3.67)
ROA		-28.609 (-55.23)	-30.654 (-34.23)	-28.720 (-30.82)	-30.879 (-23.34)
OCF		30.016 (60.47)	31.500 (43.19)	29.813 (50.83)	31.034 (24.99)
RET		0.237 (2.15)	0.221 (1.06)	0.251 (2.31)	0.286 (1.83)
RVOL		29.324 (3.75)	25.517 (1.91)	28.005 (3.57)	22.186 (2.34)
LEV		0.058 (0.19)	0.274 (0.64)	0.098 (0.25)	0.481 (1.01)
AC		0.020 (0.18)	-0.018 (-0.19)	0.011 (0.17)	-0.051 (-0.56)
INST		0.089 (1.84)	0.417 (1.12)	0.428 (1.94)	0.618 (1.96)
Industry indicators		YES	YES	YES	YES
N		8,264	3,680	8,264	3,680
Adj. R <sup>2</sup>		0.350	0.390	0.348	0.387

**Table 3 (Continued)***Panel B: Regression results using family control*

	Using non-CEO family control: Testing H1			Using total family control, including board seats held by family CEOs	
	Predicted signs	The full sample (1)	Within family firms (2)	The full Sample (3)	Within family Firms (4)
Intercept		-3.522 (-6.79)	-4.301 (-6.33)	-3.588 (-7.17)	-4.343 (-6.60)
FAM_CTRL	+	<b>0.064</b> <b>(3.39)</b>	<b>-0.023</b> <b>(-1.09)</b>	0.073 (2.26)	-0.005 (-0.14)
SIZE		0.124 (2.38)	0.222 (2.85)	0.128 (3.18)	0.224 (3.88)
MB		0.070 (3.79)	0.087 (4.63)	0.070 (4.99)	0.086 (3.37)
ROA		-28.725 (-53.88)	-30.709 (-33.63)	-28.763 (-34.05)	-30.648 (-24.44)
OCF		29.872 (54.90)	31.074 (35.50)	29.924 (53.74)	31.081 (25.23)
RET		0.252 (2.45)	0.281 (1.42)	0.248 (2.26)	0.283 (1.67)
RVOL		28.359 (3.64)	22.801 (2.07)	28.094 (3.70)	23.276 (2.51)
LEV		0.097 (0.27)	0.495 (1.23)	0.084 (0.21)	0.498 (1.05)
AC		0.007 (0.01)	-0.049 (-0.36)	0.005 (0.09)	-0.052 (-0.57)
INST		0.436 (1.93)	0.540 (0.96)	0.461 (2.40)	0.543 (1.69)
Industry indicators		YES	YES	YES	YES
N		8,264	3,680	8,264	3,680
Adj. R <sup>2</sup>		0.351	0.388	0.351	0.388

**Table 4**  
**The Effect of Founder CEOs**

The sample consists of 8,264 firm-years from 1,204 firms in the S&P 1500 index over 1996-2005. The regression model is as follows:

$$\begin{aligned}
 NACC_{i,t} = & \alpha + \beta_1 FAM_{i,t} + \beta_2 FOUNDER_{i,t} + \beta_3 FAM_{i,t} \times FOUNDER_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 MB_{i,t} \\
 & + \beta_6 ROA_{i,t} + \beta_7 OCF_{i,t} + \beta_8 RET_{i,t} + \beta_9 RVOL_{i,t} + \beta_{10} LEV_{i,t} + \beta_{11} AC_{i,t} + \beta_{12} INST_{i,t} \\
 & + IndustryDummies + \varepsilon_{i,t}
 \end{aligned} \tag{2}$$

The dependent variable (NACC) is the negative of three-year average non-operating accruals times 100. FAM is non-CEO family ownership (FAM\_OWN) in panel A and non-CEO family control (FAM\_CTRL) in panel B. FOUNDER is the founder CEO indicator. See notes to Table 2 for definitions of variables. Firm and year clustered t-statistics are reported in parentheses.

*Panel A: Regression results using family ownership*

	Predicted signs	Full sample (1)	Within family firms (2)
Intercept		-3.394 (-6.33)	-4.071 (-5.71)
FAM_OWN	+	0.888 (4.46)	0.755 (2.68)
FOUNDER	?	0.186 (1.59)	0.084 (0.59)
FAM_OWN × FOUNDER	-	-1.336 (-4.06)	-1.045 (-2.86)
SIZE		0.108 (2.35)	0.185 (2.43)
MB		0.058 (3.85)	0.070 (2.80)
ROA		-28.781 (-55.23)	-31.014 (-33.35)
OCF		30.581 (60.47)	31.753 (43.53)
RET		0.173 (2.15)	0.167 (0.83)
RVOL		27.393 (3.75)	26.773 (1.82)
LEV		0.017 (0.19)	0.032 (0.06)
AC		0.009 (0.18)	-0.013 (-0.05)
INST		0.381 (1.84)	0.456 (1.01)
Industry indicators		YES	YES
N		8,264	3,680
Adj. R <sup>2</sup>		0.388	0.424

**Table 4 (Continued)***Panel B: Regression results using family control*

	Predicted signs	Full sample (1)	Within family firms (2)
Intercept		-3.658 (-6.53)	-4.487 (-5.71)
FAM_CTRL	+	0.136 (4.72)	0.095 (1.71)
FOUNDER	?	0.285 (4.99)	0.299 (3.08)
FAM_CTRL× FOUNDER	-	-0.290 (-2.41)	-0.321 (-1.86)
SIZE		0.134 (2.50)	0.224 (2.80)
MB		0.068 (3.69)	0.086 (4.51)
ROA		-28.697 (-59.51)	-30.401 (-27.88)
OCF		29.869 (57.62)	31.071 (33.43)
RET		0.263 (2.52)	0.260 (1.46)
RVOL		27.449 (3.72)	22.594 (1.90)
LEV		0.154 (0.39)	0.598 (1.35)
AC		-0.006 (-0.15)	-0.050 (-0.37)
INST		0.497 (1.97)	0.462 (0.82)
Industry indicators		YES	YES
N		8,264	3,680
Adj. R <sup>2</sup>		0.354	0.394

**Table 5**  
**The Impact of Non-CEO Family Ownership vs. CEO Ownership**

The sample consists of 8,264 firm-years from 1,204 firms in the S&P 1500 index over 1996-2005. We further require the availability of CEO ownership. The regression model is as follows:

$$\begin{aligned}
 NACC_{i,t} = & \alpha + \beta_1 FAM\_OWN_{i,t} + \beta_2 FOUNDER_{i,t} + \beta_3 FAM\_OWN_{i,t} \times FOUNDER_{i,t} \\
 & + \beta_4 CEO\_OWN_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 MB_{i,t} + \beta_7 ROA_{i,t} + \beta_8 OCF_{i,t} + \beta_9 RET_{i,t} + \beta_{10} RVOL_{i,t} \\
 & + \beta_{11} LEV_{i,t} + \beta_{12} AC_{i,t} + \beta_{13} INST_{i,t} + IndustryDummies + \varepsilon_{i,t}
 \end{aligned}$$

The dependent variable (NACC) is the negative of three-year average non-operating accruals times 100. Non-CEO family ownership (FAM\_OWN) is the proportion of shares held by non-CEO founding family members (and is zero for non-family firms). FOUNDER is the founder CEO indicator. CEO ownership (CEO\_OWN) is the proportion of shares owned by CEOs. See notes to Table 2 for definitions of variables. Firm and year clustered t-statistics are reported in parentheses. For parsimony the results on control variables are not tabulated.

	(1)	(2)	(3)
Intercept	-3.239 (-6.50)	-3.382 (-6.28)	-3.352 (-6.03)
FAM_OWN		0.587 (2.96)	0.822 (4.09)
FOUNDER			0.290 (3.00)
FAM_OWN × FOUNDER			-1.399 (-4.35)
CEO ownership	-1.623 (-3.46)	-1.723 (-3.39)	-2.266 (-6.84)
Control variables	YES	YES	YES
Industry indicators	YES	YES	YES
N	8,213	8,213	8,213
Adj. R <sup>2</sup>	0.345	0.346	0.348

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

The sample consists of 8,264 firm-years from 1,204 firms in the S&P 1500 index over 1996-2005. We further require the availability of board independence and director ownership. The regression model is as follows:

$$\begin{aligned}
 NACC_{i,t} = & \alpha + \beta_1 FAM\_OWN_{i,t} + \beta_2 FOUNDER_{i,t} + \beta_3 FAM\_OWN_{i,t} \times FOUNDER_{i,t} \\
 & + \beta_4 BOARDIND_{i,t} + \beta_5 OUTSIDE\_OWN_{i,t} / nonFAM\_OUTSIDE\_OWN_{i,t} + \beta_6 SIZE_{it} \\
 & + \beta_7 MB_{i,t} + \beta_8 ROA_{i,t} + \beta_9 OCF_{i,t} + \beta_{10} RET_{i,t} + \beta_{11} RVOL_{i,t} + \beta_{12} LEV_{i,t} + \beta_{13} AC_{i,t} + \beta_{14} INST_{i,t} \\
 & + IndustryDummies + \varepsilon_{i,t}
 \end{aligned}$$

The dependent variable (NACC) is the negative of three-year average non-operating accruals times 100. Non-CEO family ownership (FAM\_OWN) is the proportion of shares held by non-CEO founding family members (and is zero for non-family firms). FOUNDER is the founder CEO indicator. Board independence (BOARDIND) is the proportion of independent directors on the board. Total outside director ownership (OUTSIDE\_OWN) is the percentage of shares owned by all outside directors. Non-family outside director ownership (nonFAM\_OUTSIDE\_OWN) is the percentage of shares owned by non-family outside directors. See notes to Table 2 for definitions of variables. Firm and year clustered t-statistics are reported in parentheses. For parsimony the results on control variables are not tabulated.

	(1)	(2)	(3)
Intercept	-3.398 (-6.10)	-3.541 (-6.02)	-3.583 (-6.32)
FAM_OWN		0.539 (2.83)	0.817 (5.38)
FOUNDER			0.190 (1.87)
FAM_OWN × FOUNDER			-1.391 (-4.43)
Board independence	0.150 (1.59)	0.141 (1.67)	0.125 (1.24)
Total outside director ownership	0.477 (1.99)		
Non-family outside director ownership		0.072 (0.04)	0.412 (0.30)
Control variables	YES	YES	YES
Industry indicators	YES	YES	YES
N	8,110	8,110	8,110
Adj. R <sup>2</sup>	0.351	0.350	0.352

**Table 7**  
**The Impact of Non-CEO Family Ownership vs.**  
**Concentrated Institutional Ownership**

The sample consists of 8,264 firm-years from 1,204 firms in the S&P 1500 index over 1996-2005. The regression model is as follows:

$$\begin{aligned}
 NACC_{i,t} = & \alpha + \beta_1 FAM\_OWN_{i,t} + \beta_2 FOUNDER_{i,t} + \beta_3 FAM\_OWN_{i,t} \times FOUNDER_{i,t} \\
 & + \beta_4 INST\_CON_{i,t} + \beta_5 INST\_OTHER_{i,t} + \beta_6 SIZE_{i,t} + \beta_7 MB_{i,t} + \beta_8 ROA_{i,t} + \beta_9 OCF_{i,t} \\
 & + \beta_{10} RET_{i,t} + \beta_{11} RVOL_{i,t} + \beta_{12} LEV_{i,t} + \beta_{13} AC_{i,t} \\
 & + IndustryDummies + \varepsilon_{i,t}
 \end{aligned}$$

The dependent variable (NACC) is the negative of three-year average non-operating accruals times 100. Non-CEO family ownership (FAM\_OWN) is the proportion of shares held by non-CEO founding family members (and is zero for non-family firms). FOUNDER is the founder CEO indicator. Concentrated institutional ownership (INST\_CON) is measured as holdings by the top 5 institutions, by dedicated institutions (Bushee 1998), and by long-term institutions (Gasper *et al.*, 2005) in Column (1), (2), and (3). Other institutional ownership (INST\_OTHER) is the difference between total institutional ownership and concentrated institutional ownership. The list of control variables are the same as in Table 3 except that total institutional ownership (INST) is excluded. See notes to Table 2 for definitions of variables. Firm and year clustered t-statistics are reported in parentheses. For parsimony the results on control variables are not tabulated.

	(1) Top 5 institutional ownership	(2) Dedicated institutional ownership	(3) Long-term institutional ownership
Intercept	-3.346 (-6.92)	-3.454 (-6.50)	-3.370 (-6.34)
FAM_OWN	0.894 (3.82)	0.879 (4.77)	0.929 (4.92)
FOUNDER	0.183 (1.54)	0.186 (1.50)	0.206 (1.78)
FAM_OWN × FOUNDER	-1.346 (-3.95)	-1.337 (-3.89)	-1.383 (-4.29)
Concentrated institutional ownership	0.415 (0.75)	0.004 (0.04)	0.056 (0.10)
Other institutional ownership	0.346 (1.07)	0.527 (2.26)	0.458 (1.81)
Control variables	YES	YES	YES
Industry indicators	YES	YES	YES
N	8,264	8,264	8,264
Adj. R <sup>2</sup>	0.389	0.388	0.389