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Research Paper

Audit opinion shopping[1] --Further Evidence from China's Capital Market

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Abstract: *Existing literature on audit opinion shopping gives inconsistent evidence on whether or not abnormal audit fee is associated with audit opinion shopping. In this paper, we hypothesize that firms engage in audit opinion shopping with abnormal audit fee only when their accounting quality is low. To examine this, we group firms based on their ROA change and show that abnormal audit fee improves the audit opinion only for firms with local auditors and low ROA but which have experienced a large increase in ROA, especially when the change was caused by abnormal accruals. For other firms, we do not find an association between abnormal audit fee and audit opinion improvement.*

Key Words： *Abnormal audit fees, Audit Opinion Shopping*

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I. Introduction

Audit opinion shopping has been studied extensively in accounting research. A firm engages in opinion shopping by influencing or even manipulating its auditor's decision in certain ways in order to obtain a more favorable opinion that is unwarranted by the quality of its accounting information. If such a behavior exists, it leads to higher information asymmetry between managers and investors and weakens the protection effect of auditing on the investors.

Empirical research has resulted in inconsistent evidence about whether a firm can influence its audit opinion in the China's capital market by paying excessive fees. Chen, Su, and Wu (2005) showed that absent auditor switch, there is a positive correlation between a higher abnormal audit fee and an improvement in audit opinion. Using a different research design, Fang and Hong (2008) also found that abnormal audit fee can lead to a better audit opinion. However, when they used the same data selection criterion as Chen, Su, and Wu (2005), the positive relationship between abnormal audit fee and audit opinion improvement disappeared. Some other results in Fang and Hong (2008) were also counterintuitive. For example, they argued that domestic local audit firms were less likely to allow for audit opinion shopping than the international big four auditors were. Such a result is not consistent with the general perception that the big four, each with a large customer base, are less likely to be pressured by each client.

In this paper, we reconsider the relationship between abnormal audit fee and audit opinion change, with several significant modifications on the research methodologies used in the aforementioned papers. First, we believe that only a firm with low accounting quality has an incentive to pay an extra audit fee to avoid questions on its accounting quality. If a firm improves its operating results in such a convincing way that its audit opinion improves, then there is no need for the firm to pay an extra audit fee to its auditors to obtain a better opinion. On the other hand, if the earnings quality is not convincing, a firm must to pay extra to the auditor to induce the auditor not to question its earnings quality. Therefore, we believe that the relationship between abnormal audit fee and audit opinion improvement is most likely to exist among firms with a questionable profitability improvement.

Existing literature has focused on the association between audit opinion improvement and abnormal audit fee. However, one form of opinion shopping is to avoid the worsening of a firm's audit opinion. Unlike opinion improvement, we do not observe an opinion change when a firm successfully maintains its audit opinion. In this paper, we extend the existing literature by considering a model for the deterioration of audit opinion, and

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test the role of abnormal audit fee. We then combine the two models into an ordinal logit model of audit opinion change, which allows us to combine the information from both opinion improvement and deterioration.

In this paper, we also introduce a number of improvements to the model for computing abnormal audit fee. In our model, we introduce fixed effects to account for unobserved factors in the normal audit fee among different firms, and include the lagged audit fee to allow for systematic change of the normal fee over time. With these changes, our model integrates the two different methods for calculating abnormal audit fee, that is, the ratio method of Fang and Hong (2008) and the residual method of Chen, Su, and Wu (2005). The resulting model significantly improves the prediction accuracy of audit fees, thus allowing a more accurate determination of abnormal audit fee and increasing the efficiency of the tests of the hypotheses of interest. The model also unifies the models for audit fee level and fee change and thus addresses the inconsistency between these two types of models discussed by Wu and Liu (2008).

Based on the improved models, empirical results show that holding fixed the controlled factors, high abnormal audit fees are associated with a higher chance of audit opinion improvements (or lower chance of audit opinion deterioration) for firms with an abnormally high increase in profitability, but not for firms with a normal increase or a decrease in profitability. Further analysis indicates that the association comes from firms with low profitability (even after an abnormally high increase). This is likely to be associated with China's corporate law system, which delists firms with three consecutive years of losses.

To further our understanding of the role of accounting, we decompose profitability change into operating cash flow change and accrual change. We expect an association between a high abnormal audit fee and an opinion improvement for firms with profitability increase driven by high abnormal accruals, rather than high cash flows. Our empirical results confirm this. Taken all these together, we believe that firms with low accounting quality can use their audit fee to obtain a more favorable audit opinion.

For firms with an auditor switch, we find no association between audit fee and audit opinion change, similar to Chen, Su, and Wu (2005). However, unlike Fang and Hong (2008), we do not find evidence of association between abnormal audit fee and audit opinion change for international big four auditors in any of the samples.

II. Literature Review

In the existing literature, a typical method to study audit opinion shopping is to compare the audit opinion before and after auditor switch. Chow and Rice (1982) found that an auditor switch does not improve audit opinion. Krishnan and Stephens (1995) compared the decision process of the auditors before and after the switch and found no evidence that the audit opinion could be improved. Using an audit opinion forecasting model, Lennox (2000) arrived at the opposite result. For China's capital market, Gen and Yang (2001) found that after an auditor switch, firms are more likely to get an unqualified opinion instead of a qualified opinion. Li, Huang, and Wang (2001) showed that auditor switch is positively correlated with a qualified opinion in the prior year. Using a modified Lennox model, Li and Wu (2002) found that for firms with qualified opinions in the prior year, switching auditors led to a slightly lower probability of receiving a qualified opinion compared to firms with no auditor switch, but the result was not statistically significant. Lu and Tong (2003) found no evidence of audit opinion shopping in year 2000, but weak evidence in 2001. Wu and Tan (2005) also found that that an auditor switch did not improve audit opinion. These results collectively show that there is no evidence that firms can improve their audit opinions by switching auditors.

A potential alternative is that a firm may improve its audit opinion by paying a higher audit fee to its current auditor. That means that a firm "purchases" a more favorable audit opinion without switching its auditor. Chen, Su, and Wu (2005) studied firms that received a qualified opinion in the 2000-2002 sample period, and found that absent auditor switch, a high abnormal audit fee is associated with improvement in auditing outcome (with improvement in both profitability and audit opinion) in the subsequent year. The result indicates that an auditor's independence may be negatively impacted by the economic incentive provided by its clients.

Fang and Hong (2008), extending the sample to all firms in China's stock markets and using some different measures of abnormal audit fee, also found a positive relationship between abnormal audit fee and audit opinion improvement. However, including all firms in their regression leads to bias in estimation results, since firms with an unqualified opinion in prior year cannot improve their audit opinion any further. The correct method is to either exclude these firms as they did in their robustness study following Chen, Su, and Wu (2005), or, equivalently, to include indicator variables for the prior year's audit opinion. However, when they exclude firms with a prior unqualified opinion in their robustness study, there is no longer a significant relationship between abnormal audit fee and audit opinion improvement, even through their sample size is several times of that in Chen, Su, and Wu (2005). In addition, they also show that local audit firms allow less opinion shopping than international big four auditors. This result appears to be counterintuitive since it is generally believed that big four have many more clients and are less likely to be concerned about the profit from each client.

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This paper extends existing research in several aspects. We classify firms based on their accounting quality, which is similar to the method used in Chen, Su and Wu (2005). On the other hand, our model is more similar to that of Fang and Hong (2008), using audit opinion as the dependent variable, which is more intuitive and easier to interpret than the model in Chen, Su and Wu (2005).

One of the important issues in this research is the determination of abnormal audit fee. Chen, Su, and Wu (2005) used a cross-sectional regression to determine the expected audit fee. However, in addition to known factors such as size, audit fee is determined by many other unobserved factors. When the observed factors exist, the residuals would capture these factors and bias in the abnormal fee. Fang and Hong (2008) measure the abnormal audit fee as the change in audit fee-to-assets ratio, a method that overcomes some of the problems of Chen, Su, and Wu (2005) but creates new problems, because the change in audit fee-to-asset ratio being driven by predictable factors and not being abnormal.

In this paper, we improve the audit fee model by including fixed effects and a lagged audit fee. The fixed effect captures unobserved factors in the audit fee. The inclusion of lagged audit fee allows dynamic change in these unobserved factors. Moreover, it allows us to integrate the two different approaches in Chen, Su and Wu (2005) and Fang and Hong (2008), so that our model includes both of the models as nested submodels. This significantly improves the accuracy in the calculations of abnormal audit fee.

Both Chen, Su, and Wu (2005) and Fang and Hong (2008) use the sample period from 2000-2002. We consider the sample period from 2002-2008, which gives a much larger sample and reflects a more up-to-date situation of China's audit market. Moreover, we also include a model for audit opinion deterioration, which gives an independent verification of the hypotheses and gives more credibility to the results. An ordinal logit model is then formed to combine the information from both opinion improvement and deterioration.

1. Hypotheses Development and Research Design

To evaluate whether a firm pays a higher audit fee to obtain a favorable audit opinion, it is necessary to understand the incentive for the firm to do so. Absent the incentive, firms are unlikely to make the extra payment. Our analysis is built on this foundation.

The need of a firm to obtain a more favorable audit opinion depends on two factors. First, the firm needs to either improve its audit opinion or maintain a favorable opinion. Second, the foundation of a more favorable opinion is questionable. If a firm's earnings increase is solid and convincing, the audit opinion reflects the profitability increase; therefore, there is no need for the firm to offer an incentive to its auditors for a better opinion. However, if the profitability increase is obtained through questionable accounting practices, then the firm must find ways, such as paying higher audit fee, to persuade its auditor to certify the earnings and give it a better audit opinion.

To proxy for the quality of profitability increase, we consider two measures. The first one is whether the profitability increase is normal. While a large profitability does not necessarily imply a quality problem, it is relatively unlikely that the ROA (return-on-assets) of a firm can suddenly increase significantly.

Hypothesis I: For firms with an abnormally large increase in profitability, a high abnormal audit fee is associated with an improvement in audit opinion. For other firms, abnormal audit fee is not associated with audit opinion change.

A second method is to consider the abnormal increase in accruals. Accruals are relatively easy to manipulate. If the profitability increase comes from a large increase in accruals, then the profitability increase is likely of low quality.

To test the hypothesis, we use the following model, which is similar to Fang and Hong (2008):

$$\begin{aligned}\textbf{Logit(Imp=1)} &= \beta_0 + \beta_1\,\textbf{Abfee} + \beta_2\,\textbf{Size} + \beta_3\,\Delta\textbf{ROA} + \beta_4\,\Delta\textbf{LEV} + \beta_5\,\textbf{Growth} \\ &+ \beta_6\,\textbf{Loss} + \beta_7\,\textbf{Lastloss} + \beta_8\,\textbf{Switch} + \beta_9\,\textbf{Switch*Abfee} \\ &+ \beta_{10}\,\textbf{Big4} + \textbf{Prior Opinion Dummies} + \textbf{Year Dummies}, \qquad (1)\end{aligned}$$

where Imp is a binary variable indicating an improvement in audit opinion, Abfee is the variable of interest, the abnormal audit fee, and ΔROA is the change in ROA. See Table 1 for definition of the variables. For firms that have abnormally large values in ΔROA, we expect $\beta_1>0$; for the remaining firms, we expect $\beta_1=0$. Note that the model should use only firms with qualified opinions, since only these firms can have an improvement in audit opinion.

For firms whose audit opinion faces a downgrade, the concern would be to avoid such deterioration. To do so, firms have to show a better profitability than the actual, and persuade the auditors to accept its nominal profitability, potentially through paying a higher audit fee. Therefore, the abnormal audit fee may thus reduce the likelihood of audit opinion deterioration.

Hypothesis II: For firms with an abnormally large increase in profitability, a high abnormal audit fee is associated with lower probability of audit opinion deterioration. For the other firms, abnormal audit fee is not associated with audit opinion change.

The model for testing Hypothesis II is similar to model (1), with the dependent variable Det which is a binary variable that takes the value 1 when the audit opinion this period is worse that prior period and 0 if the opinion is better or unchanged. The model is specified as

$$\text{Logit(Det=1)} = \beta_0 + \beta_1 \text{Abfee} + \beta_2 \text{Size} + \beta_3 \Delta\text{ROA} + \beta_4 \Delta\text{LEV} + \beta_5 \text{Growth} + \beta_6 \text{Loss} + \beta_7 \text{Lastloss} + \beta_8 \text{Switch} + \beta_9 \text{Switch*Abfee} + \beta_{10} \text{Big4} + \text{Prior Opinion Dummies} + \text{Year Dummies}, \quad (2)$$

Based on this coding, a coefficient has the meaning opposite to that in Model (1). Therefore, Hypothesis II states that $\beta_1<0$ for firms with abnormally large values of ΔROA. For other firms, Hypothesis II implies that $\beta1=0$. Note that the model uses firms with prior opinions better than the worst type (declaimer or adverse opinion), since the audit opinion of the firms cannot deteriorate.

Given that audit opinion may either improve or deteriorate, a better approach is to integrate the two types of changes. To do so, we use an ordinal model with four categories, 0, –1, –2, and –3, to represent the four types of audit opinions from best to worst. Assuming the audit opinion of a firm during t-1 is $OP_{t-1}=j$, we denote the conditional probability that the audit opinion t-th period $OP_t=i$ as $\text{Prob}(OP_t=i| OP_{t-1}=j)$. The dependent variable of an ordinal model the logit of the probability $\text{Prob}(OP_t\leq i \mid OP_{t-1}=j)$, which is the conditional probability that the opinion is not worse than *i*, given that the prior opinion is *j*. An ordinal model has the form

$$\text{Logit}(OP_t\leq i \mid OP_{t-1}=j) = \beta_{i,0} - \beta^{j,0} - \beta_1 \text{Abfee} - \beta_2 \text{Size} - \beta_3\Delta\text{ROA} - \beta_4 \Delta\text{LEV} - \beta_5 \text{Growth} - \beta_6 \text{Loss} - \beta_7 \text{Lastloss} - \beta_8 \text{Switch} - \beta_9 \text{Switch*Abfee} - \beta_{10} \text{Big4} - \text{Year Dummies} \quad (3)$$

The coefficients presented in a standard ordinal model are the opposite of the estimated value, so that presented coefficient coincides with those of a logit model when data is binary (0-1). Note that with model (3), we use all the firms and include the dummy variables for the prior audit opinion, $\beta^{j,0}$. The following hypothesis summarizes Hypotheses I and II.

Hypothesis III: For firms with abnormally large increases in profitability, a high abnormal fee is associated with a higher probability of better audit opinion, that is, $\beta_1>0$; For the other firms, abnormal audit fee is not associated with audit opinion level; that is, $\beta_1=0$.

To define an abnormal increase in profitability, we use two different criteria, ΔROA > P75 (75^{th} percentile) and ΔROA > P90 (90^{th} percentile. Thus we consider three different subsamples for each hypothesis: ΔROA ≤ P75, ΔROA > P75, and ΔROA > P90.

In China's market, a listed firm receives special treatment (ST) if its loss continues for two consecutive years and is delisted if its loss continues for three years. A firm facing such possibilities is often pressured to manage earnings to avoid such situations. When the firm is successful in doing this, it usually has a positive and low profitability. It also needs to persuade the auditors to accept its financial reports and give a favorable audit opinion. Therefore, for firms with abnormally increase in profitability, we also partition the sample into low profitability (ROA<0.01) and ROA>0.01. We expect that audit opinion shopping exists mainly in firms with low profitability.

We now consider the estimation of abnormal audit fees. Chen, Su, and Wu (2005) used a residual method by constructing a regression model of the audit fee and obtaining the abnormal fee as the residuals. Many factors are known to affect the normal audit fee (see, for examples, Simunic, 1980; Francis, 1984; Palmrose, 1986; and Francis and Stokes, 1986). These factors include the client's assets, audit complexity, leverage, prior audit opinion, profitability, and auditor type (big four vs. non-big four). Recent research also found that the price premiums of international big four auditors have increased significantly relative to those of domestic Chinese firms over the sample period (see, Cai, Sun, and Ye, 2009). Therefore, we also include an interaction variable between time and big four dummy. However, there are still many other factors that affect audit fee that cannot be observed. Without taking into account these factors into the audit fee model, they would be captured in the abnormal audit fees. In addition, some of these unobserved factors fluctuate over time. To take care of these, we include the fixed effect and lagged audit fee in our audit fee model:

$$\text{LnFee} = \beta_o + \beta_1\times\text{LagLnfee} + \beta_2\times\text{Size} + \beta_3\times\text{Growth} + \beta_4\times\text{Roa} + \beta_5\times\text{Lev} + \beta_6\times\text{Cata} + \beta_7\times\text{Switch} + \beta_8\times\text{Big4} + \beta_9\times\text{Big4}\times\text{Time} + \text{Prior Audit Opinion} + \text{Year Dummies} + \text{Firm fixed effect} + \square, \quad (4)$$

where Lnfee is the logarithm of audit fee, and LagLnFee is the lagged value of the dependent variable. See Table 1 for definition of variables. The abnormal audit fee is measured as the residuals, □□□ from the model.

An alternative method of measuring abnormal audit fee, the ratio method, is used in Fang and Hong (2008), where the abnormal audit fee is defined as

$$\Delta\text{Ln(Fee/Assets)} = \text{Ln(Audit Fee}_t\text{/Assets}_t\text{)} - \text{Ln(Audit Fee}_{t-1}\text{/Assets}_{t-1}\text{)} \quad (5)$$

This measure is more effective than that in Chen, Su, and Wu (2005) in eliminating the effects of unobserved determinants of audit fee. However, it assumes that audit fee is proportional to assets, which is generally not true. Most empirical results show that audit fee usually does not double when a client's assets double. Also, the measure may be driven by many predictable factors which are not abnormal.

The abnormal audit fees, measured as the residuals from model (4), can be also regarded as a generalization of the ratio method. This is because equation (4) can be rewritten as

$$\Delta\text{Ln(Fee/Assets)} = \beta_0 + \beta_1' \times \text{LastLnfee} + \beta_2 \times \text{Size} + \beta_3' \times \text{Growth} + \beta_4 \times \text{Roa} + \beta_5 \times \text{Lev} + \beta_6 \times \text{Cata} + \beta_7 \times \text{Switch} + \beta_8 \times \text{Big4} + \beta_9 \times \text{Big4} \times \text{Time} + \text{Prior Audit Opinion} + \text{Year Dummies} + \text{Firm fixed effect} + \varepsilon. \quad (4')$$

Note that model (4) and (4') are mathematically equivalent, so the residuals are the same. This shows that the residuals from model (4) are also the residuals from model (4') that regress ΔLn(fee/Assets) on predictors. Therefore, the residuals from model (4) are also an improvement over the ratio difference in Fang and Hong (2008), with adjustment to factors that are predictable. The new method unifies and refines the residuals method of Chen, Su, and Wu (2005) and the ratio method in Fang and Hong (2008).

Table 1: Definition of Variables

Optype	0＝unqualified opinion；–1＝unqualified opinion with explanatory notes；–2＝qualified opinion, with or without explanatory notes；–3＝declaimer or adverse opinion.
Imp	Imp =1 when $\text{Optype}_t > \text{Optype}_{t-1}$, and 0 otherwise.
Det	Det =1 when $\text{Optype}_t < \text{Optype}_{t-1}$, and 0 otherwise.
Lnfee	Logarithm of audit fee.
Abfee	Abnormal audit fee, calculated as residuals of model (4).
Size	Logarithm of total assets at fiscal year end.
ΔROA	Change in ROA, where ROA is net income divided by total assets at beginning of the year.
ΔLEV	Change in leverage, where leverage is total liabilities divided by total assets.
Growth	= ΔLnassets, is the growth rate in total assets.
Loss	=1 if net income is negative and 0 otherwise.
Lastloss	Lag variable of Loss.
Lastop=-1	=1 if prior period audit opinion is "unqualified with explanations".
Lastop=-2	=1 if prior period audit opinion is "qualified," with or without explanations.
Lastop=-3	=1 if prior period audit opinion is negative, or if auditor refused to express an opinion.
Switch	=1 if auditor is different from prior period, and 0 otherwise.
Big4	=1 if auditor is international big four, and 0 otherwise.
Abacc	Abnormal accruals,
CATA	Current assets/total assets
Lastlnfee	Logarithm of prior period audit fee；
Time	Year – 2005，so that 2002-2008 are coded as -3, -2, -1, 0, 1, 2, 3.

2. Sample Selection and Descriptive Statistics

Our initial sample includes all public firms with A shares in China's stock markets. Financial data and auditor information are obtained from the CISMAR database. After removing firms with missing data in the variables, our sample consists of 7,028 firm-years. Auditor mergers or name changes are not treated as auditor switches. Since China switched to IFRS in 2020, which could potentially have created changes in profitability and other accounting measures, we also conduct a robustness check by limiting our tests to the sample before 2020. The robustness check does not lead to qualitatively different results.

Table 2 describes the transition matrix of auditor opinions. Of the 7028 firm-years, , audit opinion improved in 342 cases (4.9%) , remained unchanged for 6,351 cases (90.4%), and worsened in 355 cases (4.8%). Of the 659 cases in which firms started with a qualified opinion or worse, 51.9% saw a better opinion in the following year.

Table 2: Distribution and Transition Matrix of Audit Opinions

	Audit opinion at period t				
	0	–1	–2	–3	Total
Audit opinion at period t –1					
0	6,106	154	86	23	6,369
–1	185	149	25	26	385
–2	66	33	71	15	111
–3	8	31	9	41	163
total	6,365	367	129	167	7,028

Table 3 gives the descriptive statistics of the variables. We winsorized the 1% extreme observations for variables ROA, ΔROA, ΔLEV, and Growth at each side. That is, that we replaced the value of that are below 1st percentile with 1st percentile, and values over 99th percentile with 99th percentile. This reduces the impact of extreme observations by reducing effective sample size. Without effectively controlling the extreme observations, the results may have become unstable and driven by a few peculiar firms. The statistics given in the table are based on data after winsorizing. The sample size is 7028.

Table 3: Descriptive Statistics

Variable	Mean	StDev	Minimum	Maximum
Imp	0.05	0.22	0	1
Det	0.95	0.21	0	1
Lnfee	13.01	0.53	10.31	16.59
Abfee	0	0.2	-1.98	2.39
Lnassets	21.26	1.03	18.03	27.3
Roa	0.017	0.10	-0.85	0.4
ΔROA	-0.01	0.11	-1.02	1.54
Abacc	0.001	0.09	-0.96	0.75
Lev	0.5	0.28	0.07	3.89
ΔLEV	-0.03	0.12	-0.48	1.43
CATA	0.52	0.2	0.07	0.98
Growth	0.1	0.24	-0.82	1.56
Loss	0.14	0.35	0	1
Big4	0.06	0.23	0	1
Switch	0.1	0.3	0	1

Table 4 gives the correlation table. From the table, we observe a low correlation among variables. This suggests that the there is no serious multicollinearity in the regression models below. We also examine the variance inflation factor (VIF) to test multicollinearity. The VIFs are all less than 3, significantly below the critical value of 10 for multicollinearity.

Table 4: Correlation Coefficients (Lower Triangle is Pearson, Upper Traiangle is Spearman)

	Imp	Det	Lnfee	Abfee	Lnassets	ΔROA	Lev	CATA	Growth	Big4	Switch
Imp	1	0.051	-0.019	0.010	-0.125	0.162	0.208	0.005	-0.095	-0.037	0.070
Det	0.051	1	0.045	-0.017	0.110	0.222	-0.082	0.000	0.193	0.031	-0.036

Lnfee	-0.021	0.049	1	0.369	0.619	0.013	0.080	-0.027	0.098	0.326	-0.007
Abfee	-0.011	-0.010	0.293	1	0.000	0.000	0.000	0.000	-0.021	0.000	0.000
Lnassets	-0.116	0.107	0.596	-0.014	1	0.008	-0.064	-0.105	0.310	0.267	-0.008
ΔROA	0.136	0.183	0.011	-0.009	0.020	1	0.157	-0.014	0.121	-0.002	-0.007
Lev	0.141	-0.089	0.167	-0.011	0.119	0.092	1	0.050	-0.107	-0.065	0.030
CATA	0.005	0.001	-0.025	0. 000	-0.099	0.004	0.088	1	0.074	-0.05	0.007
Growth	-0.108	0.199	0.097	-0.038	0.295	0.038	-0.128	0.070	1	0.043	-0.054
Big4	-0.037	0.031	0.229	-0.01	0.204	-0.005	-0.07	-0.046	0.048	1	0.008
Switch	0.070	-0.036	-0.016	-0.003	-0.012	0.029	0.045	0.008	-0.051	0.008	1

3. Empirical Results

Estimation of Audit Fee Model

To estimate the abnormal audit fee, we use equation (4), which is listed as Model (III). For comparison purposes, we also include two submodels: Mode(I) is a conventional audit fee model that does not include either fixed effects or lagged audit fee. This is similar to that in Chen, Su, and Wu (2005). Model (II) adds fixed effects but not lagged audit fee.

Table 5 shows the results of all three models. Model (I) gives results similar to those of a typical audit fee model, where firm size (Size), leverage (LEV), current assets ratio (CATA), all have positive and significant coefficients, at 0.31 (t=59.5), 0.17 (t=8.86), and 0.135 (t=5.76) respectively. These indicate that audit fee increases with firm size and audit risk. International big-fours have significant price premium over local firms. The coefficient of Big4 is 0.462 (t=21.37), indicating that in 2005 (Time=0), big-fours have premium of $e^{0.462} - 1 = 58.7\%$. The interaction term of Big4 and Time has a positive and significant coefficient, with coefficient 0.143 (t=13.59), indicating that the premium was increasing over the sample period. The coefficient is reduced slightly as fixed effects and lagged audit fee are included, showing that the trend cannot be attributed to change in the sample.

Model (I) included most important determinants of audit fee. Its R^2, 39.28%, is also roughly in line with results obtained in existing papers on audit fee. In Model (II), however, the R^2 increases very substantially to 81.89%. This indicates that the fixed effects have a highly significant contribution. In the other words, a very large portion of audit fee that is attributable to difference in individual firms cannot be explained by the known factors. Without taking into account the fixed effects, the difference among firms would be classified as abnormal audit fee.

Table 5: Regression Models for Audit Fee

	Model (I)		Model (II)		Model (III)	
	Estimate	t-value	Estimate	t-value	Estimate	t-value
Lastlnfee					0.202	17.28***
Lnassets	0.31	59.50***	0.219	20.52***	0.184	17.43***
Growth	-0.185	-8.37***	-0.072	-4.46***	-0.036	-2.26**
Lev	0.170	8.86***	0.097	4.99***	0.087	4.59***
CATA	0.135	5.76***	0.004	0.10	-0.001	-0.02
Lastloss	-0.002	-0.12	-0.012	-1.09	-0.009	-0.78
ΔROA	0.013	0.30	0.018	0.61	0.014	0.48
Big4	0.462	21.37***	0.329	12.87***	0.296	11.86***
Time	0.015	5.00***	0.023	10.28***	0.019	8.68***
Big4*Time	0.143	13.59***	0.126	17.01***	0.105	14.33***
Switch	-0.029	-1.80*	-0.013	-1.27	-0.019	-1.83**
Lastop=-1	0.086	3.83***	0.048	3.03***	0.043	2.78***
Lastop=-2	0.110	3.53***	0.056	2.47**	0.047	2.12**
Lastop=-3	0.113	2.39***	0.025	0.75	0.038	1.13
Intercept	6.279	55.74***	8.321	36.84***	6.439	26.23***

Year	included	included	included
Firm effects		included	included
R^2(adj)	39.28%	81.89%	82.81%
Sample size	7028	7028	7028

*, **, *** indicates significance at 10%, 5%, and 1% level.

Model (III) introduces the lagged audit fee variable to account for time series change in a firm's audit fee. Its R^2 is 82.81%, a statistically significant increase from 81.89% of Model (II). The lagged audit fee has a coefficient of 0.202 (t=17.28), which is as significant as firm size in this regression.
When model (III) is rewritten into equation (4'), we get an R_2 of 61.4% (unlisted). This shows that the measure of abnormal audit fee in Fang and Hong (2008) is predictable to a large extent. Model (III) gives an abnormal audit fee that excludes the predictable component. For the analysis below, we use the residuals from model (III).

Abnormal Audit Fee and Audit Opinion Change: Empirical Results

In Table 6 we give the estimation results for audit opinion improvement and deterioration models. For each model, we consider three subsamples based on ΔROA: ΔROA ≤ P75, ΔROA > P75, ΔROA > P90, where P*x* is the x-th percentile. We give the results for both ΔROA >P75 and ΔROA > P90 subsamples as robustness checks.

We first consider the model for audit opinion improvement in Table 6. This model is estimated for the sample of firms starting with qualified opinions. In all three cases, the most significant variable is "Loss". The variable has negative and significant coefficients (-1.063, -1.743, and -2.12, respectively), indicating that loss is a major factor that reduces the probability of audit opinion improvement. Increase in leverage (ΔLEV) is also negatively associated with audit opinion improvement, while asset growth has a positive association, although not always significant. These results are consistent with intuition and existing literature.

Table 6: Models for Audit Opinion Improvement and Deterioration

	Model (1): Audit Opinion Improvement			Model (2): Audit Opinion Deterioration		
	ΔROA≤P75	ΔROA>P75	ΔROA>P90	ΔROA≤P75	ΔROA>P75	ΔROA>P90
Abfee	**-0.205**	**1.610**	**2.598**	**0.477**	**-3.000**	**-2.471**
	(-0.24)	**(2.02**)**	**(2.86***)**	**(1.23)**	**(-2.43**)**	**(-1.76*)**
Switch	**-2.099**	**-0.506**	**-1.731**	**1.263**	**3.406**	**3.255**
×Abfee	**(-1.22)**	**(-0.32)**	**(-0.99)**	**(1.39)**	**(1.32)**	**(1.15)**
	-2.304	**1.103**	**0.857**	**1.740**	**0.406**	**0.784**
Sum	**(-1.54)**	**(0.78)**	**(0.55)**	**(2.12**)**	**(0.18)**	**(0.32)**
Big4	**-0.507**	**-0.685**	**-2.386**	**-0.371**		
	(-0.54)	**(-0.64)**	**(-1.38)**	**(-0.89)**		
ΔROA	0.260	-0.872	-0.597	-4.102	-1.048	-2.171
	(0.31)	(-1.18)	(-0.75)	(-6.62***)	(-0.59)	(-0.97)
Lnassets	0.201	0.076	-0.062	0.088	-0.309	-0.374
	(1.45)	(0.48)	(-0.33)	(1.06)	(-1.42)	(-1.38)
Loss	-1.063	-1.743	-2.120	2.085	2.026	2.084
	(-3.11***)	(-4.71***)	(-4.79***)	(11.48***)	(5.07***)	(4.66***)
Lastloss	-0.549	0.095	0.241	0.353	1.905	0.962
	(-1.36)	(0.24)	(0.35)	(1.66)	(3.47***)	(1.18)
ΔLEV	-1.360	-0.449	-0.631	1.555	1.848	2.134
	(-1.73*)	(-0.74)	(-1.05)	(2.20***)	(1.34)	(1.41)
Growth	1.224	0.984	0.445	-1.089	-1.694	-1.107
	(2.24**)	(1.83*)	(0.72)	(-2.93***)	(-1.91*)	(-1.12)
Switch	0.520	-0.807	-0.439	0.063	0.527	0.43
	(1.56)	(-2.27**)	(-1.05)	(0.27)	(1.11)	(0.76)
Lastop=-1	-0.326	-2.466	-2.476	0.020	-0.502	-0.155
	(-1.08)	(-4.89***)	(-4.498***)	(0.08)	(-1.10)	(-0.31)
Lastop=-2		-1.439	-1.365	-1.293		
		(-2.75**)	(-2.38**)	(-3.30***)		
Lastop=-3	0.134					

	(0.24)					
Intercept	-4.374	1.715	3.389	-6.480	1.641	4.037
	(-1.43)	(0.52)	(0.87)	(-3.60***)	(0.36)	(0.70)
N	349	306	237	4903	1479	566
pseudo-R^2	21.21%	18.59%	22.01%	29.67%	31.74%	26.36%

Note: 1. All models include the year dummies. The coefficients are not displayed.

2.*, **, *** indicate significance at 10%、5% and 1% level. Given in the parentheses are the t-values.

For firms with profitability not exceeding 75th percentile (ΔROA≤P75), the coefficient of abnormal audit fee (Abfee) is -0.205 (t= -0.24), which is not statistically significant. This indicates that for firms without abnormally large profitability increase, there is no evidence of the association between abnormal audit fee and audit opinion change. For firms with ΔROA>P75 and ΔROA>P90, the coefficient of ABfee is 1.61 and 2.598 (t=2.02 and 2.86), which are significant at 0.05 and 0.01 level, respectively. These results indicate that for firms with abnormally large profitability increase, higher audit fee is associated with a higher probability of audit opinion improvement, after controlling for all the other variables. This is consistent with Hypothesis I.

In the estimation, the coefficient for the big-four indicator variable (Big4) is negative but statistically insignificant in all cases. The interaction between abnormal audit fee and the big-four indicator is insignificant (not shown in the table) for the ΔROA≤P75 sample, and we do not have enough data of big-four firms in the other cases. Therefore unlike Fang and Hong (2008), we do not find evidence that high abnormal audit fee is more associated with audit opinion improvement for big-four more than for local audit firms.

Model (2) in Table 6 estimates the audit opinion deterioration model. Note that the meaning of the coefficients here are opposite to that of the audit opinion improvement model. Based on the estimation results, we find that Loss, Last Loss, ΔLEV tend to have positive coefficients, indicating that loss and increase in financial leverage are associated with audit opinion deterioration. The variable ΔROA has a negative coefficient, indicating that decreases in ROA are associated with audit opinion deterioration, which is intuitive.

For firms with ΔROA≤P75, the coefficient of Abfee is 0.477 (t=1.23), not significantly different from 0. This indicates that for these firms, there is no evidence that higher abnormal fees lead to better audit opinion. For firms with ΔROA>P75, the coefficient of Abfee is –3.0 (t=-2.43), significant at 5% level. This indicates that for firms with abnormally high profitability increase, a high abnormal fee is associated with a lower probability of avoiding audit opinion deterioration, which is consistent with audit opinion shopping. A similar result also holds for firms with ΔROA>P90 (coef= -2.471. t= - 1.76, significant at 10% level),. The results support Hypothesis II.

For firms with auditor switch, we find that the coefficients of the interaction term of auditor switch and Abfee have signs opposite to those of Abfee for ΔROA>P75 and ΔROA>P90 subsamples, both for both models for audit improvement and deterioration. The sums of the coefficients for Abfee are insignificant, indicating that for ΔROA>P75 and ΔROA>P90 subsamples, there is no evidence of association between high audit fee paid and better audit opinion. This result is consistent with Chen, Su, and Wu (2005).

In Table 7, we integrate the models of audit opinion improvement and deterioration into the ordinal model of audit opinion. We use two different measures of abnormal audit fees, first the measure of model (4) in our paper, and then from the ratio method in Fang and Wu (2008), for comparison purposes. One distinctive result comparing Table 7 to Table 6 is that the lagged audit opinion variables become much more significant in Table 7. This is because in Table 7we use all observations in the sample, and thus which the prior audit opinion becomes highly significant. All the lagged opinion dummies have a negative coefficient, indicating that compared to firms with prior unqualified opinion, firms with prior qualified opinion has a much lower probability of getting an unqualified opinion in the current period. From the table, we observe that the variables Loss, Lastloss, and ΔLEV show negative association with audit opinion, while Lnassets and Growth have possible association. These results are similar to Table 6 but generally appear to be more significant here.

Table 7: Ordinal Logit Model for Audit Opinion

	Abnormal Audit Fee from Model (4)					**Abnormal Audit fee from (5)**		
	ΔROA≤ P75	**ΔROA>P75**			**ΔROA>P90**	**ΔROA≤P75**	**ΔROA>P75**	**ΔROA>P90**
		All	**ROA<0.0**	**ROA>0.01**				
Abfee	**-0.383**	**1.817**	**3.616**	**-0.114**	**2.206**	**-0.180**	**0.518**	**0.772**
	(-1.11)	**(3.11***)**	**(3.75***)**	**(-0.14)**	**(3.45***)**	**(-0.87)**	**(1.40)**	**(1.91*)**
Switch ×Abfee	**-1.616**	**-1.055**	**-3.859**	**1.525**	**-1.840**	**-0.976**	**0.361**	**0.054**
	(-2.23)**	**(-0.94)**	**(-1.50)**	**(1.23)**	**(-1.37)**	**(-2.41**)**	**(0.79)**	**(0.10)**

Sum	**-2.000**	**0.762**	**0.366**	**1.41**	**0.366**	**-1.155**	**0.879**	**0.825**
	(-	**(0.79)**	**(0.31)**	**(1.43)**	**(0.31)**	**(-3.07***)**	**(2.09**)**	**(1.70*)**
Big4	**0.188**	**0.070**	**-1.422**		**-0.318**	**0.224**	**0.002**	**-0.533**
	(0.53)	**(0.09)**	**(-1.47)**		**(-0.37)**	**(0.63)**	**(0.00)**	**(-0.62)**
ΔROA	2.884	-0.364	-1.008	-0.426	-0.101	2.931	-0.278	-0.012
	(5.63***)	(-0.66)	(-0.79)	(-0.66)	(-0.17)	(5.53***)	(-0.50)	(-0.02)
Lnassets	0.005	0.267	0.049	0.272	0.173	-0.001	0.277	0.194
	(0.06)	(2.31**)	(0.27)	(1.70)	(1.27)	(0.01)	(2.39**)	(1.42)
Loss	-1.876	-1.861	-1.609		-2.218	-1.879	-1.814	-2.176
	(-	(-	(-4.88***)		(-7.31***)	(-	(-6.83***)	(-
Lastloss	-0.220	-0.882		-0.362	-0.515	-0.213	-0.828	-0.468
	(-1.17)	(-		(-.97)	(-1.17)	(-1.14)	(-2.92***)	(-1.08)
ΔLEV	-1.315	-0.536	-2.905	0.196	-0.845	-1.228	-0.621	-0.946
	(-2.45**)	(-1.11)	(-2.83***)	(0.31)	(-1.58)	(-2.30**)	(-1.29)	(-1.78**)
Growth	1.264	0.936	2.017	0.320	0.445	0.922	1.547	1.230
	(3.97***)	(2.29***)	(2.54**)	(0.66)	(1.03)	(2.30**)	(2.87***)	(2.12**)
Switch	0.012	-0.448	-0.423	-0.864	-0.177	0.078	-0.436	-0.144
	(0.07)	(-1.75*)	(-0.97)	(-2.49)	(-0.57)	(0.39)	(-1.70*)	(-0.46)
Lastop=-1	-2.548	-2.767	-2.028	-4.014	-2.746	-2.410	-2.765	-2.705
	(-	(-	(-5.56***)	(-8.84***)	(-8.65***)	(-	(-	(-
Lastop=-2	-3.000	-3.403	-2.317	-5.142	-3.563	-3.020	-3.376	-3.488
	(-	(-	(-5.09***)	(-9.94***)	(-9.30***)	(-	(-	(-
Lastop=-3	-4.825	-3.930	-2.653	-4.975	-4.006	-4.693	-3.968	-4.003
	(-	(-	(-4.30***)	(-8.43***)	(-9.13***)	(-9.31***)	(-	(-
Cut1	-4.120	1.350	-2.281	0.821	-0.144	-4.275	1.581	0.377
	(-2.67**)	(0.56)	(-0.58)	(0.24)	(-0.05)	(-2.77***)	(0.65)	(0.13)
Cut2	-5.474	-0.741	-4.605	-1.219	-2.439	-5.632	-0.494	-1.889
	(-	(-0.31)	(-1.16)	(-0.36)	(-0.86)	(-3.64***)	(-0.20)	(-0.66)
Cut3	-7.263	-2.431	-6.257	-3.252	-4.010	-7.433	-2.171	-3.449
	(-	(-1.00)	(-1.57)	(-0.94)	(-1.41)	(-4.77***)	(-0.89)	(-1.21)
N	4940	1687	313	1,374	697	4940	1687	697
pseudo-R^2	38.36%	45.36%	35.12%	46.86%	38.95%	36.77%	41.87%	36.96%

Note：1. All models include year dummies. But the coefficients and t-values are not presented.
2. *, **, and *** indicate statistical significance at 10%, 5% and 1% level.
3. 'Cut1', 'Cut2', and 'Cut3'represent the intercepts $\boldsymbol{\beta}_{i,0}$, i=-1,-2, and -3 for ordinal model.
4. The row 'Sum' gives the coefficient sum of Abfee and Switch*Abfee.

We first consider the model where abnormal audit fees are estimated from model (4). For firms with ΔROA≤P75, the coefficient for Abfee is -0.383 (t=-1.11), which do not show significant relationship between Abfee and audit opinion. For ΔROA>P75 (all sample) and ΔROA>P90, the coefficient of Abfee is 1.817 (t=3.11) and 2206 (t=3.45) respectively, both significant at 0.01 level. These coefficients indicate that for firms with abnormal profitability increase, higher abnormal audit fee is associated with better audit opinion. This supports Hypothesis III. For firms with auditor switch, however, the coefficient for Abfee (as the sum of the coefficient for Abfee and Switch*Abfee) are in significant for both ΔROA>P75 (all sample) and ΔROA>P90, indicating that for firms with abnormal profitability increase, abnormal audit fees do not play a significant role in improving audit opinion when there is auditor switch.

One of the major incentives of earnings manipulations for firms in China's capital market is to avoid loss, since firms with two consecutive losses are marked as "ST" and firms with three consecutive losses are delisted. We separate the ΔROA>P75 subsample into two groups, the low profitability group (ROA≤0.01) and high profitability group (ROA>0.01). We use 0.01 as the threshold just for convenience. The coefficients of Abfee are significantly different. For the low profitability group (ROA≤0.01), Abfee is highly significant (coef=3.616, t=3.75). However, for the high profitability group (ROA>0.01), Abfee is not significant (coef=-0.114, t=-0.14). This indicates that the association between abnormal audit fees and better audit opinions are due primarily to firms with ROA≤0.01, and not to firms with higher profitability. Further analysis (not given in

the tables) show that there is no significant difference in the coefficient of Abfee between firms with negative ROA (ROA≤0) and small and positive profitability firms (0<ROA≤0.01). Such a result is possible if the improvement of ROA is important for a firm even if it does not cross the threshold of 0.

In Table 7, we also give the results when abnormal audit fees are calculated from equation (5) using the ratio method in Fang and Hong (2008). The coefficients of Abfee are of the same sign as the case when abnormal audit fees are calculated using the regression residuals from equation (4). However, the results are insignificant or less significant. Our explanation is that the abnormal audit fees from the ratio method contain a significant portion of normal audit fees. Indeed, equation (4') re-expresses the equation (4) to use the abnormal audit fees from ratio method as the dependent variable, and obtain an R^2 of 61.4% (not given in the tables). This is to say that 61.4% of the variation in the abnormal audit fees from ratio method is explainable by other systematic factors, and so does not truly capture the abnormal audit fees. Therefore the results based on this method are likely to be weaker.

In sum, we conclude that (1) for firms with abnormally high profitability increase but with low profitability, if these firms do not switch their auditors, then higher abnormal audit fees are associated with better audit opinion, controlling for all the known factors.; (2) for other firms, we find no significant association between abnormal audit fee and audit opinion.

Earnings Quality, Abnormal Audit Fee, and Audit Opinion Change: More Tests

In this paper we have used a big increase in profitability as a measure of low earnings quality. To further examine the relationship between abnormal audit fees and audit opinion, in this section, we decompose the increase in profitability into increase in cash flows from operations (CFO) and accruals (ACR). Since changes in accruals often reflect changes in CFO, we regress the change in accruals on change in CFO, and use the residuals as the measure of abnormal accruals. By doing so, we decompose the change in profitability into change in CFO (ΔCFO) and change in abnormal accruals (ΔACR). Again, we divide the sample into three subsamples, X≤P75, X>P75, and X>P90, where X is either ΔCFO or ΔACR.

Table 8：Ordinal Model of Audit Opinion: Grouping by Accruals and Cash Flows

	Change in Abnormal Accruals			**Change in Cash Flows from Operations**		
	ΔACR≤P7	**ΔACR>P75**	**ΔACR>P9**	**ΔCFO≤P75**	**ΔCFO>P75**	**ΔCFO>P9**
Abfee	**-0.399**	**1.849**	**1.45**	**0.044**	**0.259**	**-0.441**
	(-1.17)	**(3.22***)**	**(2.01**)**	**(0.13)**	**(0.43)**	**(-0.50)**
Switch×Abfe	**-0.979**	**-3.059**	**-1.972**	**-1.262**	**-1.767**	**-0.686**
	(-1.17)	**(-2.71***)**	**(-1.31)**	**(-1.63)**	**(-1.34)**	**(-0.34)**
Sum	**-1.377**	**-1.210**	**-0.522**	**-1.218**	**-1.508**	**-1.127**
	(-1.80*)	**(-1.26)**	**(-0.39)**	**(-1.77*)**	**(-1.29)**	**(-0.62)**
Big4	**0.347**	**-0.536**	**-0.651**	**0.182**	**0.024**	**-0.386**
	(0.92)	**(-0.85)**	**(-0.52)**	**(0.51)**	**(0.03)**	**(-0.34)**
ΔROA	3.876	0.329	0.128	1.32	1.755	1.755
	(6.41***)	(0.70)	(0.26)	(3.34***)	(2.98***)	(2.05***)
Lnassets	-0.016	0.306	0.504	0.041	0.324	0.284
	(-0.22)	(2.79***)	(3.47***)	(0.60)	(2.75***)	(1.57)
Loss	-1.773	-2.118	-2.336	-1.964	-1.681	-1.637
	(-11.04***)	(-8.24***)	(-6.86***)	(-13.17***)	(-6.48***)	(-4.08***)
Lastloss	-0.369	-0.327	-0.478	-0.219	-0.968	-1.601
	(-2.04**)	(-1.19)	(-1.17)	(-1.35)	(-3.70***)	(-4.00***)
ΔLEV	-1.098	-1.072	-0.518	-1.49	-1.062	-1.352
	(-1.88*)	(-2.30**)	(-1.01)	(-3.48***)	(-1.64)	(-1.46)
Growth	0.877	0.942	0.451	1.743	0.857	0.333
	(2.42**)	(2.51**)	(1.08)	(5.54***)	(2.04**)	(0.56)
Switch	0.022	-0.554	-0.585	0.093	-0.774	-0.898

	(0.11)	(-2.19**)	(-1.80*)	(0.50)	(-3.00***)	(-2.25**)
Lastop=-1	-2.589	-2.866	-2.889	-2.901	-1.954	-1.717
	(-15.05***)	(-10.70***)	(-8.07***)	(-17.59***)	(-7.28***)	(-4.33***)
Lastop=-2	-2.881	-3.683	-3.777	-3.181	-3.09	-2.413
	(-10.65***)	(-9.58***)	(-7.39***)	(-12.45***)	(-8.03***)	(-4.39***)
Lastop=-3	-2.721	-3.896	-4.143	-3.273	-2.825	-2.932
	(-8.08***)	(-9.29***)	(-7.69***)	(-10.85***)	(-6.10***)	(-4.13***)
cut1	-4.658	2.661	6.316	-2.714	2.711	2.01
	(-2.98***)	(1.14)	(2.13**)	(-1.88*)	(1.09)	(0.53)
cut2	-6.016	0.541	4.01	-4.239	1.015	0.056
	(-3.84***)	(0.23)	(1.36)	(-2.94***)	(0.41)	(0.01)
cut3	-7.814	-1.105	2.52	-6.000	-0.673	-1.387
	(-4.96***)	(-0.47)	(0.85)	(-4.13***)	(-0.27)	(-0.36)
N	4,919	1,708	717	4,982	1,645	653
Pseudo-R^2	37.87%	45.17%	44.20%	39.27%	39.81%	40.65%

Note：1. All models include year dummies. The coefficients and t-values are not presented.
2. *, **, and *** indicate statistical significance at 10%, 5% and 1% level.
3. 'Cut1', 'Cut2', and 'Cut3'represent the intercepts $\boldsymbol{\beta_{i,0}}$, i=-1,-2, and -3 for ordinal model.
4. The row 'Sum' gives the coefficient sum of Abfee and Switch*Abfee.

Table 8 shows the estimation results from the ordinal model of audit opinion. When the sample is grouped by abnormal accruals (ΔACR), the results are similar to those using the profitability increase grouping: When accruals increase is not abnormally high (ΔACR≤P75), the coefficient of Abfee is -0.399 (t=-1.17), which is not significant at 0.1 level; For ΔACR>P75 and ΔACR>P90 subsamples, the coefficient is -1.849 (t=-3.22) and -1.45 (t=-2.01), both of which are negative and significant at 0.05 level. The results show that for firms with abnormally large increase in accruals, high abnormal audit fees are associated with better audit opinion, controlling for the other factors. For the other firms, we find no evidence of such association.

When the sample is classified based on increase on cash flows (ΔCFO), the coefficients of Abfee are all statistically insignificant for all subsamples. This indicates that when profitability increase is from cash flows, which are considered to be higher quality component of earnings, there is no evidence that abnormal audit fee is associated with audit opinion improvement.

In sum, Table 8 shows again that we can observe an association between abnormal audit fee and audit opinion shopping only if the earnings quality is questionable.

III. Conclusions

In this paper, we study whether a listed firm may obtain better audit opinion by paying a higher audit fee to its current auditor. Using data from China's capital markets for the period between 2010 to 2020, we examine whether a high abnormal audit fee would help firms to achieve a better audit opinion, or avoid being given a unfavorable audit opinion.

Building on existing literature, we believe that only firms with low earnings quality have an incentive to engage in opinion shopping. For conducting the tests, we improve the audit fee model to increase the accuracy of the measurement of abnormal audit fee. An audit opinion deterioration model and an ordinal model for audit opinion are also introduced to allow for general pattern of audit opinion shopping. Our results show that for firms with large increase in profitability but with low profitability, the high abnormal audit fee is associated with better audit opinion, all the other things being equal. This is also true if the increase in profitability is due to accounting accruals.

The results suggest that investors and regulators should pay special attention to firms that experienced a large increase in accounting profitability that is driven by accruals and with an unexplainable the audit fee increase.

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