Evidence on the contracting explanation of conservatism

Ryan Blunck
Georgia State University

ABSTRACT

This paper investigates the three contracting explanations of conservative accounting suggested by Watts (2003). Using Basu's asymmetric timeliness as the primary measure of conservatism this paper provides evidence supporting the debt, compensation, and governance theories of conservative accounting. Debt, compensation and governance are all related to cross-sectional differences in conservative reporting separately and together in the same model. These findings suggest that firms report conservatively for a number of different reasons and that it is unlikely that just one explanation of conservatism can explain its existence for all firms.

Keywords: conservative accounting, conservatism, asymmetric timeliness, contracting

INTRODUCTION

Watts (2003) suggests that financial statement users benefit from conservative financial reporting and therefore demand it from managers. One explanation of the demand for conservatism is the contracting explanation. The contracting explanation of conservatism is that shareholders and debt-holders demand conservative financial reporting from managers to reduce agency costs and to align managerial incentives with those of shareholders. The contracting explanation is comprised of three distinct theories. Watts separates the contracting explanation into the compensation, debt, and governance theories. This paper empirically investigates the three contracting theories of conservatism to determine which if any of these theories helps to explain cross-sectional differences in conservatism. This paper provides evidence consistent with the debt and compensation theories and finds limited evidence consistent with the governance theory.

Each contracting theory is a unique explanation for why managers report conservatively. The contracting debt theory is well established in the literature (e.g., Ahmed et al 2002, Qiang 2007). This theory says that because of a debt-holder's asymmetric payoffs they demand conservative accounting from managers. Debt-holders have little to gain when a firm performs better than expected, but have a lot to lose when a firm's performance is poor. Thus, many debt contracts include covenants which transfer assets to debt-holders when the terms of the covenant are not met. These covenants allow debt-holders to limit losses in liquidation and to protect their interests. Debt-holders also often have the right to stop managers from making liquidating dividends to shareholders. All of these rights rely on timely disclosure of bad news to debt holders. Conservative accounting ensures that debt holders receive bad news in a timely manner so they can exercise their rights. This paper provides evidence that debt financing is associated with a firm's level of accounting conservatism.

The contracting compensation theory of conservatism is based on the ex-post settling up problem. This problem exists because managers generally have shorter horizons than do shareholders. A manager's payoffs are closely linked with short-term firm performance while shareholders are more concerned with long-term value. A manager who is immediately compensated for an investment decision may no longer be with the firm when the consequences of the decision are realized. If the investment decision turns out to be a bad one, the manager may not be held responsible. In most cases it is difficult for shareholders to recover compensation that has been distributed to managers. If managers know that they will not be held responsible for investments in long-term negative net present value projects, they may be more willing to accept projects that are profitable in the short-term but generate long-term losses. Prior research has shown that CEO compensation is highly correlated with earnings (Lambert and Larker 1987, Sloan 1993). Conservative accounting requires firms to recognize bad news as it becomes known, but postpones the recognition of good news until the good news is realized or nearly realized. When earnings are conservative CEOs are less likely to be compensated for projects with uncertain returns and are more likely to be held responsible for poor investment choices. The ratio of cash compensation to total compensation and years-to-retirement are proxies for the importance of the ex-post settling up problem[1]. This paper provides some

[1] This study uses the ratio of cash compensation to total compensation to measure the importance of cash compensation to the CEO. The ex-post settling up problem should primarily exist in the portion of compensation paid to managers in cash. The larger the percentage of cash compensation to total compensation the more important the ex-post settling up problem should be.

evidence that the number of years until a CEO leaves a firm, a proxy for CEO horizon, is associated with accounting conservatism.

The contracting governance theory of conservatism predicts that shareholders are better able to take actions to improve firm performance when they receive bad news in a timely manner. For example, if a manager initiates a negative net present value project, conservative accounting would improve the likelihood that shareholders receive bad news on a timely basis. Armed with timely information, shareholders are better able to correct problems and disciple managers. The author expects that firms with stronger corporate governance at the beginning of a reporting period will have more conservative accounting. When shareholders have stronger governance mechanisms in place they should be better able to impose conservative accounting on managers (Ahmed and Duellman 2007). So, good governance characteristics should be positively associated with accounting conservatism. The percentage of insiders on the board, percentage of insiders on the audit committee, the number of board meetings, the Gompers metric, and managerial stock ownership are proxies for corporate governance quality. This paper provides limited evidence that stronger corporate governance is associated with more accounting conservatism.

The author uses Basu's (1997) measure of asymmetric timeliness as the primary measure of conservatism because of its simple, straight-forward interpretation. Asymmetric timeliness measures the difference in sensitivity of earnings to positive and negative economic news. Firms with greater asymmetric timeliness are considered more conservative. A number of accounting studies express concerns about this measure's ability to capture conservatism (e.g. Givoly, Hayn, and Natarajan 2007). There have also been papers that defend Basu's asymmetric timeliness measure (e.g. Ryan 2006, Ball and Kothari 2006). After a thorough review of the conservatism literature, it seems that asymmetric timeliness continues to be a valid measure of accounting conservatism. Nonetheless, as a sensitivity check the author also uses Givoly and Hayn's (2000) non-operating accruals measure of conservatism and finds that the results are largely the same.

This paper is the first comprehensive study of the contracting explanation of accounting conservatism, though previous research has investigated the debt and governance theories separately. This study tests all three explanations together and finds evidence that each explanation has a separate and significant impact on a firm's choice to report conservative earnings. Depending on the characteristics of a particular firm, the debt, compensation or governance theories may have differing importance for the firm's choice to practice conservative accounting. This is the first study to provide evidence that the compensation theory (i.e., the ex post settling up problem) is associated with conservative accounting. This paper continues a growing stream of research regarding the importance of, and explanation for firms' conservative accounting.

This research is important because it provides evidence regarding the demand for conservative accounting. Conservative financial reporting is a persistent phenomenon that is yet to be fully explained. As the conservatism literature continues to mature it should help regulators understand the demand for and potential benefits of conservatism and should influence regulatory choices. The conceptual framework for financial accounting currently calls for "neutrality of information" to be applied to financial statements (FASB 1980). If conservative accounting is a natural, efficient outcome then it is important for regulators to acknowledge its benefits as they make regulations that constrain firm choices. The FASB and IASB continue to debate an expansion of "fair-value" accounting within the GAAP framework. If these regulatory bodies move to more fair-value accounting without regard to the benefits of conservative

accounting, they may inadvertently reduce the contracting efficiency of financial statement users. This paper provides evidence that conservatism is demanded by debt holders and shareholders to reduce agency costs and to improve contracting.

HYPOTHESIS DEVELOPMENT AND PRIOR LITERATURE

Conditional and Unconditional Conservatism

Conservatism has long been recognized as one of the fundamental characteristics of financial accounting. Academic research has confirmed its continued existence and its increasing importance over time (Basu 1997, Beaver and Ryan 2000, Givoly and Hayn 2000). Conservatism can be classified into two distinct types, unconditional and conditional (Ball and Shivakumar 2005). Unconditional conservatism is the systematic reduction of an accounting number without regard to information or an event. Examples of this type of conservatism include adopting accelerated depreciation methods and expensing research and development costs. Unconditional conservatism has been found to be related to a firm's desire to avoid taxes, a firm's litigation risk, and accounting regulations (Qiang 2007). There is also evidence that unconditional conservatism is negatively correlated with conditional conservatism (Rowchowdhury and Watts 2007).

Conditional conservatism is defined as either asymmetric timeliness (Basu 1997) or asymmetric verification (Watts 2003) conditional on an event. Both definitions of conditional conservatism require managers to postpone reporting good news and to accelerate reporting bad news. Because there is discretion available in GAAP, managers often have a choice whether to report information immediately or to defer reporting the information into the future. Conditional conservatism imposes asymmetric requirements for reporting information depending on the effect of the information on the financial statements. Conditional conservatism is similar to its unconditional counterpart as it tends to reduce earnings and book value.

An example of conditional conservatism is when a firm has new information regarding the quality of its outstanding account receivables. Under conditional conservatism if the news is bad (i.e., the account receivables appear less likely to be collected) a loss will be reported immediately. On the other hand, if the news about the outstanding account receivables is good (i.e., the account receivables appear more likely to be collected) conditional conservatism would postpone the reporting of the news until the change becomes more certain. This paper uses conditional conservatism as the construct of interest and whenever the word conservatism is used this is the type to which is referred.

Explanations of Conservatism

Watts (2003) provides the following four potential explanations for the existence of conservatism in financial accounting: shareholder litigation, taxation, regulation, and contracting. The litigation hypothesis claims that by understating earnings and net assets a firm is less likely to be sued by shareholders. Current shareholders are more likely to sue if they feel that a firm has overstated the firm's financial position than if a firm understates assets or defers earnings. Both conditional and unconditional conservatism understates earnings and book value, which reduces the likelihood of shareholder litigation. Basu (1997) provides evidence that conditional conservatism varies through time as the litigation environment changes. Ball et al. (2000) provide evidence that conservatism varies across countries according to a country's system of law. They show that in countries where shareholder litigation is more likely, firms tend to have more conservative financial reporting. Qiang (2007) predicts and finds that the litigation theory is related to both conditional and unconditional conservatism. Litigation is not the focus of this paper but may be associated with a firm's level of conservatism, therefore this study controls for litigation in its empirical tests.

The taxation explanation for conservative accounting is that firms reduce financial earnings to lower their taxes. Financial earnings will only reduce taxes in firms with a high degree of book-tax conformity. The taxation explanation predicts that when there is a high correlation between book and tax earnings a firm will be more likely to report conservative financial earnings to reduce tax obligations. Qiang (2007) finds that taxation is related to unconditional conservatism but not conditional conservatism. Since there is no evidence that the taxation explanation is related to conditional conservatism, this study does not control for taxation in its empirical tests.

The regulation explanation of conservatism is that accounting regulation requires firms to report conservatively. Ball et al. (2000) provides evidence that conservatism is associated with governmental regulation in a cross country sample. Qiang (2007) concludes that regulation induces unconditional conservatism but not conditional conservatism. Because Qiang (2007) finds that regulation is not associated with conditional conservatism this study does not directly control for the regulation explanation of conservatism in its empirical tests.

The Contracting Explanation of Conservatism

The separation of ownership and control between shareholders and managers creates agency costs (Jensen and Meckling 1976). To reduce agency costs shareholders contract with managers using financial accounting. Financial accounting is more useful for contracting when it exhibits certain characteristics such as timeliness. Asymmetric timeliness of accounting also benefits shareholders by helping them to monitor managers more efficiently and by motivating managers to maximize firm value. If shareholders fail to create appropriate incentives for managers, CEOs will maximize their own payoff functions instead of maximizing the value of the firm. Conservatism is one method to help align the interests of managers with those of shareholders and to decrease agency costs. Debt holders may also benefit from conservative accounting, since their payoff functions are asymmetric with respect to the performance of the firm.

Watts (2003) has separated the contracting explanation of conservatism into three distinct theories. Each theory can explain conservatism by itself or may be a contributing factor amongst

a number of factors regarding the supply of conservative accounting. Each of these contracting theories of conservatism are reviewed below.

Another potential source of demand for accounting conservatism is from customers or suppliers. Hui et al. (2012) investigate this explanation and find a relation between accounting conservatism and powerful customers and suppliers. This study does not investigate this alternative contracting theory.

The Contracting Debt Theory

The contracting debt theory of conservatism is that debt holders demand conservative accounting to help them avoid liquidating dividends, monitor a firm's liquidation value more efficiently, and exercise their contractual rights on a timely basis. Ahmed et al. (2002) find that firms with the potential for more severe bondholder-shareholder conflicts over dividends report more conservatively and that conservatism is associated with a lower cost of debt. Conservative accounting decreases the possibility that shareholders will receive dividends from reported earnings that never materialize in cash. Debt holders demand conservative accounting to reduce the likelihood that shareholders will receive a liquidating dividend at their expense.

Conservative accounting also improves debt holders' ability to monitor a firm so they can exercise their contractual rights more efficiently. Nikolaev (2010) finds that firms with more restrictive debt covenant tend to be more conservative. He argues that conservative accounting makes debt covenants more valuable and effective. Conservative accounting ensures that debt holders receive bad news in a timely manner so they can exercise their rights. Zhang (2008) finds that both lenders and borrows benefit from conservative reporting.

The contracting debt theory leads one to predict that firms with more debt will have more conservative accounting. The more influence debt holders have over a firm the more likely it is that they will be in a position to require managers to report conservatively.

The Contracting Compensation Theory

The contracting compensation theory of conservatism is that shareholders demand conservatism to overcome a manager's bias toward myopic behavior. Managers tend to have a shorter horizon than do shareholders since a manager's payoffs are closely linked with short-term firm performance through compensation contracts. Managers are also threatened by loss of employment. So, many managers are willing to sacrifice long-term firm value in exchange for current performance (Graham et al. 2005). To counteract this tendency some shareholders demand conservative accounting.

Conservative accounting reduces myopic managerial behavior by reducing the ex-post settling up problem. The ex-post settling up problem is that managers make investment decisions with long-term implications for a firm but only face the consequences of those decisions as long as they are employed by the firm. Once a manager's employment ends recouping losses or retrieving excess compensation from the manager is nearly impossible. So managers have the incentive to accept projects that are profitable in the short-term regardless of their long-term costs or benefits. Financial accounting provides a tool to overcome managers' tendency toward myopic behavior. Prior research has shown that earnings are a key driver of managerial compensation (Lambert and Larker 1987, Sloan 1993). Asymmetric timeliness of earnings helps to overcome a manager's tendency to act myopically. Bad news is reflected in

earnings on a timelier basis so managers are more likely to be held responsible for investing in long-term negative net present value projects. Good news is not reported until it is very likely to be realized, so managers are motivated to ensure profits are realized.

Leone et al. (2006) provide evidence that CEO cash compensation is more highly associated with negative stock returns than positive stock returns. They interpret this as evidence that shareholders control for the ex-post settling up problem when they make compensation contracts with managers. However, Leone et al. ignore earnings in their empirical work and do not test whether accounting conservatism is associated with the ex-post settling up problem.

One might expect firms for which cash compensation is a more important element of total compensation to have more conservative accounting. The more cash compensation a manager receives the more likely the ex-post settling up problem will be a concern and thus the greater the need for conservative accounting. One might also expect that firms with CEOs who are closer to retirement or CEOs which are likely to be replaced to have a shorter horizon and therefore will have more conservative accounting. In other words, shareholders should demand more conservative accounting from managers with shorter horizons.

The Contracting Governance Theory

The governance theory of conservatism is that asymmetric timeliness of earnings helps shareholders monitor managers more effectively. Timely recognition of bad news provides shareholders more time to induce managers to make changes or helps shareholders to replace management on a timelier basis. Ahmed and Duellman (2007) find that corporate governance quality is associated with accounting conservatism. Specifically, they document a positive relationship between the percentage of outsiders on the board and three measures of accounting conservatism. Qiang (2007) find similar results for conditional conservatism. Ahmed and Duellman (2007) also find that the percentage of outside directors' shareholdings is positively related to conservatism. These findings suggest that firms with higher quality corporate governance impose conservative accounting on managers to improve the board's monitoring effectiveness. The governance theory of conservatism leads us to predict that high quality corporate governance will be positively associated with conservative accounting.

Another governance mechanism that may reduce agency costs is the alignment of managerial incentives through equity ownership. LaFond and Roychowdhury (2008) find that managerial ownership is associated with accounting conservatism. Managers with more stock ownership act more like shareholders, so the need to report conservatively is reduced.[2] One might expect that the level of managerial ownership will be associated with a firm's accounting conservatism.

[2] Conservative accounting should also be related to the degree of asymmetry of information between managers and shareholders. Lafond and Watts (2008) document that the PIN score, a proxy for asymmetry of information between informed and uninformed shareholders, is associated with asymmetric timeliness of earnings. This result suggests that firms with more asymmetric information and therefore more agency costs have shareholders that demand more conservative accounting to overcome those agency costs.

RESEARCH DESIGN AND VARIABLE MEASUREMENT

Measurement of Conditional Conservatism

The primary measure of conditional conservatism in this study is Basu's (1997) asymmetric timeliness measure as follows:

$$\text{Earnings} = \beta_0 + \beta_1\text{Negative} + \beta_2\text{Return} + \beta_3\text{Return*Negative} + \varepsilon \quad (1)$$

where Earnings is annual earnings divided by MVE_{t-1}, Return is the sum of the monthly raw returns from 9 months before fiscal year end to 3 months after fiscal year end, Negative is a dummy variable that equals one if Return is negative and is equal to zero otherwise. The coefficient β_3 measures the incremental timeliness of bad news (negative returns) compared to the timeliness of good news (positive returns). The larger the coefficient β_3 the more asymmetry in timeliness of earnings and the more conditionally conservative is a firm's accounting. Many studies have relied on Basu's measure of asymmetric timeliness including Ball and Shivakumar (2005), Bushman and Piotroski (2006), Lafond and Watts (2008), Nikolaev (2010), LaFond and Roychowdhury (2008), and Ahmed and Duellman (2007).

Recent research discusses several concerns regarding Basu's measure of accounting conservatism (Ball et al. 2013). Roychowdhury and Watts (2007) show that asymmetric timeliness of earnings and the market-to-book ratio, two commonly used measures of accounting conservatism, are negatively correlated when asymmetric timeliness is measured over short periods. They find that the beginning of the period equity value is primarily responsible for this result. To control for the beginning of the period equity value this study includes a firm's beginning market-to-book ratio in all of the regressions.

Givoly et al. (2007) identify a number of firm characteristics that are unrelated to conservatism, but affect the asymmetric timeliness of earnings. One of their concerns is the aggregation of news over time. They argue that small firms have less information which tends to be focused around the earnings announcement dates. Big firms have more information released throughout the year and will therefore experience more aggregation of information. Because of the increased aggregation of information in larger firms the asymmetric timeliness of earnings is expected to be less for large firms than for small firms with similar amounts of accounting conservatism. Thus, this study controls for firm size as described below. Givoly et al. (2007) also show that Basu's asymmetric timeliness measure may not reflect accounting conservatism when it does, in fact, exist- which should bias against finding results.

Khan and Watts (2009) attempt to create a firm-year measure of conservatism by controlling for similar firm characteristics (i.e., MB, Size, and Leverage). The author does not use their measure of accounting conservatism because of its severe limitations and because this study does not require a firm-year measure since its tests measure cross sectional differences in accounting conservatism and not changes over time.

Another concern is that asymmetric timeliness of earnings varies with important economic events, such as mergers, class-action lawsuits, and SEC investigations (Givoly et al. 2007). Because of these concerns with the asymmetric timeliness measure of conservatism, this study also uses a second measure to substantiate the main results. The second measure of conditional conservatism used in this study is non-operating accruals, as computed by Givoly and Hayn (2000). This measure is calculated as the average of the past five years' non-operating

accruals. Non-operating accruals are total accruals (Compustat data item #18 + #14 – #308) less operating accruals (Compustat data item #302 + #303 + #304 + #305 + #307). This study takes the average of the past five years non-operating accruals and scales it by the beginning market value of equity; then changes the sign of the variable so that a more positive number means more conservative accounting. Non-operating accruals measure the tendency of a firm to report more losses relative to gains over a period of time. This measure of conditional conservatism has weaknesses as well, but should provide additional evidence with regard to the research question this study investigates[3].

To test each of the three contracting theories of accounting conservatism, the author relies on proxies for the relative importance of debt and compensation contracts and the strength of governance mechanisms. It also controls for a number of variables that are expected to be associated with the asymmetric timeliness of earnings but are not associated with the contracting explanation of conservatism.

Each independent variable is measured as the scaled decile rank of the continuous measure. Each decile is scaled by 9 to simplify the interpretation of each variable. For example, if an explanatory variable for a firm in a given year is in the highest decile, the firm-year measure would be assigned a value of 9/9 or one. Firms in the lowest decile would get a value of 0/9 or zero. So, the coefficients in the regressions can be interpreted as the effect of a move from the bottom decile to the top decile. This procedure allows one to directly compare the effects of each variable on the degree of asymmetric timeliness. Fama-MacBeth (1973) regressions are run to ensure that changes in the measures over time do not affect the results.

For the main results this study follows the research design of LaFond and Watts (2008). Each of the right-hand side variables in equation (1) are interacted with the explanatory and control variables (e.g. Leverage, Litigation, etc.). The interactions between Return, Negative, and the explanatory variables provide the coefficients of interest. Explanatory variables that are associated with a firm's tendency to report conservatively should have significant coefficients on these interaction terms. All explanatory variables and controls are measured in the previous year to ensure that changes in the variable during the year do not affect the asymmetric timeliness of earnings.

Measurement of Debt

A firm's leverage ratio (Compustat data item ([#9 + #34] / #16) measures the importance of the debt theory of accounting conservatism (hereafter Leverage). The more important debt is as a financing tool, the greater the impact that debt holders should have on the financial reporting of a firm. Debt holders will use their influence to impose conservative accounting on managers. If the debt theory of accounting conservatism explains cross-sectional differences in conservatism, then one should expect higher leverage ratios to be associated with greater asymmetric timeliness of earnings.

[3] Non-operating accruals are a noisy proxy of accounting conservatism. All proxies for accounting conservatism have significant measurement error which makes it hard to draw inferences about accounting conservatism.

Measurement of Compensation

If shareholders demand conservative accounting to minimize the ex-post settling up problem, then one should expect that firms for which the ex-post settling up problem is likely to be more severe to have more conservative accounting. To proxy for the severity of the ex-post settling up problem the percentage of a manager's total compensation that is paid in cash (hereafter Cash) is used. Specifically this study uses the percentage of total compensation paid in cash ([bonus + salary] / total compensation) as disclosed in Execucomp. One should predict that shareholders at firms with higher proportions of cash compensation should demand more conservative accounting and thus exhibit greater asymmetric timeliness of earnings. A second proxy for the severity of the ex-post settling up problem attempts to capture the managerial horizon or potential myopia of CEOs. The second measure is the number of years until a manager leaves a firm as disclosed in Execucomp (hereafter Horizon).[4] One should expect that the number of years until a manager leaves a firm is negatively correlated with conservative accounting. In other words, the shorter the managerial horizon, the greater the conservative accounting demanded by shareholders.

Measurement of Governance

Prior research has utilized numerous proxies for strength of corporate governance. This study relies on several measures used in prior studies of accounting conservatism, as well as several additional measures used in corporate governance research. First, the percentage of independent directors on the board (Independent-Board) and the percentage of independent directors on the audit committee (Independent-Audit) are used since prior research shows that independence of the audit committee and board are important factors in evaluating the quality of a firm's internal corporate governance (Klein 2002, Krishnan 2005). Second, to proxy for the strength of corporate governance this study uses the number of meetings held each year by the board of directors (Meetings). Prior research shows that the number of board meetings per year is a proxy for the strength of a firm's corporate governance (Vafeas 1999). Independent-Board, Independent-Audit, and Meetings are measures of managerial monitoring by the board.

Third, this study uses a firm's Gompers score (G-score), a measure of the shareholders' rights, as a proxy for the strength of a firm's external corporate governance. Fourth, recent accounting research finds that managerial ownership is systematically related to accounting conservatism (Lafond and Roychowdhury 2008). Thus, the author measure Ownership as the number of shares owned by the CEO, excluding options, divided by the total number of shares outstanding. This measure is likely negatively correlated with firm size; thus, this study controls for firm size as described below.

One should expect that higher quality corporate governance will be positively associated with the degree of accounting conservatism. Specifically, one should expect Independent-Board, Independent-Audit, and Meetings to be positively related to the asymmetric timeliness of earnings. In contrast, one should expect G-score to be negatively associated with asymmetric

[4] This variable relies on ex-post data and excludes firms whose CEOs are still employed by the firm. It is not clear how accurately shareholders and CEOs can predict when a CEO will leave a firm. CEOs leave firms for many reasons including retirement, death, sickness, poor performance, and better opportunities. To the extent that shareholders and CEOs can predict these events one should expect the measure to accurately measure the CEO's horizon and the shareholder's estimation of the CEO's horizon.

timeliness since G-score is decreasing in shareholder rights. Finally, since firms with lower agency costs should have less need for conservative accounting, one should expect that Ownership will be negatively correlated with the asymmetric timeliness of earnings.

Controls

Prior research has shown that asymmetric timeliness is associated with firm characteristics that are unrelated to conservative accounting or to the contracting theory of conservatism (Givoly et al. 2007). To control for differences in asymmetric timeliness related to firm size, Size is included, which is measured as the scaled decile ranking of market value of equity at the beginning of the fiscal year. Prior research also shows that asymmetric timeliness is negatively correlated with the market-to-book ratio (Roychowdhury and Watts 2007). To control for this effect the regression includes the market-to-book ratio and calls it MB.

In a test of various explanations of accounting conservatism, Qiang (2007) finds that both the litigation and contracting theories are related to conditional conservatism. She finds that other explanations of conservatism, governance and taxes, are associated with unconditional conservatism but not conditional conservatism. Since the focus of this study is on the contracting theory of conservatism and it uses a conditional conservatism measure, litigation is controlled for. Following Francis et al. (1994) and LaFond and Roychowdhury (2008) this study measures litigation risk as a dummy variable (Litigation) that equals one if the firm is in one of the litigation intensive industries indicated by the four digit SIC industry codes 2833-2836, 3570-3577, 7370-7374, 3600-3674, and 5200-5961. Size of the firm's auditor is also used as a control for litigation risk. Firms with Big 4 auditors (or the earlier equivalents) have a value of one for the dummy variable Big4 and all other firms receive a zero (firms with Compustat data item #149 < 90 receive a value of 1). Past research has shown that firms with more litigation risk tend to have larger auditors to shield the firm from litigation risk (Menon and Williams 1994).

SAMPLE SELECTION AND DESCRIPTIVE STATISTICS

Firms with the required stock return and Compustat data for years 1991-2005 are included, which generates an initial sample of 83,117 firm-years. The compensation and executive data comes from Execucomp, which includes approximately 17,000 firm-years from 1993-2005. Because the myopia variable, Horizon, requires a CEO to leave the firm prior to 2006 to be included in the sample, tests that include this variable are based on just 5,809 firm-years. The governance data is from the IRRC database, which includes board of directors' data and the Gompers metric from 1999-2005. Sample sizes for each variable are listed in Table 1. For all of the empirical tests, the largest sample with the requisite data for each model specification is used.

Table 1 Panel A includes univariate descriptive statistics for each of the variables of interest. Earnings and returns are winsorized at the 1% and 99% level to reduce the effects of outliers. All other variables are indictor variables or scaled decile ranks which reduce the concern about outliers affecting the results. Panel B provides year-by-year observation counts and means of selected measures. The number of observations available for the Horizon measure and the mean value of Horizon are decreasing through time. This is not surprising since the CEO must leave the company after the sample year but prior to 2006 to be included in the sample and earlier sample firm-years are more likely to include CEOs that retire during the sample period.

An untabulated correlation matrix found that all three measures of board monitoring, Independent-Board, Independent-Audit, and Meetings, are positively correlated providing confidence they are measuring similar corporate governance attributes. G-score, which is measured with lower values implying better shareholder rights, is positively correlated with the other measures of corporate governance which may mean there is some tradeoff between these governance mechanisms. As expected, Ownership is negatively correlated with Size. Interestingly, Ownership is also positively correlated with Cash which may imply that shareholders are more willing to pay cash to managers when there are fewer agency costs.

FINDINGS

To test the effects of each of the three theories of accounting conservatism on the asymmetric timeliness of earnings each explanatory variable is interacted with Return*Negative in separate regressions. Table 2 Panel A provides evidence supporting the debt contracting theory of accounting conservatism. As expected there is a significant positive coefficient on the Leverage interaction term. The more a firm finances with debt, the more asymmetric timeliness of earnings it exhibits. This result is consistent with debt holders demanding more conservative accounting to protect themselves from liquidating dividends and to improve the efficiency of their debt covenants. All of the coefficients on the control variables (e.g. Return*Negative*MB) have the predicted sign and significance level, except for Litigation.

Table 2 Panel B provides evidence regarding the compensation contracting theory of accounting conservatism. The coefficient on the first proxy for the ex-post settling up problem, Cash, is not significant. The second proxy for the ex-post settling up problem is Horizon. It appears that on average the shorter a CEO's horizon the more conservative is a firm's accounting. This implies that as a CEO's horizon becomes shorter shareholders require more conservative accounting to counteract the effect of the ex-post settling up problem. Regarding the control variables, only the coefficient on MB is of the predicted sign and significance level. As mentioned earlier, the Horizon sample is a smaller subset of the other samples and the sample selection may bias the empirical results.

Table 2 Panels C1 and C2 provide evidence with respect to the governance contracting theory of conservatism. The only governance quality measure with a significant coefficient is the number of board meetings per year. Meetings reflects the monitoring role of the board where greater numbers of meetings are typically associated with higher quality corporate governance. It appears that as the amount of monitoring increases, the firm's accounting conservatism increases. This supports the contracting governance theory of accounting conservatism which predicts that better governed firms should have more conservative accounting. Previous research using different methodologies has also documented a relationship between the independence of the board and accounting conservatism.

Lafond and Roychowdury (2008) document an association between CEO ownership and asymmetric timeliness of earnings using a very similar methodology and sample selection. This study's coefficient estimate is similar to their results, but this study's p-value in Panel C2 is significantly higher for two reasons. First, they use a one-sided t-statistic while this study uses a two-sided test. Second, this study's sample selection and treatment choices differ from those in LaFond and Roychowdhury (2008). In untabulated results the author replicates Lafond and Roychowdury's findings using more extreme winsorization choices.

In summary, the results using proxies for the three contracting theories of conservatism seperately indicate that to some degree, all three theories have an effect on a firm's choice to report conservatively. However, not all of the contracting variables are of the expected sign and significance levels. In Table 3 variables from each contracting theory are combined in a single regression to compare the importance of the three theories. Because of their prior significance levels, Leverage, Horizon, Ownership, and Meetings are included as explanatory variables. Including Horizon reduces the average sample size to 350 observations per year. The coefficients on Horizon and Meetings continue to be statistically significant, but the coefficients on Leverage and Ownership are not. Note that the R-squared in this regression is significantly higher than in any of the other regression specifications.

Because of the sample selection requirements that Horizon imposes on the combined sample, it is likely that this study includes a sample of firms that are particularly affected by the ex-post settling up problem. So, it is not surprising that this study's proxies for CEO horizon and board monitoring are the most significant. In examining this smaller sample one may observe that it tends to include larger firms that are relatively profitable, but have low market-to-book ratios. These firms are "cash cow" type firms that generate substantial amounts of cash from established operations. Firms in this sample also tend to have significant amounts of debt, but are far from liquidation or violating debt covenants. Thus, the author suspects that the average firm in this sample has debt holders that are less concerned about conservative financial reporting because the firms are far from debt covenant violation and generate steady streams of cash, which would explain the insignificant coefficient on leverage. Although this study does not find a significant result for the coefficient on Leverage in the combined sample, the author expects that for many firms the debt contracting explanation of conservatism is a significant driver of the demand for conservatism as evidenced by the Table 2 results.

To corroborate the results based on Basu's asymmetric timeliness measure of accounting conservatism, the author uses an alternative measure of conditional conservatism to test the importance of the proposed contracting theories. In Table 4 reports results for Fama-MacBeth regressions of Givoly and Hayn's non-operating accruals measure of conservatism on proxies for the three contracting theories of accounting conservatism. Again one finds that Horizon is negatively associated with a firm's conditional conservatism. However, none of the other proxies for the contracting theory are significant in their separate regressions. When proxies for all three explanations are included in the same regression, the coefficients on both Meetings and Horizon are significant. These results reinforce the earlier findings regarding the importance of CEO horizon and board monitoring for a firm's accounting conservatism.

This study's research findings are subject to a number of limitations. It is limited to proxies for accounting conservatism that all include differing amounts of measurement error. Such measurement error may account for the lack of significant results for some of the explanatory variables. In addition, the proxies for each contracting theory also contain varying degrees of measurement error, which may impact the statistical significance of the results.

CONCLUSION

This study provides evidence that to varying degrees supports each of the three contracting theories of accounting conservatism. The main findings suggest that debt holders play an important role in demanding conservative accounting from managers in firms with greater debt financing. Subsequent tests also indicate that debt holders in firms far from

liquidation or debt covenant violation may not demand conservative accounting. Additional findings also suggest that managerial horizon is highly correlated with the degree of accounting conservatism. One may conclude that shareholders demand more conservative accounting when managerial horizons are shorter to alleviate the ex-post settling up problem. This study also provides limited evidence that greater monitoring by the board of directors is associated with conservative reporting.

These findings suggest that conservative accounting exists for several reasons and that it is unlikely that one explanation can describe all the variation in accounting conservatism. Firms with differing characteristics such as financing structure, managerial horizon, and the quality of corporate governance all likely contribute to the importance of accounting conservatism to various financial statement users.

REFERENCES

Ahmed, A. S., B. K. Billings, R. Morton, and M. Harris. 2002. The role of accounting conservatism in mitigating bondholder-shareholder conflicts over dividend policy and in reducing debt costs. The Accounting Review 77, 867-890.

Ahmed, A. S., and S. Duellman. 2007. Accounting conservatism and board of director characteristics: An empirical analysis. Journal of Accounting & Economics 43, 411-437.

Ball, R., S. P. Kothari, and Nikolaev. 2013. Econometrics of the Basu asymmetric timeliness coefficient and accounting conservatism. Working paper University of Chicago.

Ball, R., Kothari, S.P., Robin, A., 2000. The effect of international institutional factors on properties of accounting earnings. Journal of Accounting & Economics 29, 1-52.

Ball, R., and L. Shivakumar. 2005. Earnings quality in U.K. private firms: Comparative loss recognition timeliness. Journal of Accounting and Economics 39, 83-128.

Basu, S., 1997. The conservatism principle and the asymmetric timeliness of earnings. Journal of Accounting & Economics 24, 3-37.

Beaver, W. H., and S. G. Ryan. 2000. Biases and lags in book value and their effects on the ability of the book-to-market ratio to predict book return on equity. Journal of Accounting Research 38, 127-148.

Bushman, R. M., and J. D. Piotroski. 2006. Financial reporting incentives for conservative accounting: The influence of legal and political institutions. Journal of Accounting & Economics 42, 107-148.

Fama, E. F., and J. MacBeth. 1973. Risk return and equilibrium: Empirical test. Journal of Political Economy 71, 607-636.

Financial Accounting Standard Board (FASB). 1980. Qualitative Characteristics of Accounting Information. Statement of Concepts No. 2. Stamford, CT: FASB.

Francis, J., Philbrick, D., and Schipper, K., 1998. Sharholder litigation and corporate disclosures. Journal of Accounting Research 32, 137-164.

Givoly, D., Hayn, C., 2000. The changing time series properties of earnings, cash flows and accruals: has financial reporting become more conservative? Journal of Accounting & Economics 29, 287-320.

Givoly, D., Hayn, C. K., Natarajan, A., 2007. Measuring reporting conservatism. Accounting Review 82, 65-106.

Graham, J., C Harvey, and S Rajgopal, 2005. The economic implications of corporate financial reporting. Journal of Accounting & Economics 40, 3-73.

Hui, K., S. Klasa, and P. Yeung, 2012. Corporate suppliers and customers and accounting conservatism. Journal of Accounting & Economics 53, 115-135.
Jensen, M. C., and W. H. Meckling. 1976. Theory of the firms: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics 3, 305-360.
Khan, M., and R. Watts. 2009. Estimation and validation of a firm-year measure of conservatism, working paper Massachusetts Institute of Technology.
Klein, A., 2002. Economic determinants of audit committee independence. The Accounting Review 77, 435-452.
Krishnan, J., 2005. Audit committee quality and internal control: An empirical analysis. The Accounting Review 80, 649-675.
Lambert, R. and D. Larcker, 1987. An analysis of the use of accounting and market measures of performance in executive compensation contracts. Journal of Accounting Research 25, 85-129.
Lafond, R. and S. Roychowdhury. 2008. Managerial ownership and accounting conservatism. Journal of Accounting Research 46, 101-135.
Lafond, R. and R. Watts. 2008. The information role of conservatism. The Accounting Review 83, 447-478.
Leone, A. J., Wu, J. S., and Zimmerman, J. L., 2006. Asymmetric sensitivity of CEO cash compensation to stock returns. Journal of Accounting & Economics 42, 167-192.
Menon, K. and D. D. Williams. 1994. The insurance hypothesis and market prices. The Accounting Review 69, 327-342.
Nikolaev, V., 2010. Debt covenants and accounting conservatism. Journal of Accounting Research 48, 51-89.
Qiang, X., 2007. The effects of contracting, litigation, regulation, and tax costs on conditional and unconditional conservatism: cross-sectional evidence at the firm level. Accounting Review 82, 759-796.
Roychowdhury, S., and R. L. Watts. 2007. Asymmetric timeliness of earnings, market-to-book and conservatism in financial reporting. Journal of Accounting & Economics 44, 2-31.
Ryan, S. G., 2006. Identifying conditional conservatism. European Accounting Review 15, 511-525.
Sloan, R.G., 1993. Accounting earnings and top executive compensation. Journal of Accounting and Economics 16, 55-100.
Vafeas, N. 1999. Board meeting frequency and firm performance. Journal of Financial Economics 53, 113- 142.
Watts, R. L. 2003. Conservatism in accounting part I: Explanations and implications. Accounting Horizons 17, 207-221.
Zhang, J. 2008. The contracting benefits of accounting conservatism to lenders and borrowers. Journal of Accounting and Economics 45, 27-54.

TABLES

Table 1
Descriptive statistics

Panel A: Summary statistics on unscaled variables

Variable	Obs	Mean	Median	Std. Dev.	P25	P75
Earnings	83,117	-0.016	0.047	0.240	-0.032	0.085
Return	83,117	0.181	0.155	0.534	-0.101	0.421
MB	83,082	3.994	1.712	84.869	1.097	3.168
Size	83,117	2065	142	11,205	35	706
Litigation	83,117	0.203				
Big4	83,117	0.871				
Leverage	82,577	0.225	0.177	0.231	0.033	0.349
Horizon	5,809	2.998	3	3.335	1	5
Cash	17,649	0.531	0.505	0.285	0.298	0.762
Independent-Board	12,331	0.631	0.667	0.185	0.500	0.778
Independent-Audit	9,774	0.875	1	0.205	0.750	1
G-Score	25,351	8.815	9	2.756	7	11
Ownership	16,846	0.029	0.004	0.067	0.001	0.018
Meetings	17,230	7.253	7	3.092	5	9

The unit of observation is firm-year. All firm-years with available data between the years 1991-2005 are included. *Earnings* is the annual net income (data18) divided by the beginning of the year market value of equity (data199 * data25). *Return* is the sum of the monthly raw returns from 9 months before fiscal year end to 3 months after fiscal year end taken from CRSP. *MB* is the beginning of the year market-to-book ([data199 * data25] / data60). *Size* is the beginning market value of equity. *Litigation* is an indicator variable that equals 1 if the firm is in one of the four digit industry codes 2833-2836, 3570-3577, 7370-7374, 3600-3674, and 5200-5961. These industries have been identified has highly litigious. *Big4* is an indicator variable that equals 1 if the firm employs one of the Big 4 auditors or one of the predecessors to the current Big 4 firms (data149 < 90). *Leverage* is the firms leverage ratio at the beginning of the year ([data9 + data34] / data6). *Horizon* is the number of years until the current CEO leaves the firm through retirement, death, or taking a new position taken from Execucomp. *Cash* is the percentage of the CEO's compensation paid in cash taken from Execucomp ([Cash + Bonus] / tdc1). *Independent-Board* is the percentage of board members that are considered independent as recorded by the IRRC database. *Independent-Audit* is the percentage of committee members on the audit committee that are considered independent as recorded by the IRRC database. *G-Score* is the Gompers Metric as recorded by the IRRC database. *Ownership* is the percentage of the firm that is owned by the CEO excluding options as recorded by Execucomp ([shrsown_excl_options / shrsout] /1000). *Meetings* is the number of board meetings for the firm in the previous fiscal year as recorded by Execucomp.

Table 1 (continued)

Panel B: Number of observations and means by year for select variables

Year	Earnings	Horizon	Ownership	Independent-Audit
1991	-0.057 n = 4532			
1992	-0.026 n = 4527	5.1 n = 153		
1993	-0.010 n = 4862	4.6 n = 439	0.025 n = 295	
1994	0.008 n = 5534	4.1 n = 544	0.030 n = 982	
1995	0.008 n = 5988	3.9 n = 539	0.033 n = 1302	
1996	0.008 n = 6129	3.7 n = 522	0.031 n = 1339	
1997	-0.001 n = 6392	3.4 n = 529	0.030 n = 1340	
1998	-0.016 n = 6297	3.4 n = 505	0.030 n = 1376	
1999	-0.017 n = 6184	3.1 n = 489	0.033 n = 1411	0.805 n = 1341
2000	-0.012 n = 5879	3.1 n = 458	0.034 n = 1444	0.821 n = 1422
2001	-0.079 n = 5799	2.9 n = 414	0.030 n = 1478	0.852 n = 1480
2002	-0.045 n = 5556	2.4 n = 370	0.026 n = 1450	0.881 n = 1570
2003	-0.036 n = 5324	1.8 n = 307	0.024 n = 1466	0.902 n = 1313
2004	0.010 n = 5093	1.2 n = 249	0.022 n = 1494	0.925 n = 1326
2005	0.008 n = 5021	0.8 n = 145	0.022 n = 1469	0.949 n = 1322

Table 2
Determinants of Asymmetric Timeliness- Annual cross-sectional Fama-MacBeth regressions of annual returns and determinates regressed on earnings

Panel A- Debt			
		Leverage	
	Expected Sign	Coefficient	P-value
Intercept		-0.000	0.957
Negative		-0.016	0.315
Leverage		-0.021	0.043
MB		-0.008	0.519
Size		0.087	0.000
Litigation		-0.056	0.000
Big4		0.006	0.447
Negative * Leverage		0.004	0.633
Negative * MB		-0.012	0.449
Negative * Size		0.022	0.110
Negative * Litigation		0.021	0.002
Negative * Big4		-0.003	0.748
Return		-0.072	0.000
Return * Leverage		0.007	0.701
Return * MB		0.032	0.055
Return * Size		0.067	0.000
Return * Litigation		0.009	0.126
Return * Big4		-0.007	0.442
Return * Negative	+	**0.467**	**0.000**
Return * Negative * Leverage	+	**0.143**	**0.000**
Return * Negative * MB	-	**-0.360**	**0.000**
Return * Negative * Size	-	**-0.294**	**0.000**
Return * Negative* Litigation	+	-0.006	0.791
Return * Negative * Big4	+	**0.061**	**0.041**
Average adjusted R^2		0.188	
Average n per year		5503	

All variables except *Return* and *Earnings* are indicator variables or the scaled decile rank of the raw variable. *Negative* is an indicator variable which equals 1 if Returns are less than zero and 0 otherwise. All other variables are as defined in Table 1.

BOLD means significantly different from zero at the 0.10 level for interaction terms with *Return*Negative*

Table 2 (continued)

Panel B- Compensation					
		Cash		Horizon	
	Expected Sign	Coefficient	P-value	Coefficient	P-value
Intercept		-0.023	0.320	0.054	0.513
Negative		-0.025	0.559	-0.043	0.714
Cash		0.027	0.001		
Horizon				0.023	0.103
MB		0.000	0.978	0.032	0.274
Size		0.082	0.001	0.083	0.014
Litigation		-0.021	0.003	-0.031	0.005
Big4		-0.010	0.450	-0.118	0.133
Negative * Cash		0.004	0.773		
Negative * Horizon				0.008	0.739
Negative * MB		-0.038	0.029	-0.012	0.717
Negative * Size		0.032	0.369	0.004	0.953
Negative * Litigation		0.014	0.146	-0.007	0.620
Negative * Big4		0.024	0.518	0.056	0.506
Return		-0.068	0.170	-0.050	0.854
Return* Cash		0.016	0.453		
Return * Horizon				0.096	0.037
Return * MB		-0.010	0.632	-0.066	0.216
Return * Size		0.094	0.001	0.101	0.045
Return * Litigation		-0.013	0.348	-0.005	0.831
Return * Big4		0.004	0.930	-0.022	0.928
Return* Negative	+	**0.539**	**0.006**	0.389	0.300
Return * Negative * Cash	+	-0.065	0.293		
Return * Negative * Horizon	-			**-0.308**	**0.018**
Return * Negative * MB	-	**-0.375**	**0.000**	**-0.219**	**0.089**
Return * Negative* Size	-	**-0.366**	**0.006**	-0.264	0.208
Return * Negative * Litigation	+	0.012	0.738	-0.069	0.218
Return* Negative * Big4	+	0.151	0.222	0.249	0.413
Adjusted R^2		0.203		0.264	
Average n per year		1357		415	

Table 2 (continued)

Panel C1- Governance

	Expected Sign	Independent-Board		Meetings		Independent-Audit	
		Coefficient	P-value	Coefficient	P-value	Coefficient	P-value
Intercept		-0.010	0.042	0.015	0.397	-0.022	0.203
Negative		0.046	0.090	-0.024	0.526	0.033	0.439
Independent_Board		0.009	0.097				
Meetings				-0.003	0.591		
Independent_Audit						0.006	0.127
MB		0.023	0.043	-0.003	0.823	0.029	0.132
Size		0.035	0.056	0.063	0.003	0.042	0.099
Litigation		-0.018	0.022	-0.020	0.005	-0.017	0.125
Big4		0.010	0.040	-0.013	0.345	0.012	0.499
Negative * Independent_Board		0.001	0.969				
Negative * Meetings				-0.012	0.359		
Negative * Independent_Audit						0.004	0.820
Negative * MB		-0.069	0.049	-0.031	0.063	-0.068	0.013
Negative * Size		0.052	0.114	0.038	0.279	0.072	0.088
Negative * Litigation		0.016	0.035	0.008	0.447	0.015	0.235
Negative * Big4		-0.046	0.080	0.021	0.556	-0.047	0.203
Return		-0.001	0.100	-0.054	0.218	-0.013	0.797
Return * Independent_Board		-0.012	0.511				
Return * Meetings				-0.029	0.084		
Return * Independent_Audit						-0.003	0.809
Return * MB		-0.023	0.095	-0.010	0.658	-0.006	0.887
Return * Size		0.126	0.111	0.092	0.002	0.127	0.028
Return * Litigation		-0.024	0.051	-0.020	0.180	-0.035	0.131
Return * Big4		-0.080	0.071	0.014	0.763	-0.080	0.030
Return * Negative	+	0.769	0.556	**0.433**	**0.004**	**0.621**	**0.001**
Return*Negative*Independent_Board	+	0.101	0.429				
Return * Negative * Meetings	+			**0.155**	**0.036**		
Return*Negative*Independent_Audit	+					-0.027	0.692
Return * Negative * MB	-	-0.498	0.269	**-0.326**	**0.000**	**-0.463**	**0.002**
Return * Negative * Size	-	-0.299	0.295	**-0.385**	**0.010**	**-0.255**	**0.025**
Return * Negative * Litigation	+	0.069	0.206	0.009	0.822	0.051	0.543
Return * Negative * Big4	+	-0.128	0.568	0.124	0.246	0.081	0.535
Adjusted R^2		0.221		0.205		0.217	
Average n		1370		1325		1396	

Table 2 (continued)

Panel C2- Governance					
		G-Score		Ownership	
	Expected Sign	Coefficient	P-value	Coefficient	P-value
Intercept		-0.026	0.166	0.007	0.680
Negative		-0.005	0.910	-0.041	0.379
Ownership				0.000	0.973
G-Score		0.005	0.414		
MB		0.002	0.836	-0.002	0.916
Size		0.098	0.001	0.071	0.004
Litigation		-0.027	0.000	-0.021	0.008
Big4		-0.009	0.398	-0.016	0.260
Ownership				0.019	0.144
Negative * G-Score		0.008	0.251		
Negative * MB		-0.018	0.219	-0.036	0.063
Negative * Size		-0.001	0.967	0.044	0.323
Negative * Litigation		0.029	0.002	0.015	0.125
Negative * Big4		0.008	0.785	0.022	0.554
Return		-0.081	0.138	-0.082	0.098
Return * Ownership				0.044	0.032
Return * G-Score		0.011	0.521		
Return * MB		0.021	0.529	-0.012	0.621
Return * Size		0.097	0.076	0.095	0.002
Return * Litigation		-0.005	0.709	-0.022	0.158
Return * Big4		-0.012	0.594	0.002	0.958
Return * Negative	+	**0.722**	**0.002**	**0.520**	**0.001**
Return * Negative * Ownership	-			-0.062	0.289
Return * Negative * G-Score	-	0.031	0.450		
Return * Negative * MB	-	**-0.404**	**0.000**	**-0.368**	**0.000**
Return * Negative * Size	-	**-0.560**	**0.001**	**-0.336**	**0.010**
Return * Negative * Litigation	+	0.027	0.548	0.042	0.336
Return * Negative * Big4	+	0.100	0.546	0.152	0.210
Adjusted R^2		0.226		0.194	
Average n per year		1690		1296	

Table 3
Asymmetric timeliness with multiple determinants- Fama-MacBeth regressions of returns and determinates regressed on earnings

Variable	Expected Sign	Coefficient	P-value
Intercept		0.027303	0.676
Negative		0.0899	0.462
Leverage		0.002026	0.884
Horizon		0.028659	0.099
Ownership		-0.01082	0.365
Meetings		-0.01116	0.165
MB		0.033317	0.237
Size		0.025973	0.553
Litigation		-0.02655	0.018
Big4		-0.03386	0.620
Negative * Leverage		-0.03732	0.202
Negative * Horizon		-0.01451	0.669
Negative * Ownership		0.022734	0.399
Negative * Meetings		0.017676	0.303
Negative * MB		-0.06502	0.126
Negative * Size		0.079811	0.335
Negative* Litigation		-0.01044	0.677
Negative * Big4		-0.08452	0.267
Return		0.136149	0.685
Return * Leverage		0.017903	0.598
Return * Horizon		0.098063	0.101
Return * Ownership		0.051431	0.081
Return * Meetings		0.055356	0.088
Return * MB		-0.08569	0.096
Return * Size		0.244998	0.001
Return * Litigation		-0.00628	0.797
Return * Big4		-0.40255	0.200
Return * Negative	+	0.359408	0.604
Return * Negative * Leverage	+	-0.11329	0.451
Return * Negative * Horizon	-	**-0.25681**	**0.081**
Return * Negative * Ownership	-	0.04694	0.751
Return * Negative * Meetings	+	**0.156998**	**0.056**
Return * Negative * MB	-	**-0.29852**	**0.072**
Return * Negative * Size	-	-0.20737	0.580
Return * Negative * Litigation	+	-0.10456	0.378
Return * Negative * Big4	+	0.304701	0.591
Adjusted R^2		0.323	
Average n per year		350	

See Table 1 for variable definitions. **BOLD** means significantly different from zero at the 0.10 level.

Table 4
Determinants of Givoly and Hayn's non-operating accruals measure of conservatism- annual cross-sectional Fama-MacBeth Regressions of determinants on non-operating accruals measure

Panel A- Governance

		Independent-Audit		Independent-Board		G-Score		Ownership		Meetings	
Variable	Expected Sign	Coef	P-value	Coef	P-value	Coef	P-value	Coef	P-value	Coef	P-value
Intercept		**1.03**	**0.10**	**0.147**	**0.05**	0.684	0.15	1.82	0.27	1.03	0.25
Independent-Audit	+	-0.89	0.61								
Independent-Board	+			0.006	0.92						
G-Score	-					-0.623	0.29				
Ownership	-							-0.93	0.31		
Meetings	+									-0.89	0.39
MB	-	-1.14	0.32	-0.15	0.16	-0.834	0.25	-0.71	0.29	-1.14	0.31
Size	-	0.20	0.53	0.102	0.41	0.367	0.33	-0.92	0.28	0.20	0.53
Litigation	+	-0.14	0.44	0.047	0.31	-0.152	0.36	-0.14	0.43	-0.14	0.44
Big4	+	0.33	0.29	0.008	0.82	0.206	0.23	0.19	0.21	0.33	0.29
Adjusted R^2		0.008		0.005		0.005		0.008		0.008	
Average n per year		1,219		1,206		1,455		1,201		1,224	

All independent variables are indicator variables or the scaled decile rank of the raw variable. See Table 1 for variable definitions.
BOLD means the coefficient is significantly different from zero at the 0.10 level using a two sided t-test.

Table 4 (continued)

Panel B- Debt, Compensation, and All 3 Theories

		Leverage		Horizon		Cash		All 3 Theories	
Variable	Expected Sign	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value
Intercept		**0.441**	**0.004**	**0.140**	**0.058**	**0.456**	**0.000**	0.175	0.192
Leverage	+	0.083	0.385					-0.101	0.579
Horizon	-			**-0.210**	**0.009**			**-0.224**	**0.009**
Cash	+					0.409	0.492		
Ownership	-							-0.088	0.339
Meetings	+							**0.186**	**0.036**
MB	-	-0.385	0.114	-0.021	0.789	-0.856	0.298	0.004	0.965
Size	-	-0.123	0.588	**0.191**	**0.061**	-0.061	0.588	0.151	0.163
Litigation	+	**-0.161**	**0.035**	0.185	0.140	-0.101	0.433	**0.168**	**0.093**
Big4	+	**0.223**	**0.004**	-0.013	0.795	0.237	0.287	-0.032	0.744
Adjusted R^2		0.003		0.022		0.008		0.024	
Average n per year		3,522		346		1,254		316	