

## **Do Firms adopt more Conservative Reporting in the Wake of Litigation?**

**Ping KE, PhD**

Assistant Professor

Department of Accounting and Financial Studies

New York Institute of Technology

700 Northern Blvd., Old Westbury

New York 11568

### **Abstract**

*I use a performance-matched sample from 1996 to 2011 to test if firms adopt more conservative reporting after being sued under the Rule 10(b)-5. Using Basu's measure as proxy for conservatism, I find that the firms that get sued are less conservative than the matched firms before litigation. In the post-litigation period, the lawsuit firms exhibit significant change in their reporting behavior by recognizing losses in a significantly timelier manner as compared to recognizing gains. However, result also suggests that the sued firms are still less conservative than the matched firms in the post-litigation period.*

**Keywords:** Conservatism, shareholder litigation

**Data Availability:** Stanford Law school website (<http://securities.stanford.edu>)

### **I. Introduction**

Conservatism is expressed by the rule “anticipate no profit, but anticipate all losses.” It is the differential verifiability required for recognition of gains versus losses (Basu 1997). Watts (2003a, 2003b) attributed conservatism to contracting, shareholder litigation, taxation and accounting regulation. In the litigation explanations, shareholders’ right to sue for financial statement misrepresentation creates a demand for conservatism. This is because conservative accounting reduces the expected present value of shareholder litigation costs. Shareholders are much more likely to sue when earnings or net assets are overstated (aggressive accounting) than when earnings or net assets are understated (conservative accounting) (Watts 1993, 2003; Kothari 1998; Beaver 1993). Also, conservative financial reporting is a governance mechanism that reduces the manager’s incentives and ability to manipulate accounting numbers and so reduces information asymmetry (LaFond and Watts, 2008). By reducing the information asymmetry between equity investors, conservative accounting practices prevent the firm’s stock price from declining sharply thus reducing the firm’s chance of being sued by investors for damages.

Empirical studies, however, provide mixed results. Basu (1997) provides some evidence that periods of greater auditor legal liability exposure correspond to periods of greater accounting conservatism.

However, Rogers and Buskirk (2008) suggests that the litigation process encourages firms to reduce the amount of information to investors. They fail to find evidence that firms adopt a more conservative disclosure strategy after litigation. Their results suggest that firms’ post-suit behavior is not always consistent with the goals of more timely and informative disclosures.

The purpose of this study is to provide additional evidence regarding litigation and the demand for conservatism by examining the conservatism of firms subject to a lawsuit. While the potential for litigation may provide incentives to be more conservative, the occurrence of a lawsuit would then suggest that the firm’s reporting policy may not have been sufficiently conservative. I investigate whether firms that are subject to a lawsuit were less conservative leading up to the lawsuit than firms with similar price declines but that are not sued.

Further, evidence in Rogers and Buskirk (2008) that disclosure policy does not appear to improve post suit raises questions about whether firms reporting policy will shift post suit.

Since reporting policy is more transparent to investors than disclosure policy, the lawsuit may be perceived by managers as creating a demand for a more conservative reporting policy. I investigate whether firms subject to a lawsuit adopt more conservative reporting following the lawsuit.

To investigate this research question, I utilize Basu's differential timeliness measure based on the relation between earnings and stock returns (Basu 1997). A performance-matched sample design similar to Rogers and Buskirk (2008) is used.

The results suggest that firms subject to a lawsuit were less conservative prior to litigation than firms experiencing similar price declines but not subject to a lawsuit, consistent with the hypothesis that insufficient conservatism triggers lawsuits. Results of the tests of change in the degree of conservatism indicate that sued firms recognize losses in a significantly timelier fashion after litigation, however similar behavior is also observed for matched firms.

The results partly support Watts' (2003) claim that litigation creates a demand for conservatism. The results also extend the evidence in Rogers & Buskirk (2009) by showing that firms appear to adopt a more conservative reporting policy by recognizing losses faster than gains in response to a lawsuit. While Rogers and Buskirk (2008) suggest that managers' reduction in post-suit voluntary disclosures is inconsistent with goals of regulators and private litigants who desire more timely and informative disclosure, results in the current study suggest that firms do alter their reporting policy toward more timely recognition in some way.

The remainder of the paper is organized as follows: In section II, I expand on my argument as to the link between conservatism and shareholder litigation and develop the testable hypothesis. Section III presents the research design and methods used to test the hypotheses and discusses the measure of conservatism. Section IV describes data and descriptive statistics. Section V reports the test results and various robustness tests. Section VI summarizes and concludes.

## ***II. Literature Review and Hypothesis Development***

### **2.1 Prior Research on Conservatism**

#### **2.1.1 Definitions and Role of Conservatism**

Different definitions have been used for conservatism. The only official definition of conservatism (and the one used in this paper), according to Givoly and Hayn (2002), is offered in the glossary of FASB statement of concepts No. 2, i.e., conservatism is "A prudent reaction to uncertainty to try to ensure that uncertainties and risks inherent in business situations are adequately considered." (FASB, 1980, pp.36)

Watts (2003) provide several explanations as to the cause of conservatism. They include: contracting, shareholder litigation, taxation, and accounting regulation. Under the litigation explanation, overstating the firm's net assets is more likely to generate litigation costs for the firm than understating net assets. All else equal, the more conservative the set of accounting choices, the higher the quality of earnings. Higher quality earnings should protect the firms from being sued for the misrepresentation of financial statements because with more conservative accounting, assets are usually understated. Shareholders' right to sue for financial statement misrepresentation creates a demand for conservatism.

Similarly, by recognizing losses faster than gains, conservative accounting attempts to ensure that business risks and uncertainties are adequately reflected in the financial reports, thus reducing information asymmetry between management and investors. Therefore, timely recognition of losses and understatement of assets are less likely to mislead investors to make wrong investment decisions they would otherwise make, and hence reducing the potential litigation risk.

#### **2.2 Prior Research on Shareholder Litigation and Firm's Behavior Change**

Accounting researchers have examined firms' incentives to voluntarily disclose bad news to reduce litigation risks. However, evidence on the consequences of shareholder litigation on firms behavior change has been mixed.

Skinner (1994) and Kasznik and Lev (1995) investigate how shareholder litigation influences voluntary disclosures and they conclude that the threat of such litigation explains why some firms voluntarily disclose bad news.

Skinner (1994) argues that shareholders tend to sue only if there is a large negative return at an earnings announcement, which induces an asymmetric loss function for firms and managers. This loss function creates an incentive for managers to disclose bad news voluntarily in order to reduce the cost of litigation.

The results from Francis et al (1994) seem to support the claim of firms' voluntary disclosure of bad news to reduce the litigation exposure by showing that investors are more likely to sue those firms that did not clearly inform them or prepare them for the disappointing news. They found that early disclosure of adverse earnings news (or preemptive disclosures) alone does not deter litigation completely. Their analyses show that the shareholder lawsuit firms in general made both forecasts and preemptive announcements earlier and made their formal earnings announcements no later than the at-risk firms. However, the shareholder lawsuit firms disclosed some positive and neutral earnings news pertaining to the adverse earnings quarter, giving a confusing picture of firms' performance while the at-risk firms disclosed only negative news. Consistent with this evidence, Field et al (2005) control for endogeneity between disclosure and litigation and find that firms with higher litigation risk are more likely to disclose early to preempt potential litigation and that disclosure deters certain types of litigation.

Other research, however, suggests that managers may be less forthcoming in their disclosure to reduce litigation risk. As suggested in Rogers and Buskirk (2009), firms have legal duty to update any previously disclosed information that has become untrue or in doubt. Firms' incentives to minimize such legal duty may cause them to reduce the amount of the information they will voluntarily disclose. Further, firms may reduce voluntary disclosure since plaintiffs may use such disclosures against management as evidence of misrepresentation (Rogers & Buskirk 2009: *The Louisiana School Employees' Retirement System vs. Turnstone System, Inc.* 2001). Rogers and Buskirk (2009) find that firms decrease disclosure after litigation. They document that firms provide less information (measured by frequency of conference calls, management forecast frequency, specificity and precision) post-litigation.

While evidence in Rogers and Buskirk (2009) link litigation to reduced voluntary disclosure, expected litigation costs may also affect a firms' reporting strategy. Firms may report more conservatively to reduce litigation risk ex ante. Conservatism reduces the expected present value of shareholder litigation costs because shareholders are much more likely to sue when earnings or net assets are overstated than when earnings or net assets are understated. Overstatement facilitates shareholder class action litigation because plaintiffs can claim that the overstatement of earnings or overvaluation of firm's net assets causes them to place too much confidence in the firm, and thus overinvest or make wrong investment decisions, and hence incurring losses. Thus, managers and auditors have incentives to report conservative values for earnings and net assets to mitigate expected litigation costs. (Watts 1993, 2003, Kothari 1998, Beaver 1993)

Lafond and Watts (2008) document the information role of conservatism, supporting the litigation explanation for conservatism. Specifically, they demonstrate that information asymmetry between firm insiders and outside equity investors generates conservatism in financial statement and that conservatism reduces the manager's incentives and ability to manipulate accounting numbers and thus reduces information asymmetry and potential legal liability.

Empirical studies also provide some evidence as to the change in firm's degree of conservatism after the enactment or the passing of new laws or some big events that fell upon the firm. Lobo and Zhou (2006) document an increase in conservatism in financial reporting following SOX. Seetharaman et al. (2005) showed that countering against the trend of increasing conservatism over the last four decades demonstrated by Givoly and Hayn (2002), there is a decrease in accounting conservatism (i.e. companies report less conservatively) following the Private Securities Litigation Reform Act of 1995.

Hui et al (2008) investigated the relation between a firm's accounting conservatism and managers' earnings forecast behaviors.

They find that firm's degree of conservatism is negatively related to the frequency, specificity and timeliness of management forecasts. Their evidence provides some idea as to why firms may shift towards more conservative reporting behavior while reducing the level of voluntary disclosure. The evidence suggests that since both management forecast and conservative accounting could reduce information asymmetry, conservative accounting could reduce management's incentive to issue a forecast to reduce information asymmetry between managers and shareholders. (Lafond and Watts, 2008).

The results provide evidence suggesting that accounting conservatism acts as a substitute for management forecasts by decreasing information asymmetry and reducing potential litigation through timely reporting of bad news.

Another argument for a shift towards more conservative accounting after actual lawsuits is that recent regulations of financial reporting (such as SOX) did not impose new legal liabilities, rather they simply codify a patchwork of existing corporate laws and regulations (Cunningham 2003). If this is true, then it provides a possible explanation as to why some firms may not have been conservative enough to start with (i.e. when these new rules and regulations first came into being): without more stringent law enforcement and execution, some firms might simply ignore these new regulations, and only after the actual litigation occurred did these firms take the matter more seriously and become more conservative.

Alternatively, firms may not increase the level of conservatism after litigation. The same factors that potentially contributed to their lack of sufficient conservatism prior to the lawsuit may yet remain. Further, management might regard the lawsuit as “sunk cost” and not consider that more conservative practices would help restore the credibility of their disclosure. Since no explicit prediction about the relation between litigation and conservatism can be obtained from prior literature, I present the following research questions:

Research Questions:

- 1) Are firms that are subject to a lawsuit less conservative prior to the lawsuit than similar firms experiencing a price decline but that are not sued?
- 2) Does the occurrence of a lawsuit motivate managers to shift towards more conservative reporting?

### ***III. Data and Research Design***

#### **3.1. Data and Sample Selection**

The “shareholder lawsuit” sample is comprised of firms that were targets of rule 10(b)-5 litigation from January 1996 to 2011. For most of these cases, plaintiffs claimed that their wealth was damaged because the prices of the shares they purchased were inflated by either the management’s misrepresentation or failure to disclose. Data were hand collected from the Stanford Law school website (<http://securities.stanford.edu>) and include the following information: firm’s name, ticker, date the complaint was filed, class action beginning period, class action ending period, type of litigation and litigation status (settled, dismissed or open).

The criteria for the sample selection are similar to Rogers and Buskirk (2009):

- (1) The suit was filed in federal court against a corporation;
- (2) The suit claimed wealth damage and alleged fraud involving the price of the defendant’s common stock;
- (3) The case included allegations of misrepresentation of financial information and omissions regarding the true financial condition of the company;

Also, firms without CRSP information or COMPUSTAT information were excluded.

#### **3.2. Litigation Related Time Periods**

The litigation related time periods are similar to those specified in Rogers and Burskirk (2009) and they are related to three dates in the actual lawsuit: the lawsuit filing date (or suit date), the beginning of the class action period, and the end of the class action period.

The timeline of the litigation events in this paper look as follows:

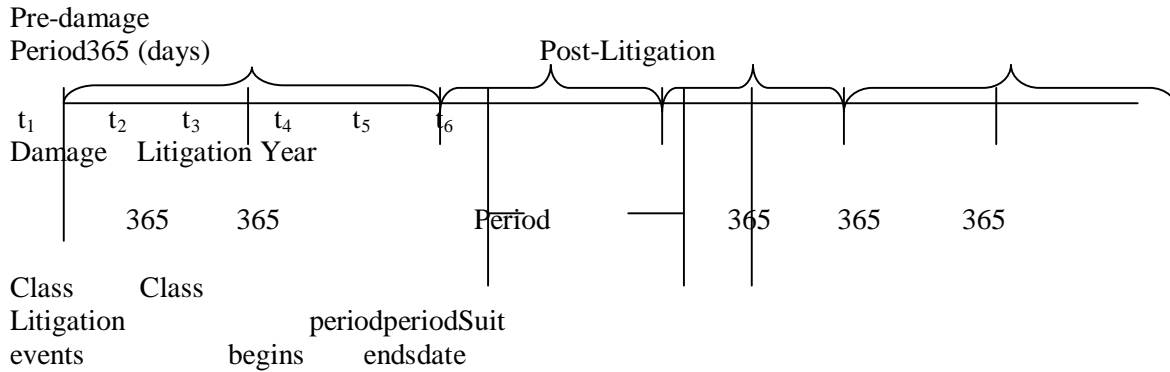


Fig.1 Litigation timeline. This timeline illustrates the litigation related periods discussed in this paper. It is slightly different from that used in Rogers and Burskirk (2009). In this study, the litigation events include class period begins, class period ends and suit date, collected from the datasets from the Stanford Law school website. The litigation related periods are: pre-damage period, damage period, revelation period and post-litigation period.

Pre-damage period here refers to the two years prior to the damage period (i.e.,  $t_1$  and  $t_2$  in the figure or  $t=-3$  and  $-2$ , with  $t=0$  referring to the litigation year. Litigation year is the year the firms are sued). Damage period refers to the period between the beginning of the class action and the end of the class action (part of  $t_3$  and part of  $t_4$ ). This damage period is specifically used to find the matched sample in the study. Revelation period (not labeled in the figure) refers to the period between damage period and suit date. Pre-litigation period in this study refers to the three years prior to the litigation year (i.e.  $t=-3$ , and  $-2$  and  $-1$ ). Post-litigation period refers to the period after the lawsuit date (i.e.  $t_5$  and  $t_6$  in the figure or  $t=1$  and  $2$ ). This timeline suggests that both the sued firms and their matched firms should have six years of financial information for analysis in this study. Such requirement may suggest survivorship bias in the data.

In this paper, pre-litigation period in the major empirical tests refers to the three years prior to the litigation year (i.e.  $t=-3$ , and  $-2$  and  $-1$ ). Post-litigation period refers to the period after the lawsuit date (i.e.  $t_5$  and  $t_6$  in the figure or  $t=1$  and  $2$ ). Different time ranges are used to refer to the above litigation-related periods for sensitivity tests.

### 3.3. The sued firms and the matched sample data

A total of 1068 firms are identified as being sued during 1996 to 2011 (for firms that have been sued several times, the earliest date that a firm is sued is considered the class action beginning period and the latest date that the case is settled or dismissed is considered as class action ending period). Panel A of Table 1 provides a comparison of the distribution of these sued firms in different years and that of those sued firms from Rogers and Burskirk (2009)'s paper.

Table 1 Descriptive Statistics

Panel A: Sued firms and matched firms in RB's paper and this paper

Litigation year	#.firms#. firms			(%)
	RB's paper	(%)in this paper		
1996	49	0.059	24	0.022
1997	96	0.116	46	0.043
1998	99	0.120	71	0.066
1999	73	0.088	67	0.063
2000	88	0.106	80	0.075
2001	68	0.082	69	0.065
2002	77	0.093	84	0.079
2003	85	0.103	73	0.068
2004	103	0.125	91	0.085
2005	89	0.108	73	0.068
2006			53	0.050
2007			71	0.066
2008			65	0.061
2009			74	0.069
2010			67	0.063
2011			60	0.056
Total	827			1068

From this table, we can see that the hand collected dataset from this paper is similar to the one used in Rogers and Burskirk (2009)'s paper, thus giving me confidence in the reliability of the datasets and suggesting the results in the two papers are comparable. For these 1068 sued firms, 423 firms satisfy the requirement that the firms should have six years of financial data in CRSP and COMPUSTAT (as suggested in the litigation timeline in Figure 1). The matched sample is based on these 423 firms and is selected from the same market capitalization decile as the lawsuit firms (as of the start of the damage period) and the firm that has the stock returns during the sued firm's damage period most closely matches that of the sued firm is selected as the matched firm. Among the 423 matched firms, some firms have been used (selected) more than once for the sued firms, thus finally 351 sued firms and 351 matched firms are obtained in the study for analysis. Appendix 2 provides the industry compositions of the 351 lawsuit firms.

### 3.4. Proxy for Conservatism

Watts (2003) mentioned five measures of conservatism. The three most popular measures are: (1) Book-to-market ratio following Beaver and Ryan (2000); (2) Earnings/Stock Returns relation measures following Basu (1997); (3) an accrual based measure following Givoly and Hayn (2000). Qiang (2007) further distinguish the measure for conditional and unconditional conservatism. In this paper, Basu's Earnings/Stock Returns relation measure is utilized to capture the degree of conservatism.

Basu (1997) uses the earnings/stock return relation to measure the degree of conservatism. To capture whether earnings incorporate bad news more quickly than good news, Basu uses positive returns to indicate good news and negative returns to indicate bad news and regresses earnings on returns. Specifically, the following model is used:

$$X_{it} / P_{it-1} = \alpha_0 + \alpha_1 DR_{it} + \beta_0 R_{it} + \beta_1 R_{it} * DR_{it} + \varepsilon$$

where, for firm  $i$  and year  $t$ ,  $X$  is annual earnings per share,  $P$  is price per share at the beginning of the year,  $R$  is fiscal year buy and hold stock return (with  $R > 0$  proxy for good news and  $R < 0$  proxy for bad news) and  $DR$  is an indicator variable with value=1 if  $R$  is negative and 0 otherwise. The coefficient on the interaction term ( $\beta_1$ ) is the incremental bad news coefficient and the measure of conservatism. It is expected to be positive if earnings are more conservative (i.e. if earnings incorporate bad news faster).

The underlying intuition is that stock prices reflect new information (i.e. either good news or bad news) without bias, and the reflection of the new information tends to be timely; if earnings respond more strongly to "bad" news than to "good" news, then this will be evidence of conservatism. This asymmetric timeliness measure, however, generates some criticisms from researchers. For instance, some researchers state that Basu's (1997) measure of conservatism will be more problematic when 1) researchers use the measure to compare the degree of conservatism across different countries; 2) researchers use this measure for between firm comparison (Givoly, Hayn, and Natarajan 2004); Dietrich (2007) even demonstrate that, when generated using truncated sub-samples formed according to the sign of stock returns, "bad" and "good" news coefficients will be unequal even in the absence of asymmetric timeliness-thus falsely presenting evidence of conservatism.

Basu's measure might still be appropriate to examine the research question here because within-firm comparison (i.e. a comparison of conservatism for the sued firms pre-and post-litigation) rather than between-firm comparison is conducted. Second, as for the concern that the research design is biased to reject the null hypothesis of conservatism, the main purpose of the research question is not to address the existence of conservatism, but rather *the change* in the degree of conservatism. Thus, it will suffer less the bias mentioned above.

### 3.5. Model Specification

To test the differences in conservatism between the sued firms and the matched firms in the pre-litigation period using Basu's measure, the following model is adopted:

$$\begin{aligned} EPS / P = & \alpha_0 + \alpha_1 * DRET + \alpha_2 * SUE + \alpha_3 * SR + \alpha_4 * DRET * SR + \\ & \alpha_5 * SR * SUE + \alpha_6 * SR * DRET * SUE + \varepsilon \end{aligned} \quad (1)$$

Where:

$EPS$  = Earnings per share. It is deflated by beginning stock price.

$DRET$  = an indicator variable taking the value of 1 if  $SR < 0$  and 0 if  $SR > 0$ ;

*SUE* = an indicator variable taking the value of 1 for lawsuit firms; 0 for matched firms.

*SR* = the holding period return for each year.

Pre-litigation period refers to the three years prior to litigation year (i.e.  $t=-1, -2$  or  $-3$ ).

To test the change in the degree of conservatism for sued firms before and after litigation, I adopt the following regression:

$$\begin{aligned} EPS/P = & \alpha_0 + \alpha_1 * SR + \alpha_2 * DRET + \alpha_3 * POST + \\ & \alpha_4 * SR * DRET + \alpha_5 * DRET * POST + \alpha_6 * SR * POST + \\ & \alpha_7 * SR * DRET * POST + \varepsilon \end{aligned}$$

Where:

*EPS* = Earnings per share. It is deflated by beginning year stock price.

*DRET* = an indicator variable taking the value of 1 if  $SR < 0$  and 0 if  $SR > 0$ ;

*SUE* = an indicator variable taking the value of 1 for lawsuit firms; 0 for matched firms.

*SR* = the holding period return for each year.

*POST* = an indicator variable taking the value of 1 if  $t=1$  or  $2$  (i.e. one year or two years after litigation year) and 0 if  $t=-1, -2$  or  $-3$  (i.e. any of the three years prior to litigation year)

The regression is run for the lawsuit firms and the matched firms separately during the same period of time. i.e. for the matched sample, the regression is run during the same pre-and post-litigation period as their sued firms. The variable of interest here is  $SR * DRET * POST$ . If lawsuit firms adopt more conservative accounting after litigation,  $\alpha_7$  should be significantly positive. I also examine  $\alpha_7$  for the match sample.

The same model in the pre-litigation period will be used to test the differences in conservatism in the post-litigation period except that the period will now be in the post-litigation (i.e.  $t=1$  or  $2$ ).

## IV. Results

### 4.1. Descriptive Statistics (About Litigation, Lawsuit Companies and at Risk Firms)

**Table 2: Descriptive Statistics**

Time-series mean of some selected variables for sued firms and matched firms over the 6-year period

**Panel A: Sued firms (n=351 each year)**

<u>t</u>	<u>AT</u>	<u>MTB</u>	<u>ACRT</u>	<u>SR</u>	<u>ROE</u>	<u>EPS</u>
-3	3812.62	5.38	-5.77	0.35	0.08	0.53
-2	4185.63	5.74	14.31	0.28	0.05	0.73
-1	4125.25	4.33	-66.34	0.15	0.02	0.47
0	4236.01	3.26	-163.19	-0.17	-0.11	0.21
1	4701.46	3.28	-73.87	0.14	-0.05	0.16
2	4927.18	3.04	-91.03	0.11	-0.03	0.34

**Panel B: Matched firms (n=351 each year)**

<u>t</u>	<u>AT</u>	<u>MTB</u>	<u>ACRT</u>	<u>SR</u>	<u>ROE</u>	<u>EPS</u>
-3	4331.07	4.69	-31.59	0.32	-0.03	0.78
-2	4582.38	4.78	-22.42	0.17	-0.07	0.54
-1	4169.04	4.34	-52.61	0.13	-0.16	0.33
0	4834.16	3.17	-65.37	0.07	-0.09	0.21
1	4314.5	3.64	-45.21	0.31	-0.07	0.39
2	4513.86	3.72	-79.56	0.18	-0.05	0.56

This table provides a time-series mean of selected variable for the sued and the matched firms for the 6 years specified in the litigation timeline. The value of  $t_1$  ranges from  $-3$  to  $2$ , with  $-3$  meaning 3 years prior to the litigation year,  $2$  meaning 2 years after litigation and  $0$  referring to the litigation year.

AT: total assets of the year; MTB: Market to book ratio, defined as the market value of equity divided by the book value of equity; ACRT: The accruals measure is calculated as net income (income before extraordinary items) less cash flows from operations; SR: stock buy and hold return during the year; ROE: return on equity; EPS: earnings per share.

Table 2 provides a time-series picture of the means for some variables to further describe the characteristics of the two sample firms-Panel A for the sued firms and Panel B for the matched firms. Statistics of the variables cover three years prior to the litigation, the litigation year and two years after the litigation are presented. Something interesting to note is that MTB ratio and ROE for sued firms decrease dramatically after litigation, but not so dramatic for matched firms (especially ROEs). ROEs are all positive prior to litigation for the lawsuit firms, however they all turned negative post litigation. The accruals measure also has an interesting pattern.

Both lawsuit firms and the matched firms seem to have more negative total accruals as time passes. However, the lawsuit firms seem to exhibit more stark differences in annual accruals between the pre-litigation period and the post litigation period than the matched firms—in the pre-litigation period, the lawsuit firms seem to have much less negative (some even positive) accruals than the matched firms, while in the post-litigation period, the lawsuit firms seem to have more negative total accruals than the matched firms.

**Table 3 Regression Analysis of Conservatism: Pre-Litigation Period**

$$EPS / P = \alpha_0 + \alpha_1 * DRET + \alpha_2 * SUE + \alpha_3 * SR + \alpha_4 * SR * DRET + \alpha_5 * SR * SUE + \alpha_6 * SR * DRET * SUE + \varepsilon$$

Variable	Coeff	Pr> t	
Intercept	0.33814	<.0001	***
DRET	0.01322	0.5138	
SUE	-0.14507	<.0001	***
SR	-0.04013	0.0004	***
SR*DRET	0.48901	<.0001	***
SR*SUE	0.05383	0.0069	***
SR*DRET*SUE	-0.36480	0.0003	***
<i>Pr&gt;F</i>		0.0001	
<i>Adj. R</i>		0.039	
<i>N</i>	2106		

This table shows the results of the regression that tests the degree of conservatism for the combined lawsuit firms sample and the match firms sample in the pre-litigation period (t=-1, -2 or -3). The dependent variable EPS is deflated by beginning stock price. “DRET” is an indicator variable taking the value of 1 if SR<0 and 0 if SR>0; “SR” is the holding period return for each year.

Table 3 shows the regression results in the pre-litigation period for both the lawsuit firms and the matched firms. Basu’s measure shows that the coefficient for the interaction term SR\*DRET is significantly positive, suggesting that the whole sample exhibits the characteristics of conservatism, more specifically, the sample firms generally recognize losses in a timelier fashion than they do gains. More importantly, the coefficient for SR\*DRET\*SUE is significantly negative at the 1% level. This indicates that sued firms recognize losses less timely (thus being less conservative) than the matched firms prior to litigation year.



**Table 4: Regression Analysis of Conservatism Before and After Litigation**

$$EPS = \alpha_0 + \alpha_1 * DRET + \alpha_2 * SR + \alpha_3 * Post + \alpha_4 * SR * DRET + \alpha_5 * DRET * POST + \alpha_6 * SR * Post + \alpha_7 * SR * DRET * POST + \varepsilon$$

Sued firms (n=2106)			Matched firms (n=2106)		
Variable	Coeff	Pr>  t	Coeff	Pr>  t	
Intercept	0.08105	0.0011	0.24196	0.0008	***
DRET	-0.00021	0.7588	0.02124	0.5897	
SR	0.00035	0.7482	-0.04531	0.1173	
POST	0.00589	0.8717	0.09822	0.3124	
SR*DRET	0.20316	0.0541	0.64892	0.0010	***
DRET*POST	-0.00243	0.3891	-0.00021	0.4801	
SR*POST	-0.54011	<.0001	-0.08457	0.607	
SR*DRET*POST	0.66629	0.0598	0.85462	0.0442	**
Adj. R	Adj. R	0.1185	Adj. R	0.0466	

This table shows the results of the regression that tests if lawsuit firms adopt more conservative reporting after litigation. POST =1 if t=1 or 2; POST =0 if t=-1, -2 or -3. The dependent variable EPS is deflated by beginning stock price. “DRET” is an indicator variable taking the value of 1 if SR<0 and 0 if SR>0; “SR” is the holding period return for each year.

Table 4 provides the results of the regressions that test the change in the degree of conservatism before and after litigation for the sued firms and the matched firms separately. The results show that the coefficients for the interaction term SR\*DRET\*POST are significantly positive for both the sued firms and the matched firms. However, the coefficient for SR\*DRET\*POST for the sued firms is 0.6663, while it is 0.8546 for the matched sample. This indicates that in the post-litigation period, the sued firms recognize losses faster than they do gains, and thus become more conservative after litigation. At the same time, the matched firms seem to exhibit even stronger conservatism in the post-litigation period in terms of the differential timeliness in the recognition of gains and losses.

**Table 5: Regression Analysis of Conservatism: Post- Litigation**

$$EPS / P = \alpha_0 + \alpha_1 * DRET + \alpha_2 * SUE + \alpha_3 * SR + \alpha_4 * SR * DRET + \alpha_5 * SR * SUE + \alpha_6 * SR * DRET * SUE + \varepsilon$$

Variable	Coeff	Pr>  t	
Intercept	0.26512	<.0001	***
DRET	0.00586	0.6613	
SUE	-0.10308	0.0644	*
SR	-0.20352	0.0102	***
SR*DRET	1.39048	<.0001	***
SR*SUE	-0.00324	0.8231	
SR*DRET*SUE	-0.4685	0.0228	**
UE			
Adj. R	0.05		
N	2106		

This table provides result for the test of difference in conservatism for lawsuit firms and matched firms after litigation. Panel A use Basu’s measure. EPS is deflated by beginning stock price; SR = buy and holding period return for each year; DRET= an indicator variable taking the value of 1 if SR<0, and 0 if SR>0. SUE is an indicator variable taking the value of 1 for a lawsuit firm and 0 for a matched firm.

Table 5 shows the regression results in the post-litigation period. The same model that was used to test the difference in the degree of conservatism in the pre-litigation period is used here to test conservatism in the post-litigation period. The coefficient for the three-way interaction term SR\*DRET\*SUE is significantly negative, consistent with the earlier findings in table 4: in the post-litigation period, the sued firms are still less conservative than the matched sample: the sued firms recognize losses in a less timely fashion than the matched firms in the post-litigation period.

#### IV. Sensitivity Tests

Various sensitivity tests have been conducted to examine the firms' degree of conservatism in the pre-litigation and post-litigation period. One of the sensitivity tests I conducted was: specify different time periods as pre-litigation period. For instance, only  $t=-2$  and  $t=-3$  are used as pre-litigation period, and  $t=-1$  (the year that includes damage period) is excluded from the pre-litigation period.

#### V. Summary and Conclusion

Prior studies have examined the relation between conservatism and shareholder litigation, and argued that shareholder litigation creates conservatism. However, little research is done to examine whether more conservative accounting actually reduces litigation and whether firms began to adopt more conservative accounting after lawsuits.

The evidence in this paper suggests that firms that are subject to lawsuit are less conservative than the similar risk firms prior to litigation, and they adopt more conservative reporting after lawsuits in that the timeliness in the recognition of losses as compared to recognition of gains is greater in the post-litigation period. However, this greater degree of conservatism from the sued firms is dwarfed by an even higher degree of conservatism manifested in the matched firms during the same period.

#### Appendix 1: Variable Definition

AT: Total assets of the year (in millions)

MTB: Market to book ratio, defined as the market value of equity divided by the book value of equity.

ACRT: Total accruals, defined as the difference between net income and operating cash flow (in millions) plus depreciation expenses;

SR: Stock buy and hold return over the aggregation period;

ROE: Return on equity

#### Appendix 2: Number of Lawsuit Firms and Matched Firms and Their Industry Composition

Industry Composition	Sued firms		Matched firms	
73-Business Services	46	13.11%	44	12.54%
36-Electronics and other electrical equipment	41	11.68%	43	12.25%
28-Chemicals and allied products	44	12.54%	43	12.25%
35-Industrial and commercial machinery and computer equipment	22	6.27%	26	7.41%
38-Measuring, analyzing, and controlling instruments	21	5.98%	21	5.98%
49-Electric, gas, and sanitary services	19	5.41%	17	4.84%
80-Health services	14	3.99%	13	3.70%
48-Communications	11	3.13%	15	4.27%
59-Miscellaneous retail	8	2.28%	9	2.56%
50-Wholesale trade--durable goods	5	1.42%	8	2.28%
63-Insurance carriers	7	1.99%	6	1.71%
51-Wholesale trade--nondurable goods	6	1.71%	4	1.14%
87-Engineering and management services	6	1.71%	3	0.85%
61-Nondepository credit institutions	7	1.99%	7	1.99%
Other industries (each representing less than 2% of one of the sample)	<u>94</u>	26.78%	<u>92</u>	26.21%
Total	351	100.00%	351	100.00%

**References**

- Anwer S Ahmed, Bruce K Billings, Richard M Morton, & Mary Stanford-Harris. (2002). The role of accounting conservatism in mitigating bondholder-shareholder conflicts over dividend policy and in reducing debt costs. *The Accounting Review*, 77(4), 867-890.
- Basu, S., 1997. The Conservatism Principle and the Asymmetric Timeliness of Earnings. *Journal of Accounting and Economics*. 24, 3-37.
- Bushman, Robert M.; Piotroski, Joseph D. 2006. Financial reporting incentives for conservative accounting: The influence of legal and political institutions. *Journal of Accounting & Economics*, Vol. 42 Issue 1/2, p107-148, 42p;
- Dan Givoly and Carla Hayn 2002. Rising Conservatism: Implications for Financial Analysis. *Financial Analysts Journal*, Vol. 58, No. 1, pp. 56-74
- Dan Givoly, Carla K Hayn, & Ashok Natarajan. (2007). Measuring Reporting Conservatism. *The Accounting Review*, 82(1), 65-106.
- Francis, J.; D. Philbrick; and K. Schipper. "Determinants and Outcomes in Class Action Securities Litigation." Working Paper, University of Chicago, 1994a
- Frank B Gigler, & Thomas Hemmer. (2001). Conservatism, optimal disclosure policy, and the timeliness of financial reports. *The Accounting Review*, 76(4), 471-493.
- Gerald J Lobo, & Jian Zhou. (2006). Did Conservatism in Financial Reporting Increase after the Sarbanes-Oxley Act? Initial Evidence. *Accounting Horizons*, 20(1), 57-73.
- García Lara, Juan; García Osma, Beatriz; Penalva, Fernando. Accounting conservatism and corporate governance. *Review of Accounting Studies*, Mar2009, Vol. 14 Issue 1, p161-201, 41p,
- Hui, Kai Wai; Matsunaga, Steve; Morse, Dale. 2009. The impact of conservatism on management earnings forecasts *Journal of Accounting & Economics*, Vol. 47 Issue 3, p192-207
- Johnson, M. R., R. Kasznik, and K. K. Nelson. 2001. The impact of securities litigation reform on the disclosure of forward-looking information by high technology firms. *Journal of Accounting Research* 39; 297-327
- J. Richard Dietrich, Karl A. Muller III, & Edward J. Riedl. (2007). Asymmetric timeliness tests of accounting conservatism. *Review of Accounting Studies*, 12(1), 95-124.
- Lafond, Ryan; Roychowdhury, Sugata. Managerial Ownership and Accounting Conservatism. *Journal of Accounting Research*, Mar2008, Vol. 46 Issue 1, p101-135.
- LaFond, R., & Watts, R.. (2008). The Information Role of Conservatism. *The Accounting Review*, 83(2), 447-478.
- Pae, Jinhan; Thornton, Daniel B; Welker, Michael. 2005. The Link between Earnings Conservatism and the Price-to-Book Ratio. *Contemporary Accounting Research*, Fall2005, Vol. 22 Issue 3, p693-717
- Qiang, X.R. (2007) The effects of Contracting, litigation, Regulation, and tax costs on Conditional and unconditional Conservatism: Cross-sectional evidence at the firm level. *The Accounting Review*. 82, 759-796
- Ross L Watts. (2003). Conservatism in Accounting Part II: Evidence and Research Opportunities. *Accounting Horizons*, 17(4), 287-301.
- Ross L Watts. (2003). Conservatism in accounting part I: Explanations and implications. *Accounting Horizons*, 17(3), 207-221
- Stephen H Penman, & Xiao-Jun Zhang. (2002). Accounting conservatism, the quality of earnings, and stock returns. *The Accounting Review*, 77(2), 237-264.
- Roychowdhury, Sugata; Watts, Ross L. Asymmetric timeliness of earnings, market-to-book and conservatism in financial reporting. *Journal of Accounting & Economics*, Sep2007, Vol. 44 Issue 1/2, p2-31, 30p;
- Seetharaman, Ananth; Srinidhi, Bin; Swanson, Zane. 2005. The Effect of the Private Securities Litigation Reform Act of 1995 on Accounting Conservatism. *Journal of Accounting & Finance Research*, Vol. 13 Issue 4, p11-26,
- Young K. Kwon, D. Paul Newman, & Yoon S. Suh. (2001). The Demand for Accounting Conservatism for Management Control. *Review of Accounting Studies*, 6(1), 29.