

Do Auditor Sanctions Affect Clients' Accruals?*

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SUMMARY: The purpose of this study is to investigate into the discretionary accruals of the client companies of sanctioned auditors before sanction enforcements and changes thereafter. We find that signed discretionary accruals of the sanctioned auditors' client companies are significantly more favorable to earnings before the sanctions and reduce conservatively afterwards. In essence, the separated discretionary accruals in the income-increasing and income-decreasing groups for clients of sanctioned auditors are significantly favorable to inflate earnings prior to enforcement releases, but shift to the opposite direction following sanction announcements. Our results infer that auditors are sanctioned for lack of conservatism but not for low audit quality, and similar to extant literature findings in auditing litigation, clients' accruals decline conservatively across-the-board subsequent to auditors' enforcement releases.

Key Words: auditor sanction; disciplinary actions; conservatism; audit quality; discretionary accruals.

Data Availability: The data used in this study is either available from public sources or commercially obtainable.

* One author of this paper is a doctoral student.

I. Introduction

The sanction system is one last resort for regulating the audit quality of certified public accountants (CPAs). Government authorities through disciplinary actions attempt not only to make sanctioned auditors improve their quality of professional work but to provide warnings for the successor CPAs and others. In most cases, the purpose of sanction enforcements is to improve the quality of professional audit services. Although disciplinary actions against auditors are explicitly written in law of many countries, only few studies examine this issue (DeFond and Francis 2005). Accordingly, whether the auditor sanction system is proper and achieves the goal to improve audit quality are interesting but so far unanswered questions.

This paper examines the discretionary accruals of client companies of sanctioned auditors before sanction enforcements are released and changes in discretionary accruals thereafter. We test discretionary accruals before disciplinary action releases of companies audited by sanctioned auditors. Because it is believed that among other goals, the regulatory authorities intend to upgrade audit quality of the profession, we posit that sanctioned auditors or their non-sanctioned successors will reduce discretionary accruals thereafter.

Since the CPA sanction system serves as a cautionary advice to auditors and a protection system for the investing public, it exists in almost every country. Regulators rely on sanctions to punish licensees' undue behavior and to relieve their duties of governing the market order. In Taiwan, there are two avenues to enforce administrative actions on the conduct of certified public accountants. One is through the CPA Disciplinary Actions Committee instituted under applicable legal provisions. Another is the actions taken by the Securities and Futures Bureau (hereafter, "SFB") of the Financial Supervisory Commission in accordance with Article 37 of the Securities and Exchanges Act whereby certified public accountants who have violated professional conduct shall be sanctioned directly. The sanction measures taken by the former include warning, reprimand (censure), temporary suspension of license and disqualification from the CPA profession (permanent suspension). The latter¹ is entitled to give a warning, to suspend operation and to revoke the privilege of conducting audit services.

The client firms whose public accountants were being charged with professional misconduct in financial examination and were being sanctioned by competent authorities during 1995 to 2006 are taken as samples in this research. The findings from the empirical analysis indicate that clients of sanctioned auditors increase their incomes by using discretionary accruals. That is, sanctioned auditors are more prone

¹ The scope of business ordered to discontinue by the SFB only confines to the attestation and assurance services defined under the Securities and Exchanges Act.

to allow their clients to increase their incomes favorably by using discretionary accruals before disciplinary actions are released. We also provide evidence that the effect of disciplinary actions on reduction of discretionary accruals is significant no matter sanctioned auditors are retained or replaced by non-sanctioned successors. In other words, sanctioned auditors and their successors will reduce discretionary accruals after disciplinary actions are released, and especially restrain their clients from inflating incomes thereafter. Based on the finding that discretionary accruals which bring earnings downward appear to be a critical factor in auditors' enforcement actions, we also conclude that auditors are in fact sanctioned for lack of conservatism but not for low audit quality.

This paper extends Chang et al. (2007) who assess the appropriateness and effectiveness of the auditor sanction system in Taiwan. First, we use the entire non-sanctioned population as our control group, rather than a matched sample, to avoid choice-based sample bias, which can lead to biased parameters and probability estimates (Doyle et al. 2007; Ashbaugh-Skaife et al. 2007). Second, we use more detailed method to refine the methodology including using the date of audit field work to distinguish pre-sanction and post-sanction period. Finally, we discuss the cause and change as a result of auditor enforcement actions by analyzing several accrual measurements specifically.

Our study contributes to auditor sanction and accounting accruals literatures by assessing whether auditor disciplinary actions are associated with significant changes in client firms' reported discretionary accruals. Our findings support that sanctioned auditors' clients prior to enforcement actions exhibit lack of conservatism in using discretionary accruals, and report conservative discretionary accruals after enforcement releases no matter the sanctioned auditors are retained or replaced. That is, sanction enforcements in the past appeared to be highly associated with lack of conservatism in accounting accruals and are effective to make auditors more conservative.

The paper is structured as follows. Section II discusses the review of literature and develops our hypotheses. Section III outlines our research design. Part IV presents our empirical results and additional analyses. The final section concludes this study.

II. Review of Literature and Hypotheses Development

DeFond and Francis (2005) summarize prior literature and find relatively few studies in the line of auditor sanction related issues. Moreland (1995) provides evidence that a sanction issued against an audit firm reduces the perceived credibility of client earnings numbers, i.e. ERCs, and sanction effect is impacted by

its severity and litigation against the auditor. Yu et al. (2000) discover that the cases handled by the Big 5 firms are less likely to be sanctioned by the competent authorities in Taiwan. Firth et al. (2005) analyze the classification of enforcement actions against auditors in China. Thompson (2006) also reports that sanctions have declined both in number and percentage in Texas. However, no prior studies provide empirical evidence to investigate what affects the auditor enforcement judgment. Accordingly, we test the characteristics of sanctioned auditors by examining the discretionary accruals exemplified by their client companies before disciplinary actions are released.

There are four situations when analyzing combined outcomes of income-increasing and income-decreasing discretionary accruals. Figure 1 shows the situation outcomes and their implications. As Cahan and Zhang (2006) examine auditor conservatism by investigating income-reducing accruals, we also emphasize on income-decreasing discretionary accruals. Watts (2003) explains that conservatism emphasizes that accountants should not recognize profits before there is legal claim to the revenues generated and those revenues should be verifiable and Givoly and Hayn (2000) state that consistent predominance of negative accruals across firms over a long period is an indication of conservatism. In figure 1, Situation 1 and Situation 3 representing conservatism and lack of conservatism respectively, contrast in directions of both negative and positive *DAs*. On the other hand, Becker et al. (1998) point out high audit quality is demonstrated by the ability of auditors to restrict their clients using discretionary accruals to reach certain intentions and to restrain earnings management further. That is, high audit quality minimizes the distortion of financial statements regardless of income-increasing or income-decreasing discretionary accruals. Situation 2 (Situation 4) in Figure 1 indicates high (low) audit quality due to the lower (higher) magnitude of both negative and positive *DAs*.

Insert Figure 1 here

Myers et al. (2003) point out that the regulators are not only concerned with the dispersion in accruals but also about the distortion in earnings, including both increased and decreased earnings. Nonetheless, lawsuits against auditors very often alleged overstatement of revenues and assets and/or understatement of liabilities and expenses (Basu et al. 2005). These studies suggest that auditors have incentives to apply conservative methods in determining earnings to reduce their exposure to such lawsuits. In other words, lack of conservatism and low audit quality may both cause enforcement actions. We are not clear whether in practice most sanction enforcements against auditors are based upon their lack of conservatism or low audit quality. Accordingly, this paper examines whether the judgments on auditor enforcement

actions are affected by lacking of conservatism, i.e. Situation 3, or by low audit quality, i.e. Situation 4. We formulate the following alternative hypotheses regarding the relation between discretionary accruals and auditor disciplinary actions:

H1a: Companies audited by sanctioned auditors show less conservative discretionary accruals in pre-sanction period.

H1b: Companies audited by sanctioned auditors show lower audit quality in discretionary accruals in pre-sanction period.

Khurana and Raman (2004) suggest that litigation risk drives auditor behavior and DeFond and Francis (2005) also take the position that punishments for misconduct by regulatory agencies affect auditor incentives. Once a disciplinary actions is released against an auditor, his/her clients may either retain the sanctioned auditor or replace him/her with another non-sanctioned auditor. First, we discuss the circumstance that companies still retain the sanctioned auditor. Shafer et al. (1999) explain that the threat of disciplinary actions by professional organizations influence auditors' ability to withstand client pressure. Shafer and Morris (2004) find that most sanction threats are perceived to act as a deterrent to fraud. Therefore, we infer that disciplinary actions provide motivations for the sanctioned auditor to limit the distortion of financial statements by their clients, i.e., to reduce discretionary accruals, after disciplinary action is released. Thus, when an auditor receives a warning or reprimand sanction but is not replaced by his/her clients, he/she learns a lesson from the sanction and enhances his/her ability to withstand pressures from clients. Consequently, he/she is able to affect discretionary accruals thereafter. This leads to Hypotheses 2a and 2b of this paper:

H2a: Companies which retain their sanctioned auditors show more conservative discretionary accruals after disciplinary action releases.

H2b: Companies which retain their sanctioned auditors show higher audit quality in discretionary accruals after disciplinary action releases.

The sanctions serve to not only provide stimuli in making the sanctioned auditors restrain discretionary accruals of clients but give warnings to fellow non-sanctioned auditors. Accordingly, the non-sanctioned successors will show higher professional competence in their conducting of financial statement examinations. Nagy (2005) suggests that a voluntary change of auditors is possibly to seek an auditor who is more agreeable to the accounting treatments of the company relative to an auditor change under a mandatory rotation system or a forced auditor change situation. There are two

reasons to cause the replacement of the sanctioned auditor after the enforcement action is released. One, if the sanctioned auditor is suspended or disqualified, the replacement of the sanctioned auditor becomes inevitable. Two, if the sanctioned auditor is subject to a warning or a reprimand, his/her clients probably dismiss the sanctioned auditor for loss of public trust. Whatever the shifting reason may be, the restraining of discretionary accruals after auditor change by the successor auditors replacing for sanctioned predecessors is greater than that for non-sanctioned predecessors. In other words, the successor auditor who replaces a sanctioned predecessor becomes more prudent in his/her professional conduct. As such, this newly appointed successor auditor would demonstrate greater conservatism or better audit quality in discretionary accruals relative to those being appointed to replace non-sanctioned predecessors. This is the rationale of hypotheses 3a and 3b:

H3a: After changing auditors, companies audited by sanctioned predecessors exhibit more conservatism in discretionary accruals compared to companies audited by non-sanctioned predecessors.

H3b: After changing auditors, companies audited by sanctioned predecessors exhibit higher audit quality in discretionary accruals compared to companies audited by non-sanctioned predecessors.

III. Research Design

Data sources and sampling

Both CPA Disciplinary Actions Committee and SFB can decree disciplinary actions against auditors in Taiwan. We hand collect sanction cases from websites of (1) the Executive Yuan for government gazettes and (2) SFB for the official announcements of CPA sanctions. The calculations of various variables are based on the database of Taiwan Economics Journal (TEJ).

Our sanctioned sample is limited to the public companies audited by sanctioned auditors during 1995 to 2006. If an auditor involves in sanction enforcements more than one case in a year, we include only the first sanction enforcement in our sanctioned sample. That is, every sanctioned auditor is included in our sanctioned sample for one sanction case only in a year. We also restrict the sanction sample to auditing related issues. According to samples observed in this study, the announcement of enforcement against an auditor generally falls between two financial report dates. Therefore, we use “audit field work completed date” as a criterion to determine pre-sanction and post-sanction period. Figure 2 presents the time line and illustrates the difference between pre-sanction and post-sanction period. In Case 1, since the announcement of sanction enforcement is earlier than date audit field work

is completed for t-1 year, we denote t-2 year as pre-sanction and t-1 year post-sanction period. In Case 2, the auditor is sanctioned after the field work for t-1 year is completed, therefore we define the financial statements of t-1 year as pre-sanction and t year as post-sanction period.

Insert Figure 2 here

In post-sanction period, we separate sanctioned sample into companies which retain sanctioned auditors and companies which change auditors. Companies are grouped as the latter only when both sanctioned auditors are replaced².

The sample size for each hypothesis in this paper may vary. Research designs corresponding to relevant hypotheses and their sample sizes in this study are shown in Table 1. Table 2 further classifies sanctioned sample by sanction severeness and auditor change. Our final sanctioned sample size is 316.

Insert Table 1 and Table 2 here

Accruals

Prior literature argues that the level of discretionary accruals reported by the company is a reflection of financial reporting discretion level of management (Schipper 1989; Jones 1991; DeFond and Park 2001). Geiger and North (2006) state that discretionary accruals are believed to be subject to more reporting judgment and are more easily manipulated relative to nondiscretionary accruals and can directly impact the reported earnings numbers. Accordingly, following modified Jones model, we estimate accruals cross-sectionally using the model below:

$$TA_{ijt} / A_{ijt-1} = \beta_{0it} / A_{ijt-1} + \beta_{1it} [(\Delta REV_{ijt} - \Delta REC_{ijt}) / A_{ijt-1}] + \beta_{2it} PPE_{ijt} / A_{ijt-1} + \varepsilon_{ijt} \dots \dots (1)$$

Where:

- TA = Total accruals, referring to the difference between the net earnings from continuing operations and cash flows of the operating activities;
- $\square REV$ = Change in sales;
- $\square REC$ = Change in account receivables;
- PPE = Total property, plants and equipment;
- A = Total assets at beginning of the year.

The estimated coefficients from the cross-sectionally industry regression are used to estimate predicted accruals for the sample. Then, discretionary accruals are actual accruals minus predicted accruals. Prior studies state that the magnitude of the absolute (unsigned) value of discretionary accruals may better capture the discretion

² In Taiwan, the Securities Exchange Law and related regulations stipulate that the financial statements of all listed companies be audited and signed in the name of two CPAs.

granted to managers by their auditors (Menon and Williams 2004; Reynolds and Francis 2001; Frankel et al. 2002).

In this paper, we examine both the signed and absolute values of discretionary accruals. Earnings distortion can occur because of inappropriate income-increasing accruals and/or inappropriate income-decreasing accruals (Myers et al. 2003). Therefore, regulators are not only concerned with the dispersion in accruals but also about the distortion in earnings. Income-increasing accruals can be used to inflate current earnings and income-decreasing accruals can be used to create cookie jar reserves³. Changes in both types of accruals are informative to regulators, hence, we estimate regressions using both income-increasing and income-decreasing accruals.

Model specifications

Hypotheses 1a and 1b test if the most auditor sanction enforcements are based upon lack of conservatism or low audit quality respectively by examining the accruals of companies audited by sanctioned auditors and companies audited by non-sanctioned auditors in pre-sanction period. Accordingly, we use the following model to compare clients of sanctioned auditors with other non-sanctioned auditors' auditees.

$$\begin{aligned}
 ABSDA \text{ or } DA = & \alpha + \beta_1 SANCTIONED + \beta_2 AGE + \beta_3 GROWTH + \beta_4 CFFO \\
 & + \beta_5 CPATYPE + \beta_6 SIZE + \varepsilon.
 \end{aligned}
 \tag{2}$$

Where:

DA (ABSDA) = discretionary accrual (absolute value) generated by modified Jones model;

SANCTIONED = 1 if the company's auditor is subject to auditing enforcement actions, and 0 otherwise;

AGE = years of the establishment of the company;

GROWTH = change in total assets divided by total assets of the previous year;

CFFO = cash flow from operating activities scaled by total assets;

CPATYPE = 1 if the auditor is a Big N auditor, and 0 otherwise

SIZE = log of total assets.

In order to observe the difference between sanctioned and non-sanctioned sample before disciplinary actions, we employ the dummy variable *SANCTIONED*. *SANCTIONED* is 1 if the company's auditor is subject to enforcement action, and 0 otherwise. If auditor sanction enforcements are based upon lack of conservatism, the sanctioned auditors allow more discretionary accruals to inflate earnings than non-sanctioned auditors do in pre-sanction period. Grounded on hypothesis 1a,

³ Myers et al. (2003) state that "cookie jar reserves" is a mean which allows managers to increase future earnings.

SANCTIONED is predicted to be positive in signed *DA*, income-increasing and income-decreasing *DA*. However, as alternative hypothesis 1b states, if auditor disciplinary actions are on account of low audit quality, *SANCTIONED* is predicted to be positive in *ABSDA* and income-increasing *DA*, and negative in income-decreasing *DA*.

Based upon previous studies, we include 5 controlled variables. Since there are many reasons that may change the amount of accruals in the life span of a company (Anthony and Ramesh 1992), we include the age of the company, *AGE*, as a controlled variable by subtracting the establishment year of the client (Nagy 2005). *GROWTH* is assets growth rate of the company and it shall be positively correlated with the amount of accruals, therefore, we employ *GROWTH* and calculate it by dividing the change of total assets of the company by total beginning assets (Nagy 2005). Managers in the companies with high levels of cash flow from operations usually do not need to manage their earnings (Dechow 1994; Sloan 1996). Accordingly, *CFFO* is included and calculated by dividing cash flow from operations by the total assets at the beginning of the year. Becker et al. (1998) provide evidence that non-Big 6 audit firms allow their clients to report 1.5% to 2.1% higher *DA*s than Big 6 firms do. Consequently, many prior studies believe that non-Big N firms tend to permit more room of subjective judgments by company management. That is, Big N firms are believed to have higher audit quality than non-Big N firms. *CPATYPE* is denoted as 1 if the audit firm belongs to Big N audit firms, otherwise it is set at 0. Because previous literature states that the size of the company might represent many omitted variables (Becker et al. 1998), we include the natural log of total assets, *SIZE*, to assess the size of the company (Nagy 2005).

The objective of hypothesis 2a and 2b is to find out if the sanctioned auditor can learn a lesson from the disciplinary actions and restrain their clients' discretionary accruals. Either conservatism or high audit quality is expected as a result. Therefore, this sample is confined to sanction in the forms of warning or reprimand, because only these sanctioned auditors can still be retained by the clients for conducting audit service. Because we attempt to examine the difference between pre- and post-sanction, we follow model (2) and substitute *POST* for *SANCTIONED* as main explanatory variable. We estimate model (3) using a reduced sample which is restricted to clients of sanctioned auditors only. The empirical model is shown below:

$$\begin{aligned}
 \text{ABSDA or } DA = & \alpha + \beta_1 \text{POST} + \beta_2 \text{AGE} + \beta_3 \text{GROWTH} + \beta_4 \text{CFFO} \\
 & + \beta_5 \text{CPATYPE} + \beta_6 \text{SIZE} + \varepsilon.
 \end{aligned}
 \tag{3}$$

Where:

POST = 1 if the company is in the post-sanction period, and 0 otherwise.

POST is included to proxy the post-sanction period. As in Hypothesis 2a, a negative coefficient on *POST* in signed, income-increasing and income-decreasing *DA* regressions would suggest that, after sanction enforcements are released, companies which retain their sanctioned auditors show more conservative discretionary accruals. On the other hand, Hypothesis 2b predicts that *POST* is negative in *ABSDA* regression, because sanctioned auditors attempt to upgrade their audit quality afterward.

Our hypothesis 3a and 3b investigate, after changing auditors, if companies audited by sanctioned predecessors exhibit either more conservatism or higher audit quality in discretionary accruals compared to companies audited by non-sanctioned predecessors. This sample includes both forced auditor change when prior CPAs are suspended or disqualified from practice and voluntary termination when the previous CPA is sanctioned by warning or reprimand only. Geiger and North (2006) test the change of discretionary accruals after CFO turnover and Cahan and Zhang (2006) examine auditor conservatism by investigating changes in accruals, hence, we follow their change model:

$$\begin{aligned} \Delta DA \text{ or } \Delta ABSDA = & \alpha + \beta_1 SANCTIONED + \beta_2 \Delta GROWTH + \beta_3 \Delta CFFO \\ & + \beta_4 \Delta CPATYPE + \beta_5 \Delta SIZE + \varepsilon \end{aligned} \quad (4)$$

Where:

ΔDA = changes in discretionary accrual generated by modified Jones model;

$\Delta ABSDA$ = changes in absolute value of discretionary accrual generated by modified Jones model;

SANCTIONED = 1 if the company's auditor is subject to auditing enforcement actions, and 0 otherwise;

$\Delta GROWTH$ = changes in total assets growth rate;

$\Delta CFFO$ = changes in cash flow from operating activities scaled by total assets;

$\Delta CPATYPE$ = changes in *CPATYPE*;

$\Delta SIZE$ = changes in log of total assets.

SANCTIONED is one if the newly appointed auditor is to replace a sanctioned predecessor. Our hypothesis 3a predicts a negative coefficient on *SANCTIONED* in ΔDA regression and hypothesis 3b suggests that *SANCTIONED* is negative in $\Delta ABSDA$ regression.

IV. Empirical Results

Hypothesis 1a and 1b examine the accruals of companies audited by sanctioned

auditors relative to companies audited by non-sanctioned auditors in pre-sanction period to find out a basis of auditor sanction enforcements. Table 3 presents descriptive statistics for each of the variables included in the regression model (2). The mean of signed discretionary accruals is shown to be positive in the sanctioned sample, but negative in the non-sanctioned sample. Based on not reported difference tests on *DA* and on *ABSDA* between sanctioned and non-sanctioned sample, *DA* of sanctioned sample is significantly higher than non-sanctioned sample ($t = 3.7670$, $p = 0.0002$). On the contrary, *ABSDA* of sanctioned sample is significantly lower than non-sanctioned sample ($t = -1.8053$, $p = 0.0002$). This result shows that clients of sanctioned auditors have higher *DA* and lower *ABSDA* than clients of non-sanctioned auditors.

Insert Table 3 here

Table 4 shows the correlations among the independent variables. In pre-sanction period, sanctioned groups tend to show larger size, higher asset growth rate and hire Big N firms. All correlation coefficients are <0.8 , and that means multicollinearity is not a problem in this sample.

Insert Table 4 here

The regulators not only are concerned with absolute values of *DAs* but income-increasing and income-decreasing accruals (Myers et al. 2003). Therefore, Table 5 presents the results of the OLS regression equation (2) using all companies in pre-sanction period with the absolute value of *DA* and signed *DA*. We also separate the sample into companies with positive and negative *DA* and estimate the regression models separately on these two samples. All four models are highly significant and have adjusted R^2 's between 11.11 percent and 28.82 percent.

SANCTIONED is negative related to *ABSDA*, and indicates that clients of sanctioned auditors use less magnitude of *ABSDA* than clients of non-sanctioned auditors before the sanction enforcement is released. Coefficients on control variables are similar to prior studies prediction (Nagy 2005; Myers et al. 2003). As to signed *DA* regression, *SANCTIONED* is significantly positive and means that the clients of sanctioned auditors exhibit more income-increasing discretionary accruals before sanction enforcement. And *SANCTIONED* is found positive significantly in both income-increasing and income-decreasing regressions. In sum, the sanctioned auditors have higher probability to approve their clients to inflate their earnings with discretionary accruals prior to enforcement actions, even if the magnitude of their discretionary accruals is less than other companies. That is, our results support H1a

and infer that auditor sanction enforcements generally result from lack of conservatism instead of low audit quality.

Insert Table 5 here

To test whether disciplinary actions force sanctioned CPAs into constraining clients' discretionary accruals more conservatively or in magnitude, we reduce our sample to examine only client companies that retained sanctioned auditors. Both pre-sanction and post-sanction periods are observed. Descriptive statistics for each of the variables included in the regression model (3) is shown in Table 6. Companies which retain their sanctioned auditors turn from positive *DA* into negative *DA* after sanction enforcement is released, and their *ABSDA* is reduced a little but still positive afterward. The difference tests on *DA* ($t = -1.5885$, $p = 0.1139$) and on *ABSDA* ($t = -0.0427$, $p = 0.9660$) between pre- and post-sanction period (not reported) show there is no significant difference. Table 7 shows all correlation coefficients between independent variables are less than 0.8 in this sanctioned sample.

Insert Table 6 and Table 7 here

Table 8 presents the results of the OLS regression equation (3). In four regressions, *POST* is only significant in signed *DA* regression. *POST* shows significant negative relation with signed *DA* and, in income-reducing and income-increasing *DA* regressions, *POST* are found negative but insignificant. This result supports our hypothesis 2a and indicates that sanctioned auditors become more conservative in discretionary accruals after disciplinary actions are released.

Kinney and Martin (1994) state that the vast majority of audit adjustments are income-reducing because of income-increasing distortion is easier to be sued (Myers et al. 2003). Combining results of model (2) with model (3), we can infer that conservatism is a critical factor in auditors' sanction enforcements both before they are released and after.

Insert Table 8 here

Table 9 shows descriptive statistics by non-sanctioned and sanctioned sample for hypothesis 3a and 3b. The sanctioned sample shows a negative change in *DA* which represents that these companies become less aggressive in inflating their incomes.

Table 10 shows the coefficient matrix of model (4) and multicollinearity is not a problem for all correlation coefficients. The non-sanctioned sample contains firms which grow more rapidly and shift to Big N audit firms more compared to its

counterpart whose predecessor auditors are sanctioned by the authorities.

Insert Table 9 and Table 10 here

The results of the change regression model for hypothesis 3a and 3b are shown in Table 11. After controlling for changes in the other control factors, a significant negative coefficient on *SANCTIONED* in ΔDA regression and an insignificant positive coefficient in $\Delta ABSDA$ regression are found. Consistent with hypothesis 1a and 2a, we provide evidence which supports hypothesis 3a. The result of model (4) also indicates companies audited by sanctioned predecessors show more conservatism in discretionary accruals instead of higher audit quality.

Insert Table 11 here

Overall, our results indicate that signed discretionary accruals of the sanctioned auditors' client companies are significantly more favorable to earnings before the sanctions and reduce conservatively afterwards. The separated discretionary accruals in the income-increasing and income-decreasing groups for clients of sanctioned auditors are significantly more favorable to inflate earnings before auditor enforcement releases, but turn to the opposite direction following sanction announcements no matter sanctioned auditors are retained or replaced. Based on results reported in hypothesis 1a, 2a and 3a, we draw the conclusion that auditors are sanctioned for lack of conservatism but not for low audit quality and, after enforcement releases, the retained sanctioned auditors or the new successor auditors become more conservative in discretionary accruals. Consistent with Cahan and Zhang (2006), who state that auditors have incentives to require more conservative accruals when litigation risk is high, our data also indicate that auditor conservatism is a critical factor in auditors' enforcement actions.

Additional Analyses

This paper examines the relationship between auditor sanction enforcements and discretionary accruals. We estimate three discretionary accrual measurements. First, we estimate abnormal working capital accruals (AWCA), developed by Carey and Simnett (2006), as accrual measure. The measure of AWCA is:

$$AWCA_t = WC_t - [(WC_{t-1} / S_t) * S_t]$$

where:

WC_t = non-cash working capital in the current year computed as (current assets - cash and short-term investments) - (current liabilities - short-term debt);

WC_{t-1} = non-cash working capital in the prior year;

S_t = sales in current year; and

S_{t-1} = sales in prior year.

All above variables are scaled by average total assets (Carey and Simnett 2006). We use signed and absolute values of AWCA as the dependent variables for all regressions, including all hypotheses. All main explanatory variables are insignificant except for *POST* which is significantly positive related to absolute values of AWCA in model (3).

Second, we also run a variation of the definition of AWCA, utilizing the measure of current accruals used by Myers et al. (2003). This is:

$$Curr_Accruals = [(\Delta Curr_Ass - \Delta Cash) - (\Delta Curr_Liab - \Delta STD)]$$

where:

- $\Delta Curr_Ass$ = change in current assets;
- $\Delta Cash$ = change in cash equivalents;
- $\Delta Curr_Liab$ = change in current liabilities; and
- ΔSTD = change in short-term notes and current portion of long-term debt.

We also use this measure of current accruals (either signed or absolute) as the dependent variable for all regressions and find that main explanatory variables remain the same sign but become insignificant. Consistent with hypothesis 2a, *SANCTIONED* is significant negative in ΔCA regression and insignificant in $\Delta ABSCA$ regression.

Third, we consider the possibility that the discretionary accruals model is misspecified. Prior literatures show that discretionary accrual models are misspecified for stratified-random samples of firms (Dechow et al. 1995). Kothari et al. (2005) propose that performance matching on return on assets controls for the effect of performance on measured discretionary accruals and helps mitigate model-misspecification issues. Therefore, we rerun the regressions for each hypothesis using the performance-matched discretionary accrual measure developed by Kothari et al. (2005). For model (2), *SANCTIONED* becomes negative but insignificant related to signed *DA* and becomes positive significantly related to income-increasing *DA*. *POST* becomes positive and insignificant. Based on the additional regression performed, these results do not change the outcome for each hypothesis.

As to sensitivity analysis, we conduct several sensitivity tests. First, many argue that enforcement actions could be just bad lucks for sanctioned auditors and sanctioned auditors, serving as a scapegoat to take the blame, are mired by accounting scandals. Sometimes, under enormous public pressure the authorities tend to review the case with a magnifying glass and enforce disciplinary actions not so fairly. Therefore, we exclude the companies which cause the auditor sanction enforcements

from our sample. Second, to control for the industry fixed effect, we add industry dummy variables for every industry. Both tests provide the same sign and significant level on all variables.

V. Conclusions

The purpose of this paper is to investigate the discretionary accruals of sanctioned auditors' clients before sanction enforcements are released and their changes thereafter. We also attempt to figure out whether in practice most sanction enforcements against auditors are based upon their lack of conservatism or low audit quality. This paper uses auditor sanction sample in Taiwan from 1995 to 2006. We find evidence that clients of sanctioned auditors increase their incomes by using discretionary accruals prior to enforcement decrees. After enforcement actions are released, their clients become significantly more conservative in discretionary accounting accruals no matter the sanctioned auditors are retained or replaced. We also find that auditors are sanctioned for lack of conservatism but not for low audit quality, and similar to previous auditing litigation literature, clients' accruals decline conservatively across-the-board subsequent to their auditors' enforcement releases. Prior studies show that auditors have incentives to require more conservative accruals when litigation risk is high (Cahan and Zhang 2006; Basu et al. 2005), our results indicate auditor conservatism is a critical factor in auditors' enforcement actions as well.

This paper contributes to auditor sanction and discretionary accounting accruals literatures by examining the relationship between auditor disciplinary actions and discretionary accruals of auditees. Our study provides information about discretionary accruals at individual auditor level and shows that auditors are sanctioned for lack of conservatism instead of low audit quality. Furthermore, after disciplinary actions are released, the companies audited by sanctioned auditors previously show more conservative accruals regardless if the sanctioned auditors are retained or replaced. Though we assume in this study that a replacement of a sanctioned auditor in post-sanction period is caused by disciplinary action, sanction enforcements by the authority sometimes may take several years from the actual audit to its related sanction decree. Hence, we cannot ensure this assumption can hold for every sanction case. It is a constraint that may affect the research result.

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FIGURE 1
Combined Outcomes of Income-increasing and
Income-decreasing Discretionary Accruals

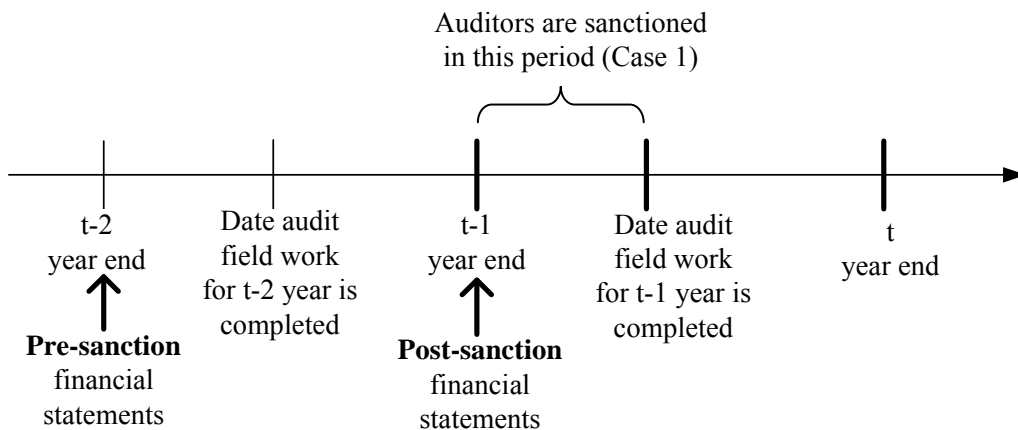
	$DA > 0$ [□]	$DA < 0$ ^{□□}	Indication	Hypothesis
Situation 1	Diminishing	Further declining	Conservatism	
Situation 2	Diminishing	Reversing to approach 0	High audit quality	
Situation 3	Enlarging	Reversing to approach 0	Lack of conservatism	H1a
Situation 4	Enlarging	Further declining	Low audit quality	H1b

□ represents income-increasing discretionary accruals.

□□ represents income-decreasing discretionary accruals.

FIGURE 2
Time Line for Pre-sanction and Post-sanction Period

Case 1: Auditors are sanctioned before the date that audit field work is completed for t-1 year



Case 2: Auditors are sanctioned after the date that audit field work is completed for t-1 year

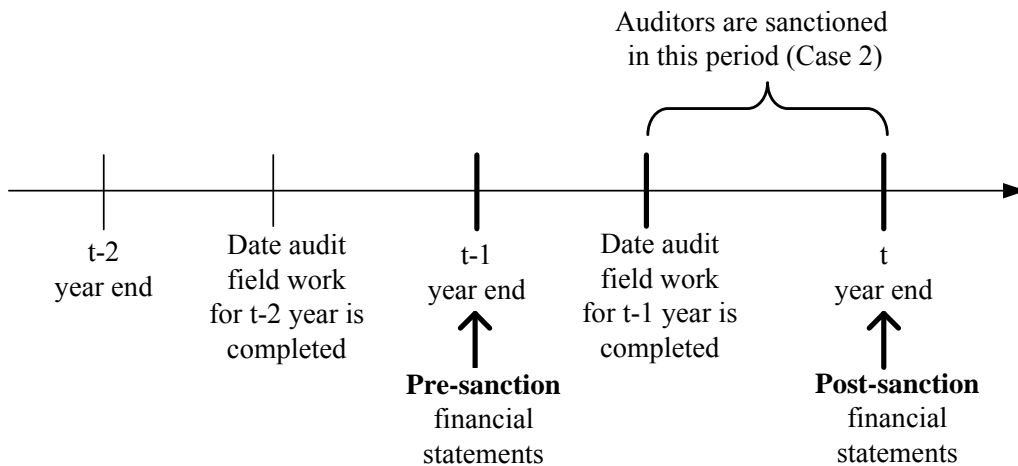


TABLE 1
Research Design and Sample Size for Hypotheses

hypotheses	subgroup	sanctioned		non-sanctioned	total
		pre-	post-		
H1a and 1b	Full sample	316		14297	14613
H2a and 2b	sanctioned auditors are retained	97	97		194
H3a and 3b	sanctioned auditor are replaced	219 *		3146	3365

* Since this paper uses change model to test hypothesis 3a and 3b, hence, we calculate changes between pre-sanction and post-sanction period.

TABLE 2
Sanctioned Sample Grouped by
Sanction Severeness and Subsequent Auditor Change

	non-change	change	total
Suspension	34	193	227
Reprimand	12	10	22
Warning	51	16	67
total	97	219	316

TABLE 3**Descriptive Statistics of Hypothesis 1**

non-sanctioned sample (N [†] = 14297)				
Variable	Mean	Std. Dev.	Min	Max
<i>DA</i>	-0.0058	0.2385	-4.5154	2.0437
<i>ABSDA</i>	0.1362	0.1959	0.0000	4.5154
<i>AGE</i>	19.7832	11.8320	1	62
<i>GROWTH</i>	0.2085	0.3547	-0.7345	1.9965
<i>CFFO</i>	0.0426	0.1213	-0.9784	0.9856
<i>CPATYPE</i>	0.7871	0.4094	0	1
<i>SIZE</i>	14.5564	1.4426	0.0000	20.1674
sanctioned sample (N [†] = 316)				
Variable	Mean	Std. Dev.	Min	Max
<i>DA</i>	0.0400	0.2130	-0.8917	2.0159
<i>ABSDA</i>	0.1174	0.1820	0.0005	2.0159
<i>AGE</i>	19.1741	12.5341	2	55
<i>GROWTH</i>	0.2454	0.3996	-0.3155	1.9836
<i>CFFO</i>	0.0536	0.1062	-0.2638	0.4593
<i>CPATYPE</i>	0.8608	0.3467	0	1
<i>SIZE</i>	14.7406	1.4198	11.1466	19.5842

[†] N represents sample size

DA (*ABSDA*) = discretionary accrual (absolute value) generated by modified Jones model;

AGE = years of the establishment of the company;

GROWTH = change in total assets divided by total assets of the previous year;

CFFO = cash flow from operating activities scaled by total assets;

CPATYPE = 1 if the auditor is a Big N auditor, and 0 otherwise

SIZE = log of total assets.

TABLE 4**Pearson Correlation Coefficients for Hypothesis 1**

	<i>SANCTIONED</i>	<i>AGE</i>	<i>GROWTH</i>	<i>CFFO</i>	<i>CPATYPE</i>	<i>SIZE</i>
<i>SANCTIONED</i>	1					
<i>AGE</i>	-0.0075	1				
<i>GROWTH</i>	0.0151*	-0.3200*	1			
<i>CFFO</i>	0.0132	0.0448*	-0.1475*	1		
<i>CPATYPE</i>	0.0262*	-0.1379*	0.0421*	0.0344*	1	
<i>SIZE</i>	0.0186*	0.4067*	-0.1509*	0.0819*	0.0934*	1

* indicate significance at $p < 0.1$.

SANCTIONED = 1 if the company's auditor is subject to auditing enforcement actions, and 0 otherwise;

AGE = years of the establishment of the company;

GROWTH = change in total assets divided by total assets of the previous year;

CFFO = cash flow from operating activities scaled by total assets;

CPATYPE = 1 if the auditor is a Big N auditor, and 0 otherwise

SIZE = log of total assets.

TABLE 5
Regression for Hypothesis 1 (In Pre-sanction Period)

$$DA \text{ or } ABSDA = \alpha + \beta_1 SANCTIONED + \beta_2 AGE + \beta_3 GROWTH + \beta_4 CFO + \beta_5 CPATYPE + \beta_6 SIZE + \varepsilon \quad (2)$$

Variable	Predicted sign	ABSDA		Signed DA		DA > 0		DA < 0	
		Estimated Coefficient	P-value	Estimated Coefficient	P-value	Estimated Coefficient	P-value	Estimated Coefficient	P-value
Intercept		0.2354	0.0000 ***	-0.1366	0.0000 ***	0.0968	0.0000 ***	-0.2993	0.0000 ***
<i>SANCTIONED</i>	+	-0.0217	0.0370 **	0.0520	0.0000 ***	0.0208	0.0580 *	0.0522	0.0040 ***
<i>AGE</i>	-	-0.0011	0.0000 ***	0.0018	0.0000 ***	0.0006	0.0010 ***	0.0022	0.0000 ***
<i>GROWTH</i>	+	0.1575	0.0000 ***	0.0510	0.0000 ***	0.1540	0.0000 ***	-0.1499	0.0000 ***
<i>CFO</i>	-	-0.1265	0.0000 ***	-0.7873	0.0000 ***	-0.5880	0.0000 ***	-0.1449	0.0000 ***
<i>CPATYPE</i>	-	-0.0116	0.0020 ***	0.0026	0.5620	-0.0083	0.0500 **	0.0138	0.0240 **
<i>SIZE</i>	-	-0.0066	0.0000 ***	0.0079	0.0000 ***	-0.0010	0.4740 ***	0.0096	0.0000 ***
Sample Size		14613		14613		7381		7232	
Adjusted R ² (%)		12.11%		17.73%		28.82%		11.11%	
F-statistic (F-value)		336.69	(0.0000) ***	525.83	(0.0000) ***	499.12	(0.0000) ***	151.58	(0.0000) ***

*, ** and *** indicate significance at $p < 0.1$, $p < 0.05$ and $p < 0.01$, respectively.

DA (ABSDA) = discretionary accrual (absolute value) generated by modified Jones model; *SANCTIONED* = 1 if the company's auditor is subject to auditing enforcement actions, and 0 otherwise; *AGE* = years of the establishment of the company; *GROWTH* = change in total assets divided by total assets of the previous year; *CFO* = cash flow from operating activities scaled by total assets; *CPATYPE* = 1 if the auditor is a Big N auditor, and 0 otherwise; *SIZE* = log of total assets.

TABLE 6
Descriptive Statistics of Hypothesis 2

pre-sanction (N [†] = 97)				
Variable	Mean	Std. Dev.	Min	Max
<i>DA</i>	0.0458	0.2561	-0.4239	2.0159
<i>ABSDA</i>	0.1262	0.2271	0.0005	2.0159
<i>AGE</i>	19.6392	13.0441	2	55
<i>GROWTH</i>	0.2898	0.4637	-0.2183	1.9836
<i>CFFO</i>	0.0460	0.1118	-0.2638	0.3174
<i>CPATYPE</i>	0.7010	0.4602	0	1
<i>SIZE</i>	14.6038	1.3954	11.1466	19.5141
post-sanction (N [†] = 97)				
Variable	Mean	Std. Dev.	Min	Max
<i>DA</i>	-0.0076	0.2094	-0.4829	1.2451
<i>ABSDA</i>	0.1250	0.1677	0.0009	1.2451
<i>AGE</i>	20.6392	13.0441	3	56
<i>GROWTH</i>	0.1875	0.4108	-0.3715	1.9410
<i>CFFO</i>	0.0378	0.1216	-0.4424	0.3727
<i>CPATYPE</i>	0.6907	0.4646	0	1
<i>SIZE</i>	14.7296	1.2971	12.2009	19.7421

[†] N represents sample size

DA (*ABSDA*) = discretionary accrual (absolute value) generated by modified Jones model;

AGE = years of the establishment of the company;

GROWTH = change in total assets divided by total assets of the previous year;

CFFO = cash flow from operating activities scaled by total assets;

CPATYPE = 1 if the auditor is a Big N auditor, and 0 otherwise

SIZE = log of total assets.

TABLE 7
Pearson Correlation Coefficients for Hypothesis 2

	<i>POST</i>	<i>AGE</i>	<i>GROWTH</i>	<i>CFFO</i>	<i>CPATYPE</i>	<i>SIZE</i>
<i>POST</i>	1					
<i>AGE</i>	0.0385	1				
<i>GROWTH</i>	-0.1166	-0.3885*	1			
<i>CFFO</i>	-0.0353	-0.0727	-0.0714	1		
<i>CPATYPE</i>	-0.0112	-0.3260*	0.0148	0.1358*	1	
<i>SIZE</i>	0.0469	0.4459*	-0.2048*	0.0514	-0.0679	1

* indicate significance at $p < 0.1$.

POST = 1 if the company is in the post-sanction period, and 0 otherwise;

AGE = years of the establishment of the company;

GROWTH = change in total assets divided by total assets of the previous year;

CFFO = cash flow from operating activities scaled by total assets;

CPATYPE = 1 if the auditor is a Big N auditor, and 0 otherwise

SIZE = log of total assets.

TABLE 8
Regression for Hypothesis 2 (Only Sanctioned Sample)

$$DA \text{ or } ABSDA = \alpha + \beta_1 POST + \beta_2 AGE + \beta_3 GROWTH + \beta_4 CFO + \beta_5 CPATYPE + \beta_6 SIZE + \varepsilon \quad (3)$$

Variable	Predicted sign	ABSDA		Signed DA		DA > 0		DA < 0	
		Estimated Coefficient	P-value	Estimated Coefficient	P-value	Estimated Coefficient	P-value	Estimated Coefficient	P-value
Intercept		0.3287	0.0300 **	0.2365	0.1620	0.6157	0.0090 ***	0.1295	0.4100
<i>POST</i>	-	0.0114	0.6560	-0.0518	0.0730 *	-0.0605	0.1440	-0.0213	0.4090
<i>AGE</i>	-	-0.0003	0.8050	-0.0019	0.1660	0.0003	0.8740	-0.0007	0.5540
<i>GROWTH</i>	+	0.1445	0.0000 ***	0.0726	0.0450 **	0.1765	0.0010 ***	-0.0885	0.0050 ***
<i>CFO</i>	-	-0.5059	0.0000 ***	-0.9295	0.0000 ***	-0.9033	0.0000 ***	0.0319	0.7990
<i>CPATYPE</i>	-	-0.0081	0.7840	-0.0811	0.0160 **	-0.0667	0.1460	-0.0451	0.1640
<i>SIZE</i>	-	-0.0143	0.1810	-0.0051	0.6730	-0.0315	0.0730 *	-0.0115	0.2850
Sample Size		194		194		104		90	
Adjusted R ² (%)		21.00%		28.65%		36.21%		4.50%	
F – statistic		9.55	(0.0000) ***	13.91	(0.0000) ***	10.75	(0.0000) ***	1.70	(0.1313)
(P - value)									

*, ** and *** indicate significance at $p < 0.1$, $p < 0.05$ and $p < 0.01$, respectively.

DA (ABSDA) = discretionary accrual (absolute value) generated by modified Jones model; *POST* = 1 if the company is in the post-sanction period, and 0 otherwise; *AGE* = years of the establishment of the company; *GROWTH* = change in total assets divided by total assets of the previous year; *CFO* = cash flow from operating activities scaled by total assets; *CPATYPE* = 1 if the auditor is a Big N auditor, and 0 otherwise; *SIZE* = log of total assets.

TABLE 9**Descriptive Statistics of Hypothesis 3**

non-sanctioned sample (N [†] = 3146)					
Variable	Mean	Std. Dev.	Min	Max	
□ <i>DA</i>	0.0213	0.3080	-2.6318	2.7424	
□ <i>GROWTH</i>	0.0173	0.6722	-2.6646	19.8737	
□ <i>CFFO</i>	0.0058	0.1658	-1.1437	4.7640	
□ <i>CPATYPE</i>	0.0153	0.3625	-1	1	
□ <i>SIZE</i>	0.1211	0.2992	-2.2038	3.0775	
sanctioned sample (N [†] = 219)					
Variable	Mean	Std. Dev.	Min	Max	
□ <i>DA</i>	-0.0337	0.2142	-1.3069	0.4720	
□ <i>GROWTH</i>	-0.0817	0.3691	-2.1554	0.9734	
□ <i>CFFO</i>	-0.0046	0.1230	-0.4486	0.4247	
□ <i>CPATYPE</i>	-0.0365	0.2110	-1	1	
□ <i>SIZE</i>	0.1024	0.2485	-0.7690	0.9511	

[†] N represents sample size

- DA* = changes in discretionary accrual generated by modified Jones model;
- GROWTH* = changes in total assets growth rate;
- CFFO* = changes in cash flow from operating activities scaled by total assets;
- CPATYPE* = changes in *CPATYPE*;
- SIZE* = changes in log of total assets.

TABLE 10**Pearson Correlation Coefficients for Hypothesis 3**

	<i>SANCTIONED</i>	□ <i>GROWTH</i>	□ <i>CFFO</i>	□ <i>CPATYPE</i>	□ <i>SIZE</i>
<i>SANCTIONED</i>	1				
□ <i>GROWTH</i>	-0.0372*	1			
□ <i>CFFO</i>	-0.0157	-0.0752*	1		
□ <i>CPATYPE</i>	-0.0360*	0.1105*	0.0129	1	
□ <i>SIZE</i>	-0.0156	0.6200*	-0.1541*	0.2368*	1

* indicate significance at $p < 0.1$.

- SANCTIONED* = 1 if the company's auditor is subject to auditing enforcement actions, and 0 otherwise;
- GROWTH* = changes in total assets growth rate;
- CFFO* = changes in cash flow from operating activities scaled by total assets;
- CPATYPE* = changes in *CPATYPE*;
- SIZE* = changes in log of total assets.

TABLE 11
Regression Results of Hypothesis 3

$$\Delta DA \text{ or } \Delta ABSDA = \alpha + \beta_1 SANCTIONED + \beta_2 \Delta GROWTH + \beta_3 \Delta CFFO + \beta_4 \Delta CPATYPE + \beta_5 \Delta SIZE + \varepsilon \quad (4)$$

Variable	Predicted sign	ΔDA		$\Delta ABSDA$	
		Estimated Coefficient	P-value	Estimated Coefficient	P-value
Intercept		0.0172	0.0020 ***	0.0053	0.2500
<i>SANCTIONED</i>	-	-0.0589	0.0020 ***	0.0055	0.7340
$\Delta GROWTH$	-	0.0219	0.0170 **	0.1317	0.0000 ***
$\Delta CFFO$	-	-0.7389	0.0000 ***	-0.0682	0.0060 ***
$\Delta CPATYPE$	-	0.0052	0.7070	0.0116	0.3190
$\Delta SIZE$	-	0.0651	0.0020 ***	-0.1020	0.0000 ***
Sample Size		3365		3365	
Adjusted R ² (%)		18.04%		8.92%	
F-statistic (F-value)		149.06 (0.0000) ***		66.88 (0.0000) ***	

*, ** and *** indicate significance at $p < 0.1$, $p < 0.05$ and $p < 0.01$, respectively.

ΔDA ($\Delta ABSDA$) = changes in (absolute value of) discretionary accrual generated by modified Jones model; *SANCTIONED* = 1 if the company's auditor is subject to auditing enforcement actions, and 0 otherwise; $\Delta GROWTH$ = changes in total assets growth rate; $\Delta CFFO$ = changes in cash flow from operating activities scaled by total assets; $\Delta CPATYPE$ = changes in *CPATYPE*; $\Delta SIZE$ = changes in log of total assets.