

Conservative Financial Reporting in Family Firms*

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Abstract

We study the financial reporting conservatism in firms run and/or owned by founding families, relative to non-family firms. Using an accrual-based measure of conservatism, non-operating accruals, we find that family firms are more conservative in financial reporting than non-family firms, but that this relation is driven primarily by family firms run by non-family professional CEOs. Furthermore, we find that conservatism increases with family ownership and directorships in professional CEO family firms, but decreases with family ownership and directorships in firms run by the founder. These results are consistent with the joint hypotheses that conservative accounting can be used to monitor managers and that family ownership and control enhance monitoring of managers in professional CEO family firms, but likely lead to entrenchment in founder CEO firms. Family firms' influence on conservatism continues to hold after we control for CEO ownership, board independence, outside director ownership, and concentrated institutional ownership. Our primary results also hold when using two additional measures of conservatism: the skewness of earnings relative to that of cash flows, and the asymmetric timeliness measure developed in Basu (1997).

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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 plays, providing verifiable information to facilitate the monitoring of management, has not received much attention in the literature (e.g., Watts 2003a; Ball and Shivakumar 2005; Ahmed and Duellman 2007). Outside shareholders demand verifiable information that can be used to monitor managers; by reporting bad news earlier, conservative accounting can curb managers’ tendency to overstate earnings and to invest in negative net present value projects. While ownership structure is likely an important determinant of conservatism, there is little research examining its impact on conservatism (Watts 2003a).¹ In this paper we seek to provide insights on this issue by comparing financial reporting conservatism in family firms relative to that in non-family firms.

Specifically, we investigate how the level of accounting conservatism varies with family ownership and control. We focus on family ownership and control for two reasons. First, they have important implications for the monitoring of managers. Family ownership aligns the interest of family owners with that of other shareholders in monitoring managers and family control empowers them to do so. However, substantial family ownership and control may also

¹ Recently there are three studies examining the relation between various dimensions of ownership structure and accounting conservatism: LaFond and Roychowdury (2008), Ahmed and Duellman (2007), and Wang (2006). We discuss these studies and their relation to our study toward the end of the introduction. Ball and Shivakumar (2005) study differences in conservatism between private and public firms and they find that private firms are less conservative. While related, Ball and Shivakumar (2005) is different from ours and the above studies, which focus exclusively on public firms.

lead to entrenchment of family members. Since conservatism likely varies with both effects, family firms offer a rich setting of examining the monitoring role of conservatism.

Second, family firms are a very important component of the US economy, accounting for approximately 46% of the S&P 1500 firms. A family firm is a firm where members of the founding family continue to hold positions in top management, are on the board of directors, or are blockholders. Founding families have substantial ownership, an average of 17% of the outstanding shares in family firms. Family members are also influential decision makers: nearly 60% of family firms have a family member acting as the CEO and on average each family firm has two directors coming from the founding family. However, despite the prevalence of family firms and the substantial ownership and control of family members in these firms, we know very little about their impact on the extent of accounting conservatism, one of the most important dimensions of financial reporting.

We expect family ownership and control to affect both the monitoring of managers and shareholders' litigation concerns, two of the fundamental drivers of conservatism (Watts 2003a). First, the impact of family ownership and control on litigation-motivated conservative financial reporting is unequivocal: founding families are large, long-term shareholders with under-diversified holdings, and as such are more concerned with litigation costs than the average shareholder (Hutton 2007; Chen, Chen, Cheng, 2008). Conservatism, with the acceleration of bad news and the delay of good news, can reduce litigation risk (e.g., Skinner 1994, 1997). Hence litigation concerns motivate family firms towards more conservative financial reporting.

Second, the impact of family ownership and control on the monitoring-motivated conservatism depends on whether families' interests are aligned with other shareholders. 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 and board membership *empowers* them to influence corporate decisions, including financial reporting. In contrast, in family firms with family members as CEOs, the likelihood of family *entrenchment* makes it possible for either founder CEOs or descendent CEOs to thwart outside shareholders' attempt at monitoring family managers. Thus, to the extent family owners' interests diverge from that of other shareholders at monitoring, we should witness less conservative financial reporting in family firms run by family members.

Taken together, the monitoring and litigation effects of conservative financial reporting imply that family firms with professional CEOs employ more conservative accounting than non-family firms. However, it is unclear *ex ante* whether founder CEO and descendent CEO family firms will be more or less conservative than non-family firms, as the litigation and monitoring effects of conservatism can operate in opposite directions within these family firms.

In this paper, we use cumulative 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. We find that conservatism increases with family ownership in professional CEO family firms. This is consistent with both litigation concerns and shareholders' unified interests in monitoring motivating more conservatism in professional CEO firms. In contrast, we find that conservatism *decreases* with family ownership in founder CEO family firms. Founder CEO firms are more conservative than non-family firms only when family ownership is low (i.e., less than 10%) or when the number of family directors is small (one or two family directors). When family ownership or control is significant, founder CEO firms are less conservative. This is consistent with *entrenched* founder CEOs supplying less conservative financial reporting, dominating the litigation concern. Interestingly, our results also indicate that like professional CEO family firms, family firms run by descendants CEOs are more conservative than non-family firms.

The differences between founder and descendent CEO firms are worth further investigation because the CEO in both cases is a potentially entrenched family member. We conjecture that this difference is likely caused by the differential role of other family members: they might serve as monitors of descendent CEOs but not of founder CEOs. When we separate the ownership of family CEOs from that of non-CEO family members, we find conservatism to be increasing with non-CEO family ownership in descendent CEO firms but decreasing with non-CEO family ownership in founder CEO firms, consistent with our conjecture.

Taken together, our results highlight the intricacies of the monitoring role of conservatism. Conservatism is the highest when shareholders are unified in monitoring managers and are empowered to monitor the managers, as in family firms with professional and descendent CEOs. However, when the CEO is powerful enough to thwart investor attempts at monitoring, conservatism is lower, as is the case with family firms run by founders. The basic inferences are similar when we replicate our primary analyses using two alternative measures of conservatism: the difference in the skewness of earnings and cash flows (Givoly and Hayn 2000; Beatty et al. 2007) and the stock returns-based measure of asymmetric timeliness of earnings (Basu 2007).

Our paper extends the emerging literature on the relation between ownership structure and accounting conservatism by focusing on family ownership and control. LaFond and Roychowdury (2008; hereafter LR) find a lower level of accounting conservatism in firms with higher managerial ownership and in firms with founders acting as CEOs. Ahmed and Duellman (2007; hereafter AD) find that conservatism *increases* with both the proportion and the ownership of outside directors. When studying family firms' earnings quality, Wang (2006) finds that family firms managed by professional CEOs have less persistent transitory losses (a measure of conservatism), while family firms managed by founders or descendants have similar persistence as non-family firms.

Family ownership overlaps with CEO ownership and outside director ownership when family members serve as CEOs or non-executive directors. When we separate family CEO ownership from non-family CEO ownership, we find that conservatism is negatively related to family CEO ownership, but is insignificantly related to non-family CEO ownership. Similarly, we find that once family ownership is taken into account, non-family outside director ownership is not helpful in explaining the extent of financial reporting conservatism. That is, the results on both CEO ownership and outside director ownership appear to be driven by family ownership.

Wang (2006) is the closest study to ours because he also focuses on family firms. We extend Wang's (2006) analyses in several important ways. First, we provide a comprehensive analysis of various dimensions of family ownership and control, all of which have intricate implications for the extent of conservatism. Second, our comprehensive findings enable us to draw less ambiguous inferences, and help us to reconcile conflicting results documented in prior studies. For example, while LR (2008) find that founder CEO firms are less conservative, Wang (2006) finds that they have similar extent of conservatism as non-family firms. We find that the effect of founder CEO depends on the level of family ownership and control. When family ownership or control is low, founder CEO firms are more conservative, consistent with increased litigation concerns of founding family. In contrast, when family ownership or the number of family directors is high, founder CEO firms are less conservative, consistent with the entrenchment argument.² Finally, our more direct measure of accounting conservatism overcomes the limitations of the time-series tests of timeliness of losses, the particular approach

² LR (2008) interpret the less conservative reporting in founder CEO firms as indicative of greater incentive alignment and lower demand for conservative reporting by outside shareholders. When contrasting the results for founder CEO and descendant CEO firms, we interpret our results as more consistent with the entrenchment of founder CEOs and lower supply of conservative reporting. The incentive alignment interpretation implies that the results on family CEO ownership and non-CEO family ownership should be the same, or at least similar, for founder CEO and descendant CEO firms. However, we find strikingly different results, as discussed above. Nonetheless, we acknowledge that we cannot completely distinguish between these two possible explanations and leave this exploration for future research.

employed by Wang (see detailed discussion in Ball and Shivakumar, 2005 and Section 3.2 below).

Our results also shed light on the litigation role of conservatism. When family ownership or the number of family directors is low, all three types of family firms, including those managed by founder CEOs, are more conservative than non-family firms. This result is readily consistent with the litigation argument and is difficult to explain using the monitoring role of conservatism. Also, in untabulated analysis we find that in high litigation industries, all three types of family firms are significantly more conservative than non-family firms, but we do not find such evidence in low litigation industries.

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 provides additional analyses; Section 6 concludes.

2. Related Research and Hypothesis Development

Family firms are characterized by the founding family's concentrated ownership and active involvement in management, either as top executives or as directors. On average, founding families hold 17% of the outstanding equity, 22% of directorships, and CEO positions in 62% of the family firms. In addition, compared to other shareholders, 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 descendents, rather than wealth to consume during their lifetimes.³ Compared to other

³ 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')."

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 are adverse to short-term capital market pressures to report inflated earnings, which can reduce long-term firm value (Stein 1989).⁴ These distinguishing features ought to affect family firms' financial reporting choices, including the extent of accounting conservatism.⁵

Watts (2003a, b) argues that the two fundamental drivers of conservative accounting are (1) the litigation costs arising from failing to disclose bad news in a timely fashion and (2) the need of verifiable information to monitor managers. Below, we briefly outline the arguments underlying each of the two drivers ala Watts, and then discuss how the presence of a founding family affects conservatism.⁶

2.1 The litigation role of conservatism

Accounting conservatism reduces expected litigation costs because of the asymmetric payoffs of litigation (Watts 2003a). Overstating firms' net assets or profits is more likely to result in litigation than understating them, and thus recognizing bad news in a more timely fashion and postponing good news until uncertainty is resolved reduce expected litigation costs (e.g., Skinner 1994, 1997). Litigation related costs include both direct costs, such as attorney fees and settlement costs, as well as indirect costs, such as opportunity costs of managers' time and effort spent on dealing with the litigation, rather than on value-adding activities (Dabrowski 1994). Family owners, with large and under-diversified equity holdings that usually span multi-

⁴ Family owners' indifference to short-term capital market pressure is also reinforced by the fact that family firms in general have lower institutional holdings and fewer issuances of public debt and equity than other firms (Chen, Chen, Cheng 2008).

⁵ Family owners are also unique compared to other blockholders (mainly large institutional investors) because the latter do not get involved in firm management and usually hold well-diversified portfolios. In Section 5.1, we discuss the difference between large institutional investors and family owners in detail and contrast their impacts on conservatism.

⁶ Conservatism can also arise for taxation and regulation reasons. We do not focus on these alternative explanations for 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.

generations, are affected more by both the direct and indirect impact of litigation on firm value, and would prefer the firm disclose bad news earlier to avoid litigation. The findings in Chen et al. (2008) that family firms are generally less likely to provide long-range earnings guidance, but are *more* likely to give earnings warnings in the presence of bad news, is consistent with this argument.

In a similar vein, disclosing good news earlier can increase litigation costs, if such news is proven incorrect in the future (e.g., Johnson et al. 2001). Accordingly family firms are less likely to disclose good news earlier than non-family firms. Related to this, as long-term investors family owners are less interested in creating temporary run-ups in stock price and are more adverse to capital market pressures that result in myopic behavior, such as earnings management to meet or beat earnings forecasts. Thus, managers of family firms face fewer incentives to accelerate good news or postpone bad news. Taken together, the above argument suggests that, relative to non-family firms, greater litigation concerns arising from family owners' long investment horizons and under-diversified holdings lead to greater accounting conservatism in family firms.

Reinforcing family owners' preferences for conservative accounting relative to other shareholders is the fact that the main cost of conservative accounting, less value relevant accounting information in publicly available financial reports, is lower for family owners. An important criticism of conservative accounting is that by delaying the recognition of good news, conservative accounting leads to information that is less timely and less relevant for investor evaluating future profitability. This information role of accounting is more important for investors who intend to trade the securities in the near term than for those who intend to hold the securities for a long time, such as family owners (McNichols and Trueman 1994).

2.2 The monitoring role of conservatism

The second driver of accounting conservatism is outside shareholders' need of verifiable information that can be used 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 their capital (Ball 2001; Watts 2003a; LaFond and Roychowdhury 2008). As a result, it can curb managers' tendency to overstate earnings and to invest in negative net present value projects. Shareholders' need of conservative accounting will be reflected in the firm's financial reporting decisions if the firm has strong governance, such as an independent board of directors (e.g., Ahmed and Duellman 2007).

Shareholders' monitoring can also be enhanced by the presence of family owners, particularly in family firms run by professional (non-family) CEOs (e.g., Anderson and Reeb 2003). Family owners' strong incentives to monitor managers arise from their large and under-diversified holdings and from the disproportionate impact of firm value on their family's wealth. In addition, they often have significant influence over corporate decisions, including financial reporting decisions. As such, family firms run by professional CEOs are expected to employ more conservative accounting than non-family firms.⁷

The impact of the monitoring role of conservatism is more complicated when family members serve as CEOs. This is because family CEOs, particularly founder CEOs, tend to be

⁷ Some may argue that since family owners are actively involved in firm operation and management, they have access to inside information to monitor managers, thus substituting conservative reporting as a monitoring mechanism. We believe that this is unlikely the case for the following reasons. First, accessing inside information on a regular basis may be costly and not feasible in some cases for family owners. Second, as discussed above, conservative reporting is likely less costly for family firms than for non-family firms due to family owner's long investment horizon. Third, conservative reporting also permits ease of monitoring by other shareholders.

charismatic individuals whose vision and drive are the genesis of the firm. They are usually highly revered and tend to have overwhelming control, enjoying an undisputed and powerful status when it comes to decision making, including financial reporting decisions. Their powerful status is further strengthened if the founding family holds greater equity stake and have greater control over the board.⁸ In extreme cases, founder CEOs have been known to dictate the reporting of manipulated earnings, leading to SEC enforcement actions on the firm (Dechow, Sloan, and Sweeney 1996).⁹ Thus, as the most powerful decision makers in a firm, founder CEOs, relative to other CEOs, can be more entrenched, making it possible for them to thwart attempts at increased monitoring via conservative accounting.

The role of family ownership in creating opportunities for monitoring via conservatism in descendent CEO family firms is unclear *ex ante*. While it is possible that increased family ownership can also entrench descendent CEOs, an equally likely scenario is that the ownership and directorships of other family members empower them to monitor the descendent CEOs. Descendent CEOs are less likely to enjoy the undisputed power and status accorded the founder CEOs. Thus, whether descendent CEO family firms exhibit more or less conservative financial reporting may well depend on the relative power of descendent CEOs versus other founding family members in such firms.

2.3 Hypotheses

To sum up, the litigation cost argument for conservatism suggests that family firms prefer more conservative accounting, and the impact of the monitoring role of conservatism depends

⁸ 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 sprawling family-controlled media empire (see articles in WSJ, July 20, 2007 and The Financial Times, July 21, 2007).

on whether the CEO is an outsider, the founder, or a descendent of the founder. In family firms with professional CEOs (non-family member CEOs), family owners' strong monitoring incentives and significant influence will lead to more conservative accounting. However, if the founder or a descendent of the founder serves as the CEO, this CEO may be powerful enough to thwart attempts at increased monitoring via conservative accounting, leading to less conservative accounting. Taken together, the preceding discussion leads to a directional prediction for professional CEO family firms (in alternative forms) but non-directional prediction for family CEO firms (in null form):

H1: Ceteris paribus, professional CEO family firms are more conservative in financial reporting than non-family firms.

H2: Ceteris paribus, founder CEO and descendent CEO family firms have similar extent of conservatism in financial reporting as non-family firms.

Note that we are not implying that more conservative accounting is always more desirable. We view conservative reporting as being determined by firm characteristics in equilibrium. Our discussion outlines how family ownership and control affect the level of conservatism in equilibrium.

To further understand the role of family ownership and control on conservatism, we investigate the impact of high family ownership and control (high family board memberships). Founding families with greater equity stake in their firms and greater presence on the board of directors can arguably exert greater impact on the firms' decisions, including financial reporting decisions. We expect greater family control to differentially affect conservatism in family firms run by professional CEO versus family CEOs, particularly founder CEOs. For professional CEO family firms we expect the incremental impact of significant family ownership and control

⁹ Adelpia offers an extreme case of a founder CEO manipulating earnings with the intention of leading shareholders astray.

to be positive on conservatism, due to the families' heightened desire for increased monitoring via conservative accounting and their heightened concern for litigation costs. For founder CEO firms, we expect the opposite: founder CEOs are generally charismatic leaders who are highly revered in their firms and who often rule over the firm. A greater degree of family ownership and control afford founders greater power relative to non-family shareholders, making it more likely for them to thwart outside shareholders' attempts at monitoring. However, the net result of high family ownership and control on conservatism in founder CEO firms will depend on whether family owners' litigation concerns dominate. Thus, we examine this issue empirically.

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 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.¹⁰ 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.

¹⁰ Note that our family firm classification is 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.

Thus in our empirical analysis, we also use family ownership directly.¹¹ 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 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 being investigated. Conservatism leads to the minimization of cumulative reported earnings via slower revenue recognition, faster expense recognition, lower asset valuation and higher liability valuation, which in turn leads to more frequent and more

¹¹ 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 and find the same results.

negative accounting charges. Thus, firms with more conservative accounting choices exhibit more negative non-operating accruals, consisting primarily of items such as loss and 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). Givoly and Hayn (2000) argue that what constitutes conservatism in one period leads to ‘non-conservative’ results in subsequent period (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. Specifically, we measure non-operating accruals as the difference between total accruals and operating accruals:¹²

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

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-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, and tabulate only the hypothesis testing results using the skewness and asymmetric timeliness measures (see discussion in Section 5.2 and 5.3).^{13,14}

¹² Note that NACC captures conditional conservatism. For example, if the value of an asset drops due to poor economic situation, the asset write-down is long term operating accruals and is included in NACC

¹³ Basu 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 Basu measure is sensitive to the aggregation period, the occurrence of economic events, voluntary disclosure policy, and some econometric issues. In addition, we will have to introduce many interaction terms when using Basu measure in our context, resulting in potentially severe multicollinearity (see Section 5.3 for the basic model specification). As a result, we choose not to use Basu measure in the main analyses.

Some prior research (e.g., Wang 2006) also use 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:¹⁵

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). Finally, we also examine Basu's asymmetric timeliness measure, which overcomes both of the limitations by documenting whether transitory earnings components are contemporaneously correlated with stock returns.¹⁶

3.2.2 Regression Model

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

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

¹⁴ 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).

¹⁵ Wang (2006) recognizes these limitations (see page 632) and cautions readers on interpreting his findings.

¹⁶ Examining the S&P 500 firms, Wang (2006) indicates that he does not find a significant relation between family ownership and timely loss recognition using Basu's (1997) reverse regression approach. Wang reasons that the

For ease of interpretation, we scale NACC by lagged total assets, expressed in percentage, and then multiply by -1 . Thus more positive values indicate greater conservatism. FAM is alternatively 1) the family firm indicator or indicators that classify family firms into professional CEO family firms, founder CEO firms, and descendent CEO firms, and 2) family ownership in professional CEO, founder CEO, and descendent CEO 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. To mitigate the effect of outliers, we truncate 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).¹⁷

Since the above specification is a panel regression, the possibility of within-firm autocorrelation can lead to biased standard errors. Therefore, we estimate the above regression

insignificant findings can result from the fact that Basu's measure is subject to various limitations (including not controlling for voluntary disclosure).

¹⁷ Truncating at 0.5%, no truncation, or using different cut-off points for the studentized residuals do not change our inferences.

equation as a cross-sectional regression for each year of the sample independently and then compute autocorrelation-adjusted Fama-MacBeth (1973) estimates using a 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 auto correlations 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 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. While our primary investigation focuses on the difference between professional, founder and descendent CEO firms versus non-family firms, nevertheless we believe that the contrast between family and non-family firms is informative. 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 1.2% for non-family firms and 8.2% 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.^{18, 19}

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 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, classified by family and non-family firm types, in Table 2. Panel A shows that cumulative non-operating accruals are not statistically different between family and non-family firms. This is not surprising given the existence of both professional CEO firms and family CEO firms within family firms and the

¹⁸ 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.

¹⁹ 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.

opposite impacts of family power on conservatism in these two types of firms. Consistent with prior research, our sample firms on average have negative non-operating accruals, indicating an overall conservatism in the sample (recall that NACC is multiplied by -1.) Relative to non-family firms, family firms are on average smaller and followed by fewer analysts, exhibit better accounting performance (ROA) and more volatile stock returns, are less levered, are clustered more in litigation-heavy industries, and have lower institutional ownership. These univariate statistics are largely consistent with the findings of existing research (e.g., Anderson and Reeb 2003). 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 issue.

4.2 Regression results on hypothesis testing

Table 3 presents our hypothesis-testing results using non-operating accruals as the measure of conservatism. In columns (1) and (2) we use indicators to capture family firm types. Recall that we multiply the non-operating accruals measure by negative 1, so a greater value indicates greater conservatism. The results in columns (1) and (2) show that, after controlling for other factors that might affect conservatism, family firms, as a whole, are more conservative than non-family firms in their financial reporting. This greater conservatism exhibited by family firms is driven primarily by professional CEO family firms (coefficient=0.476, $t=12.99$), consistent with our Hypothesis 1, and descendent CEO family firms (coefficient=0.300, $t=3.71$).

In contrast, founder CEO family firms are not significantly different from non-family firms in conservatism (coefficient=0.120, $t=1.05$).²⁰

Since our investigation focuses largely on family ownership and control characteristics, in columns (3) and (4) we substitute the indicator variables with continuous measures of family ownership in each of the three types of family firms – professional CEO, founder CEO and descendent CEO firms. Not surprisingly, column (3) indicates that conservatism does not vary with family equity ownership when we lump all three types of firms together, as we expect opposite impacts of family ownership on conservatism in professional CEO vs. founder CEO firms. In column (4) the coefficient on family ownership in professional CEO family firms is positive and significant ($t=3.05$), suggesting that greater family ownership in professional CEO firms is associated with more conservative reporting. This is consistent with H1 and suggests that family ownership in professional CEO family firms facilitates the supply of conservative accounting and monitoring. It is also consistent with greater litigation concerns for founding families. In contrast, we find that conservatism *decreases* with family ownership in founder CEO firms, indicating that founder CEOs have greater ability to thwart attempts at monitoring through conservative accounting when family ownership is higher. LR (2008) also find a negative association between conservatism and the existence of a founder CEO. The coefficient on the family ownership in descendent CEO firms, though positive, is only marginally significant.²¹

²⁰ Additional tests (not tabulated) indicate that founder CEO firms are significantly less conservative than professional CEO family firms, but do not differ from descendent CEO firms in conservatism.

²¹ In this test, family ownership is set to zero for non-family firms. Thus the coefficients on family ownership capture the average difference between (each type of) family and non-family firms in reporting conservatism, and at the same time impose linearity on the relationship between conservatism and family ownership within family firms. If conservatism does not vary linearly with family ownership, this restriction may lead to insignificant coefficients. We also estimate equation (1) by including both family firm indicators and family equity ownership. In such a specification, the coefficients on the family firm indicators capture the difference between non-family firms and family firms on average, and the coefficients on the family ownership variables capture the *incremental* effect of family equity ownership. When breaking family firms into the three types of family firms, we find positive coefficients on all the three family firm indicators (professional CEO family firms, founder CEO firms, and

To sum up, the results in Table 3 provide consistent support for H1 that family firms with professional CEOs exhibit greater conservatism due to the families' enhanced monitoring of the CEO and their heightened concerns with litigation costs. In striking contrast, we document a *negative* association between conservatism and family ownership in founder CEO firms. The results on descendent CEO firms indicate that they are on average more conservative than non-family firms, but the extent of their conservatism only increases marginally with family ownership.

It is conceivable that conservatism can vary with the extent of family ownership, family control (or directorships), and CEO control over their firms. In the following sections we utilize the rich setting offered by family firms and further explore these different dimensions of family ownership and control.

4.3 The effects of high family ownership and family directorships

Table 4 reports the test results on the incremental impact of significant family ownership and control. For parsimony we do not tabulate the results on the control variables going forward. Recall that we expect increased family ownership and control to increase conservatism in professional CEO firms. The effect of increased family ownership and control on conservatism in founder CEOs is unclear *ex ante*. If founder CEOs' greater power at thwarting conservative reporting outweighs family owners' heightened litigation concerns, the net effect is negative and vice versa. Similar argument applies to descendant CEOs.

In columns (1) and (2) we split each type of family firm into two groups: firms with high family ownership and those with low family ownership. That is, we add six family firm type

descendent CEO firms). This suggests that when family ownership is relatively low, all the three types of family firms are more conservative than non-family firms. The coefficient on family ownership in founder CEO firms is significantly negative, while those for professional CEO and descendent CEO family firms are insignificant. These results are consistent with the results of Table 4 discussed below.

indicators to equation (1). We use 10% as cut-off to define high family ownership.²² About 40% (49%, 62%) of professional CEO (founder CEO, descendent CEO) family firms are classified as having high family ownership. In columns (3) and (4) we split each type of family firm into two groups: firms with many family directorships and those with few. We use three or more directorships as the cut-off to define significant family control because nearly all family firms (97.4%) have at least one family member seated on the board of directors, whereas only 18.6% of family firms have three or more family directorships. About 13.2% (17.3%, 32.6%) of professional (founder, descendent) CEO family firms are classified as having high family directorship.

Table 4 yields several interesting insights. First, when family ownership is low (<10%) or family presence on the board is low (< 3 family directors), *all three types of family firms are more conservative than non-family firms* (though the results on descendent CEO firms are marginal to insignificant). This is consistent with family owners' concerns over litigation playing a dominant role in determining the extent of conservatism in these cases. Second, in family firms with high family ownership or greater board presence, both professional CEO and descendent CEO family firms continue to be significantly more conservative. These results lend further support to H1 and are consistent with (other) family owners' heightened litigation concerns and empowerment to monitor managers through conservatism. Third, in stark contrast to professional CEO and descendent CEO family firms, founder CEO firms with three or more family members serving as directors are less conservative than non-family firms (coefficient = -0.555, t-statistic = -1.90). Interestingly, founder CEO firms with high family ownership are no more or less conservative than non-family firms (coefficient = -0.161, t-statistic = -1.14).

²²The results are qualitatively unchanged if we define high family ownership as at least 15% of the outstanding equity.

Together these coefficients suggest that it is *control* (or family directorships) rather than *stock ownership* that leads to less conservative accounting in founder CEO firms. Fourth, the incremental impact of many family directorships is significantly *positive* for professional CEO firms (coefficient = 0.459, t-statistic = 2.09), but significantly *negative* for founder CEO firms (coefficient = -0.834, t-statistic = -2.39).

Taken together we view the findings presented in Table 4 as more consistent with significant family ownership and directorships empowering, rather than monitoring, founders in their financial reporting. Importantly, a key contrast in accounting conservatism for founder CEO firms is demonstrated in Table 4: When family ownership and control is limited, founder CEO firms are more conservative than non-family firms; whereas, when family *control* (rather than stock *ownership*) is significant, founder CEO firms are less conservative (or more aggressive) than non-family firms. The distinction between *ownership* and *control* is important, as it helps us to better distinguish between alternative interpretations of founder CEO firms' less conservative accounting. If founder CEO firms with significant family stock ownership were less conservative than non-family firms, it would suggest that greater alignment of incentives via stock ownership reduces the demand for conservatism (ala LR, 2008). However, it is founder firms with three or more family directorships that employ less conservative accounting, which is more consistent with an entrenchment interpretation.²³

4.4 *The effect of non-CEO family ownership vs. CEO ownership*

A key element of our argument related to the monitoring role of conservatism is the effect of family ownership on the monitoring of CEOs. The above analyses indicate that the effect of family ownership depends on whether the CEO is a family member or not. However, the

²³ This latter finding is consistent with earlier research (Dechow et al. 1996), as well as anecdotal evidence (e.g., Adelpia, Campbell Soup, Cendent, Computer Associates and Rite Aid Corp.), suggesting that entrenched founders employ aggressive accounting to extend their track record of growth and strong firm performance.

ownership of the family does not belong to the CEO only; it encompasses the ownership of the family CEO as well as that of other family members. If other family members have different preference or feel that they need to monitor the family CEO, their ownership empowers them to do so. In this section we separate family ownership into two parts: ownership by non-CEO family members and ownership by CEOs, and explore how the relative power of family CEOs and other non-executive family members in founder and descendent CEO firms affect conservatism.

In column (1) we assess the differential impact of non-CEO family ownership vs. CEO ownership on conservatism by including a continuous measure of non-CEO family ownership for each type of family firms. That is, in contrast to earlier tables, the measure of family ownership used in Table 5 is split into non-CEO family ownership and family CEO ownership. In addition, we control for the effect of non-family CEO ownership (in professional CEO family firms and non-family firms) to examine separately the effects of family CEO ownership and non-family CEO family ownership.

Column (1) reveals several interesting insights. First, the negative relation between family ownership and conservatism for founder CEO firms documented in earlier tables is driven by the family CEO's ownership, not the ownership of other family members. The coefficient on non-CEO family ownership in founder CEO firms is insignificant ($t = -1.22$), while the coefficient on family CEO ownership is negative and significant (coefficient = -2.185 , $t = -3.71$). Second, the positive relation between family ownership and conservatism for descendent CEO firms documented in earlier tables is driven by the ownership of other family members, not the ownership of the family CEO: the coefficient on other family members' ownership is positively

associated with conservatism in descendent CEO firms (coefficient = 0.950, $t = 5.51$).²⁴ This finding suggests that, similar to their behavior in professional CEO firms, family members attempt to monitor the descendent CEO via conservative financial reporting. As in Table 3, family ownership in professional CEO family firms is positively correlated with conservatism, and we find that conservatism is not correlated with non-family CEO ownership.

Taken together these findings indicate that other family members' ownership have differing affects across founder and descendent CEO firms. In particular, non-CEO family ownership is ineffective at enabling monitoring of the founder CEO. On the other hand, non-CEO family ownership is effective at enabling monitoring of descendent CEOs. This difference in other family members' ability to enable monitoring is likely partly due to differences in the relative ownership of CEOs in founder versus descendent firms. Specifically, founders tend to hold larger ownership stakes compared to other family members (average founder ownership is 8.2% versus ownership of other family members in founder firms of 7.3%); whereas descendent CEOs tend to hold smaller ownership stakes compared to other family members (average descendent CEO ownership is 5.9% versus ownership of other family members in descendent CEO firms of 16.6%). Our finding is also consistent with anecdotal evidence that descendent CEOs face more monitoring from family seniors or siblings in managing their firms.

LR (2008), using Basu's measure of asymmetric timeliness, document that conservatism decreases with CEO ownership. In Column (2) of Table 5 we document a similar association when using non-operating accruals as a measure of conservatism. In column (3) of Table 5 we separate CEO ownership into family and non-family CEO ownership to explore the effects of *family* and *non-family* CEO ownership. Family CEO ownership is negatively associated with

²⁴ To ensure that the negative coefficient on family CEO ownership in column (1) is not driven entirely by founder CEO ownership, we also estimate separate coefficients for found CEO ownership and descendent CEO ownership. Both coefficient estimates are negative and significant.

our measure of conservatism (coefficient = -2.452, $t=-4.45$); non-family CEO ownership is not significantly associated with non-operating accruals. Thus, the results indicate that much of the effect of total CEO ownership documented in column (2) is driven by family CEO ownership.

Demonstrating that *family CEO ownership* drives the negative association between CEO ownership and conservatism is important because it suggests a different interpretation than the one presented in LR (2008). LR (2008) interpret the negative association between conservatism and CEO ownership as an indication that increased ownership by the CEO results in better alignment of interests, lower agency costs, and thus, less demand for monitoring via accounting conservatism. Under LR's alignment interpretation, one would expect to find a negative and significant coefficient for both family and non-family CEO ownership. While we cannot completely rule out the alignment interpretation, it seems less plausible when the negative association between conservatism and CEO ownership is driven by *family CEO ownership* and insignificant for non-family CEO ownership. The more likely interpretation is entrenchment, especially in light of the evidence presented in Table 4.

4.5 *The effect 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 independence and outside director ownership increases.²⁵ In this section we examine the association between conservatism and family equity ownership after controlling for board independence and outside director ownership.

²⁵ 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.

Consistent with Ahmed and Dullman (2007), in column (1) of Table 6, we document that both board independence and outside director ownership are positively associated with conservatism. In columns (2) and (3), we isolate the effect of non-family outside director ownership by replacing total outside director ownership with non-family outside director ownership, without family ownership variables in column (2) and with family ownership variables in column (3).²⁶ Non-family outside director ownership is insignificant in explaining non-operating accruals in both specifications.²⁷ More importantly, our results on family equity ownership variables remain unchanged. Therefore, the influence of outside directors seems to be subsumed by the influence of family directorship and ownership.

4.6 Litigation concerns and family firms

While the above analyses focus mainly on the monitoring role of conservatism, our results also shed light on the litigation role of conservatism. As discussed in Section 2, family owners' greater litigation concerns imply that family firms will be more conservative than non-family firms, whether the CEO is the founder, a descendant, or a professional manager. However, the monitoring role of conservatism implies that founder CEO firms are less conservative and professional CEO family firms are more conservative, than non-family firms. (There is no clear prediction of the relative extent of conservatism for descendant CEO firms under the monitoring role of conservatism.) Since the two roles of conservatism have opposite implications for the relative conservatism in founder CEO firms, evidence of more conservative reporting in founder CEO firms is consistent with the litigation role of conservatism. Recall that when family

²⁶ In family firms the category of 'outside directors' include family members who serve as non-executive directors.

²⁷ The focus of this investigation is on the relation between conservatism and family and director ownership characteristics. We also replace the three family ownership variables in column (3) with the three corresponding family firm indicator variables, and our results show that 1) after controlling for non-family outside director ownership, professional CEO and descendant CEO firms are more conservative than non-family firms, while founder CEO firms are no different in conservatism from non-family firms; 2) the coefficient on Board Independence (0.512) is significant ($t=2.22$). This latter result is similar to what AD (2007) document.

ownership or the number of family directors is low, founder CEO firms are more conservative than non-family firms (Table 4). This result is readily consistent with the litigation argument: the positive effect of litigation role dominates the monitoring role of conservatism, as founders are less likely to be entrenched in such cases.

In addition, the litigation role of conservatism is potentially more important when the likelihood of litigation is high. In untabulated analysis, we replicate Table 3 separately for high litigation industries and low litigation industries. We find that founder CEO firms are more conservative than non-family firms in high litigation industries and we do not find such evidence in low litigation industries. This again confirms that litigation concern affects firms' choice of conservatism level.

5. Additional Analysis

5.1 Concentrated and long-term institutional ownership

We further investigate whether our results hold after controlling for different types of institutional ownership, and whether these different types of institutional ownership have an incremental impact on conservatism after controlling for family ownership. Family owners differ from institutional owners with concentrated ownership (e.g., pension funds and mutual funds) along several dimensions. First, family owners are less diversified and the value of the firm has a larger impact on family owners' investment portfolios than on large institutional investors'. Second, unlike family owners, large institutional investors usually do not sit on the board of the firms they are holding and thus have less influence over financial reporting. Brav et al. (2008) argue that institutional investors are generally less effective monitors because of regulatory and structural barriers, including free riding on others' efforts, diversification requirement, and fund managers' weak personal financial incentives. Thus, compared to large

institutional investors, family owners' longer investment horizon, greater commitment to the firm, more active involvement in the management can lead to a greater impact on financial reporting.

Specifically, we use: 1) the ownership of the top 5 institutional investors to capture concentrated institutional holdings; 2) the ownership of dedicated institutional investors (Bushee 1998), and 3) the ownership of long-term institutional investors classified based on institutional holding turnover per Gaspar et al. (2005). Untabulated results indicate that concentrated institutional ownership is positively correlated with conservatism, and that the other two measures are not significantly correlated with conservatism. The results on family ownership, however, remain the same after controlling for different types of institutional ownership.

5.2 Conservatism measured using the difference in the skewness of earnings and cash flows

Up till now we have reported our results using non-operating accruals as our measure of conservatism. Following prior research (Givoly and Hayn 2000; Beatty et al. 2007), we also use a second measure of conservatism, the difference in the skewness between earnings and operating cash flows, to corroborate our findings. The intuition behind this measure is that under conservatism, firms take large negative charges to reflect bad news, leading to greater left-skewness in the distribution of earnings, relative to the distribution of cash flows. We measure the skewness of cash flows and earnings over three-year periods centered on the year of interest. Specifically, skewness is defined as $y = E(x - \mu)^3 / \sigma^3$, where μ and σ 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 skewness of cash flows by taking the difference: $SKEW = \text{skewness (ROA)} - \text{skewness (CFO/Assets)}$. Similar to the NACC measure, we 1) use the negative of the skewness difference so that greater values of SKEW indicate greater conservatism and multiply by 100 for ease of table presentation, 2) truncate the top and

bottom 1% of SKEW and remove observations with studentized residuals greater than 3. We estimate the following regression annually and report autocorrelation adjusted Fama-MacBeth t-statistics in Table 7:

$$SKEW_{i,t} = \alpha + \beta_1 FAM_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 MB_{i,t} + \beta_4 LEV_{i,t} + \beta_5 LIT_{i,t} + \beta_6 ROA_{i,t} + \beta_7 RVOL_{i,t} + \beta_8 AC_{i,t} + \beta_9 INST_{i,t} + IndustryDummies + \varepsilon_{i,t} \quad (2)$$

The first column of Table 7 shows that conservatism, captured using the skewness measure, does not differ between family and non-family firms. A more detailed examination of different family firm types in column (2) reveals that this is driven by the opposite results on professional CEO family firms and founder CEO firms: while professional CEO family firms are more conservative than non-family firms (coefficient = 8.437, t = 2.32), founder CEO firms are less conservative (coefficient = -7.292, t = -2.94). The descendent CEO family firms are not different from non-family firms in conservatism. These results are largely consistent with our findings using non-operating accruals. We also replicate Tables 4, 5, and 6 using SKEW and obtain qualitatively similar results.

5.3 Conservatism measured using the asymmetric timeliness of earnings (Basu measure)

We also examine whether our primary prediction holds using Basu's (1997) asymmetric timeliness measure. Specifically, we augment Basu's basic regression with indicator variables for our three family firm types, as well as the interaction of the indicators with other variables (firm and year subscripts suppressed):

$$NI = \alpha + \beta_1 NEG + \beta_2 RET + \beta_3 RET \times NEG + \beta_4 FAM + \beta_5 FAM \times NEG + \beta_6 FAM \times RET + \beta_7 FAM \times NEG \times RET + \beta_8 MB + \beta_9 MB \times NEG + \beta_{10} MB \times RET + \beta_{11} MB \times NEG \times RET + \beta_{12} LEV + \beta_{13} LEV \times NEG + \beta_{14} LEV \times RET + \beta_{15} LEV \times NEG \times RET + \beta_{16} SIZE + \beta_{17} SIZE \times NEG + \beta_{18} SIZE \times RET + \beta_{19} SIZE \times NEG \times RET + \varepsilon \quad (3a)$$

$$\begin{aligned}
NI = & \alpha + \beta_1 NEG + \beta_2 RET + \beta_3 RET \times NEG \\
& + \beta_4 FAM_P + \beta_5 FAM_P \times NEG + \beta_6 FAM_P \times RET + \beta_7 FAM_P \times NEG \times RET \\
& + \beta_8 FAM_F + \beta_9 FAM_F \times NEG + \beta_{10} FAM_F \times RET + \beta_{11} FAM_F \times NEG \times RET \\
& + \beta_{12} FAM_D + \beta_{13} FAM_D \times NEG + \beta_{14} FAM_D \times RET + \beta_{15} FAM_D \times NEG \times RET \\
& + \beta_{16} MB + \beta_{17} MB \times NEG + \beta_{18} MB \times RET + \beta_{19} MB \times NEG \times RET \\
& + \beta_{20} LEV + \beta_{21} LEV \times NEG + \beta_{22} LEV \times RET + \beta_{23} LEV \times NEG \times RET \\
& + \beta_{24} SIZE + \beta_{25} SIZE \times NEG + \beta_{26} SIZE \times RET + \beta_{27} SIZE \times NEG \times RET + \varepsilon \quad (3b)
\end{aligned}$$

Where

- NI* = Net income before extraordinary items (Compustat data #18), scaled by beginning stock price;
- RET* = 12-month returns for the year ending three months after the fiscal year end;
- NEG* = Indicator variable coded as 1 if *RET* is negative, 0 otherwise;
- FAM* = Family firm indicator;
- FAM_P* = Indicator for family firms managed by professional CEOs;
- FAM_F* = Indicator for family firms managed by founder CEOs;
- FAM_D* = Indicator for family firms managed by descendent CEOs.
- MB* = Market to book ratio (Compustat data #25× #199/#60);
- LEV* = Leverage, measured as beginning leverage ratio ($[\#9+\#34]/\#6$);
- SIZE* = Year-end market value of equity (Compustat data # 25× #199); log transformation is used in regression analyses;

The definitions of the interaction variables are self explanatory. We estimate equation (3a) and (3b) after removing the top and bottom 1% of *NI* and *RET* and deleting outliers with studentized residuals greater than 3. The results on control variables are not tabulated for ease of presentation.

Column (1) of Table 8 tabulates the results of estimating equation (3a). The three way interaction variable $FAM \times NEG \times RET$ has a significantly positive coefficient, consistent with family firms as a whole exhibit greater asymmetric timeliness of earnings with regard to bad news. Column (2) of Table 8 reports the results of estimating equation (3b) by separating family firms into three types, those run by professional CEOs, founder CEOs, and descendent CEOs, respectively. The results are largely consistent with what is reported in Table 3: for professional CEO and descendent CEO firms, the coefficients on the three way interaction variables $FAM_P \times NEG \times RET$ and $FAM_D \times NEG \times RET$ are significantly positive ($t=2.07$, $t=1.79$ respectively). This suggests that family firms run by professional and descendent CEOs

both have greater asymmetric timeliness of earnings with regard to bad news, consistent with such firms being more conservative than non-family firms. The coefficient on $FAM_F \times NEG \times RET$ is not significant.

6. Conclusion

In this paper we investigate whether firms owned and managed by founding family members differ from other firms in the extent of financial reporting conservatism. With greater than 46% of the firms in the S&P 1500 indices being family firms, this set of firms is a significant part of the economy. Family owners also hold substantial equity ownership (average family equity ownership is 17%). Yet with the exception of recent findings that family firms exhibit higher earnings quality and provide less long-term voluntary disclosure but give more earnings warnings (Wang 2006; Ali et al. 2007; Chen et al. 2008), our understanding of the financial reporting practices of such firms is limited. There is to date no study that directly focuses on the impact of founding family ownership and control on reporting conservatism, an important attribute of financial reporting.

We argue that the two fundamental drivers of conservatism, litigation concerns and monitoring, affect family owners' preferences for conservative financial reporting. Conservative financial reporting reveals bad news earlier than good news and can reduce litigation costs. Since founding families are large, long-term shareholders with under-diversified holdings, when compared to other shareholders, they have greater incentives to avoid litigations. Thus, the greater litigation concerns of family owners will lead to the prediction of greater conservatism in family firms. However, the implication of founding family ownership and control for the monitoring role of conservatism depends on whether a family member serves as the CEO. By providing verifiable information and revealing bad news earlier, conservative

financial reporting provides shareholders an early warning of the agency problems. In family firms with non-family CEOs (i.e., professional CEOs), family owners' incentives to better monitor managers will lead to more conservatism. In contrast, family CEOs may be powerful enough to thwart other shareholders' attempts at monitoring through conservative accounting. This is especially true for family firms run by founders. Thus, while we predict that professional CEO family firms exhibit more conservatism than non-family firms, it is an empirical question whether family CEO firms exhibit a different extent of conservatism from non-family firms.

Using non-operating accruals to capture reporting conservatism, we document that family firms are more conservative than non-family firms, but this greater conservatism is driven by family firms managed by professional CEOs. Furthermore, we find that in family firms managed by professional CEOs and descendent CEOs the level of conservatism increases with the level of family ownership and the number of family members on the board. In direct contrast, the level of conservatism actually *decreases* with the level of family ownership and the number of family members on the board when the founder is the CEO. These findings indicate that in professional and descendent CEO family firms increased family ownership and board presence enhance monitoring, while in founder CEO family firms increased family ownership and greater family presence on the board likely leads to greater entrenchment of the founder.

An alternative interpretation of the negative relation between family ownership and conservative accounting in founder CEO firms is an incentive alignment argument, as used in LaFond and Roychowdhury (2008) to explain the negative relation between CEO ownership and conservatism. As family ownership increases there is greater alignment of family interests with the interests of other shareholders and thus less demand for verifiable numbers that enhance the monitoring of senior management. However, even with no demand for

conservative accounting from other shareholders, the founder CEO still ought to prefer more conservative accounting to minimize expected litigation costs. Consistent with the families' desires to minimize litigation costs, we find that founder CEO firms with low family ownership are *more* conservative than non-family firms. Yet, founder firms with greater control employ *less* conservative accounting than non-family firms, consistent with high family ownership and control enabling entrenchment of the founder. Further analysis lends additional support to the entrenchment interpretation: When we disaggregate family ownership into family CEO ownership and non-CEO family ownership, the negative relation between family ownership and conservatism in founder CEO firms is driven by the founders' ownership, not the ownership of other family members. In contrast, we find a positive relation between family ownership and conservatism in descendent CEO firms and this relation is driven by the non-CEO family members' ownership, not the descendent CEO's ownership. Thus, other family members act as monitors of descendent CEOs, but are ineffective at enabling monitoring of founder CEOs.

This paper contributes to the literature on conservatism by documenting systematic differences in conservatism between family firms and non-family firms. As such, it highlights an important determinant of conservatism that is little studied in the literature: family ownership and control. The multi-faceted results also highlight the importance of separating ownership from control in studying conservatism (e.g., separately examining professional CEOs from founder CEOs and descendent CEOs). Finally, together with recent studies on family firms' earnings quality (Wang 2006; Ali et al. 2007) and voluntary disclosure (Ali et al. 2007; Chen et al. 2008), the results in this paper provide further insights into family firms' financial reporting practices.

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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&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 by CEO type</i>				
Family firms with family CEOs	2,230	27.0%	401	33.3%
1) Founder CEOs	1,494	18.1%	302	25.1%
2) Descendent CEOs	736	8.9%	99	8.2%
Family firms with professional CEOs	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
Family ownership	8,264	0.078	0.000	3,763	0.171	0.093	4,501	0.000	0.000
Total CEO ownership	8,213	0.044	0.012	3,741	0.082	0.023	4,472	0.012	0.007
Non-family CEO ownership	8,213	0.008	0.004	3,741	0.004	0.000	4,472	0.012	0.007
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:

Family ownership = Proportion of shares owned by founding families in year t;

Total CEO ownership = Proportion of shares owned by CEOs in year t;

Non-family CEO ownership = Proportion of shares owned by non-family CEOs in year t (and is zero for family CEO firms);

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

Panel A Descriptive statistics of test variables separately for family and non-family firms

The last two columns report the two-sided p-values for the difference between family and non-family firms in means and medians, respectively. T-tests (Wilcoxon rank tests) are used to test the difference in means (medians).

	Family firms (N=3,763)		Non-family firms (N=4,501)		p-values of the difference	
	Mean	Median	Mean	Median	Mean	Median
NACC	0.650	0.455	0.681	0.346	0.799	0.121
SIZE	6.406	1,264	9,925	2,279	0.001	0.001
MB	5.243	2.515	3.488	2.419	0.248	0.061
LEV	0.193	0.175	0.254	0.251	0.001	0.001
LIT	0.280	0.000	0.191	0.000	0.001	0.001
ROA	0.069	0.067	0.060	0.054	0.005	0.001
RVOL	0.027	0.025	0.024	0.022	0.001	0.001
AC	8.703	7.000	9.887	8.000	0.001	0.001
INST	0.576	0.616	0.599	0.679	0.001	0.001

*Panel B Pearson correlation matrix for test variables**

	NACC	FAM	SIZE	MB	LEV	LIT	ROA	RVOL	AC
FAM	0.020								
SIZE	0.028	-0.094							
MB	0.004	-0.005	0.304						
LEV	0.009	-0.173	0.012	-0.089					
LIT	0.035	0.109	0.110	0.122	-0.198				
ROA	-0.209	0.047	0.116	0.432	-0.280	0.063			
RVOL	0.049	0.137	-0.108	0.114	-0.189	0.259	-0.105		
AC	0.058	-0.077	0.415	0.259	-0.040	0.204	0.147	-0.009	
INST	0.064	-0.039	-0.061	0.036	-0.068	0.089	0.054	0.038	0.395

*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* = Family firm indicator, coded as 1 if 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;
- 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
Using Family Firm Indicators/Family 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.

Model:

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

	(1)	(2)	(3)	(4)
	Family firm indicator	Professional, founder, and descendent CEO firm indicators	Family ownership	Family ownership in professional, founder, and descendent CEO firms
Intercept	-1.427 (-3.43)	-1.354 (-3.46)	-1.152 (-2.65)	-1.126 (-2.78)
Family firms/family ownership	0.294 (6.20)		0.164 (1.40)	
Professional CEO firms/family ownership		0.476 (12.99)		1.403 (3.05)
Founder CEO firms/family ownership		0.120 (1.05)		-0.946 (-2.99)
Descendent CEO firms/family ownership		0.300 (3.71)		0.425 (1.80)
Size	0.106 (3.19)	0.094 (3.06)	0.088 (2.47)	0.076 (2.33)
Market-to-book ratio	0.120 (6.24)	0.120 (6.37)	0.125 (6.08)	0.121 (5.99)
Leverage	-0.183 (-0.41)	-0.210 (-0.49)	-0.295 (-0.70)	-0.270 (-0.63)
Litigation indicator	0.154 (1.00)	0.120 (0.74)	0.132 (0.82)	0.092 (0.57)
ROA	-10.986 (-20.26)	-10.930 (-19.49)	-11.015 (-17.69)	-10.797 (-17.50)
Return volatility	20.773 (2.65)	22.114 (2.83)	20.556 (2.53)	23.606 (2.87)
Analyst coverage	0.055 (0.95)	0.074 (1.24)	0.078 (1.36)	0.089 (1.63)
Institutional ownership	0.376 (2.12)	0.309 (1.59)	0.277 (1.50)	0.248 (1.37)
Industry indicators	YES	YES	YES	YES
N	8,264	8,264	8,264	8,264
Average adj. R ²	0.119	0.120	0.118	0.120

Table 3 (Continued)

Notes to Table 3:

Definition of variables:

<i>Family firms</i> =	Indicator variable coded as 1 if 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;
<i>Professional CEO family firms</i> =	Indicator variable coded as 1 if the CEO of a family firm is not a member of the founding family, either by blood or marriage;
<i>Founder CEO firms</i> =	Indicator variable coded as 1 if the founder is the CEO of the family firm;
<i>Descendent CEO firms</i> =	Indicator variable coded as 1 if a member of the founding family, either by blood or marriage (other than the founder), is the CEO of the family firm;
<i>Family ownership</i> =	The proportion of shares owned by founding families in year t.

See notes to Table 2 for definitions of other variables.

Table 4
The Incremental Impact of High Family Ownership and Many Family Directors

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. High family ownership is measured using 10% cutoff. Many family directorships is measured using three or more as the cutoff. See notes to Tables 2 and 3 for definitions of other variables. For parsimony results on control variables are not tabulated.

	(1)	(2)	(3)	(4)
	Low and high family ownership	Incremental impact of high vs. low family ownership	Few and many family directorships	Incremental impact of few vs. many directorships
Intercept	-1.272 (-3.28)		-1.301 (-3.41)	
<i>Family firms with low ownership (<10%)/few directorships (one or two)</i>				
Professional CEO family firms	0.410 (4.80)		0.403 (13.79)	
Founder CEO firms	0.383 (2.59)		0.279 (2.13)	
Descendent CEO firms	0.353 (1.72)		0.176 (1.23)	
<i>Family firms with high ownership (≥10%)/many directorships (three or more)</i>				
Professional CEO family firms	0.518 (2.86)	0.108 (0.36)	0.862 (4.14)	0.459 (2.09)
Founder CEO firms	-0.161 (-1.14)	-0.545 (-3.07)	-0.555 (-1.90)	-0.834 (-2.39)
Descendent CEO firms	0.228 (2.86)	-0.125 (-0.36)	0.503 (3.97)	0.327 (1.51)
Control variables	YES		YES	
Industry indicators	YES		YES	
N	8,264		8,264	
Average adj. R ²	0.122		0.119	

Table 5
The Impact of Non-CEO Family Ownership vs. CEO 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. Family ownership is separated into family CEO ownership and non-CEO family ownership in column (1). Non-family CEO ownership is the proportion of shares owned by non-family CEOs (and is zero for family CEO firms). See notes to Tables 2 and 3 for definitions of other variables. For parsimony results on control variables are not tabulated.

	(1)	(2)	(3)
	CEO & non-CEO Family ownership	Total CEO ownership	Family & Non-family CEO ownership
Intercept	-0.967 (-2.37)	-0.993 (-2.54)	-0.764 (-2.81)
Professional CEO family firms: non-CEO family ownership	1.291 (2.87)		
Founder CEO firms: non-CEO family ownership	-0.588 (-1.22)		
Descendent CEO firms: non- CEO family ownership	0.950 (5.51)		
Family CEO ownership	-2.185 (-3.71)		-2.452 (-4.45)
Non-family CEO ownership	-2.835 (-0.42)		-2.776 (-0.41)
Total CEO ownership		-2.362 (-3.08)	
Control variables	YES	YES	YES
Industry indicators	YES	YES	YES
N	8,213	8,213	8,213
Average adj. R ²	0.119	0.118	0.120

Table 6
The Impact of 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 and 3 for definitions of other variables. For parsimony results on control variables are not tabulated.

	(1)	(2)	(3)
	Board independence & outside director ownership	Board independence & non-family outside director ownership	Adding family ownership
Intercept	-1.328 (-2.79)	-1.186 (-2.46)	-1.263 (-2.32)
Family ownership in professional CEO family firms			1.103 (2.14)
Family ownership in founder CEO firms			-0.666 (-1.80)
Family ownership in descendent CEO firms			0.514 (3.53)
Board independence	0.304 (1.56)	0.238 (1.19)	0.260 (1.11)
Total outside director ownership	1.206 (1.91)		
Non-family outside director ownership		1.013 (0.48)	1.103 (0.52)
Control variables	YES	YES	YES
Industry indicators	YES	YES	YES
N	8,110	8,110	8,110
Average adj. R ²	0.120	0.120	0.120

Table 7
Hypothesis Testing Regression Results Using Family Firm Indicators –
Conservatism Measured as the Difference in the Skewness of Earnings and Cash Flows

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 the difference in the average three-year skewness between ROA and CFO/Assets, times 100. See notes to Tables 2 and 3 for definitions of other variables.

Model:

$$SKEW_{i,t} = \alpha + \beta_1 FAM_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 MB_{i,t} + \beta_4 LEV_{i,t} + \beta_5 LIT_{i,t} + \beta_6 ROA_{i,t} + \beta_7 RVOL_{i,t} + \beta_8 AC_{i,t} + \beta_9 INST_{i,t} + IndustryDummies + \varepsilon_{i,t} \quad (2)$$

	(1) Family firm indicator	(2) Professional, founder, and descendent CEO firm indicators
Intercept	-10.969 (-0.62)	-8.527 (-0.45)
Family firms	1.673 (0.50)	
Professional CEO family firms		8.437 (2.32)
Founder CEO firms		-7.292 (-2.94)
Descendent CEO firms		1.012 (0.13)
Size	3.109 (3.58)	2.589 (2.76)
Market-to-book ratio	0.619 (1.04)	0.768 (1.27)
Leverage	20.018 (2.77)	21.468 (2.95)
Litigation indicator	12.145 (2.68)	12.873 (2.52)
ROA	-60.645 (-2.51)	-57.432 (-2.56)
Return volatility	86.020 (0.29)	143.600 (0.47)
Analyst coverage	-3.980 (-0.94)	-3.697 (-0.87)
Institutional ownership	27.764 (2.09)	25.774 (2.14)
Industry indicators	YES	YES
N	8,355	8,355
Average adj. R ²	0.016	0.016

Table 8
Hypothesis Testing Regression Results Using Family Firm Indicators –
Conservatism Measured Using Basu Asymmetric Timeliness Approach

	(1) Family firms	(2) Separating family firms into professional, founder, and descendent CEO firms
Indicator for negative return (NEG)	0.000 (0.05)	-0.002 (-0.27)
Return (RET)	0.015 (1.75)	0.012 (1.38)
RET × NEG	0.149 (2.93)	0.151 (2.76)
Family firm indicator (FAM)	-0.005 (-1.82)	
FAM × NEG	0.009 (1.98)	
FAM × RET	0.003 (0.49)	
FAM × NEG × RET	0.040 (2.30)	
Professional CEO family firm indicator (FAM_P)		-0.003 (-1.73)
FAM_P × NEG		0.005 (1.49)
FAM_P × RET		-0.001 (-0.15)
FAM_P × NEG × RET		0.030 (2.07)
Founder CEO family firm indicator (FAM_F)		-0.005 (-1.71)
FAM_F × NEG		0.006 (1.19)
FAM_F × RET		0.000 (0.03)
FAM_F × NEG × RET		0.024 (1.04)
Descendant CEO family firm indicator (FAM_D)		-0.007 (-1.78)
FAM_D × NEG		0.025 (2.41)
FAM_D × RET		0.020 (2.44)
FAM_D × NEG × RET		0.100 (1.79)
Control variables	Yes	Yes
N	8,264	8,264
Adj. R ²	0.185	0.190

Table 8 (Continued)

Notes to Table 8:

Model:

$$\begin{aligned}
NI = & \alpha + \beta_1 NEG + \beta_2 RET + \beta_3 RET \times NEG \\
& + \beta_4 FAM + \beta_5 FAM \times NEG + \beta_6 FAM \times RET + \beta_7 FAM \times NEG \times RET \\
& + \beta_8 MB + \beta_9 MB \times NEG + \beta_{10} MB \times RET + \beta_{11} MB \times NEG \times RET \\
& + \beta_{12} LEV + \beta_{13} LEV \times NEG + \beta_{14} LEV \times RET + \beta_{15} LEV \times NEG \times RET \\
& + \beta_{16} SIZE + \beta_{17} SIZE \times NEG + \beta_{18} SIZE \times RET + \beta_{19} SIZE \times NEG \times RET + \varepsilon \quad (3a)
\end{aligned}$$

$$\begin{aligned}
NI = & \alpha + \beta_1 NEG + \beta_2 RET + \beta_3 RET \times NEG \\
& + \beta_4 FAM_P + \beta_5 FAM_P \times NEG + \beta_6 FAM_P \times RET + \beta_7 FAM_P \times NEG \times RET \\
& + \beta_8 FAM_F + \beta_9 FAM_F \times NEG + \beta_{10} FAM_F \times RET + \beta_{11} FAM_F \times NEG \times RET \\
& + \beta_{12} FAM_D + \beta_{13} FAM_D \times NEG + \beta_{14} FAM_D \times RET + \beta_{15} FAM_D \times NEG \times RET \\
& + \beta_{16} MB + \beta_{17} MB \times NEG + \beta_{18} MB \times RET + \beta_{19} MB \times NEG \times RET \\
& + \beta_{20} LEV + \beta_{21} LEV \times NEG + \beta_{22} LEV \times RET + \beta_{23} LEV \times NEG \times RET \\
& + \beta_{24} SIZE + \beta_{25} SIZE \times NEG + \beta_{26} SIZE \times RET + \beta_{27} SIZE \times NEG \times RET + \varepsilon \quad (3b)
\end{aligned}$$

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. NI is the net income before extraordinary items, scaled by beginning stock price. RET is annual stock returns ending three months after the fiscal year end. NET is an indicator variable for negative RET. FAM, FAM_P, FAM_F, and FAM_D are indicator variables for family firms, family firms managed by professional CEOs, family firms managed by founder CEOs, and family firms managed by descendant CEOs, respectively. See notes to Tables 2 and 3 for definitions of other variables.