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## Government Ownership, Accounting-Based Regulations, and the Pursuit of Favorable Audit Opinions: Evidence from China

### K. Hung Chan, Kenny Z. Lin, and Ray R. Wang

**SUMMARY:** This research finds that local government-controlled companies are able to obtain more favorable audit opinions from local auditors when they face the need for new equity financing or the threat of exchange delisting. We capture this ability by comparing the observed opinions that companies receive from local auditors with those that we predict they would receive if they used a Big 4 auditor. Our empirical results highlight the importance of understanding political and economic institutions when analyzing the reporting behavior of managers and auditors in a transition economy, and suggest that regulators should be aware of the unintended consequences of basing capital market resource allocation decisions on reported accounting earnings, which can be subject to significant managerial discretion.

**Keywords:** audit opinions; government ownership; institutional environment; local auditors; accounting-based regulations.

#### **INTRODUCTION**

his paper examines whether local government-controlled companies in China are able to obtain a better opinion from local auditors in an environment where access to new equity and exchange delisting are governed by regulations that are based on accounting earnings. China provides a unique setting in which to examine the strategic interactions of bureaucrats, managers, and auditors. First, financial accounting in China plays a prominent role in enforcing regulations that govern listing, delisting, and additional issuances of corporate securities through rights offering. Specifically, China's rights-offering and delisting mechanisms attach great

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importance to the accounting rate of return, similar to debt contracts, bonus schemes, and capital budgeting. When contracts or regulations are accounting-based, corporate managers will have an incentive to manage accounting data to circumvent contractual restrictions (Chen et al. 2008; Chen and Yuan 2004; Watts and Zimmerman 1983). To "cover up" opportunistic financial reporting, managers are motivated to hire a compliant auditor.

Second, local governments in China historically have strong influence over both corporate and accounting affairs. Previous research suggests that in China's political and economic institutions, local government-controlled companies tend to select local auditors because these auditors are lenient to them (Chan et al. 2006; Wang et al. 2008). Finally, managerial misbehavior is expected to be prominent in an emerging economy such as China, where the business environment is largely based on relationships, the government protects the companies it owns, and the market mechanisms against opportunistic reporting are immature.

Taking advantage of this unique setting, we study how local governments, listed state-owned enterprises controlled by local governments (hereafter, local SOEs), and local auditors interact strategically to maximize expected utility.<sup>1</sup> A good platform to showcase the interaction of the three market players is the rights-offering and delisting mechanisms, which are based on the manager's reported accounting earnings subject to the auditor's attestation, within an environment in which continuous listing of stocks and seasonal equity financing are highly sought-after political and economic resources for both bureaucrats and managers. We expect that local SOEs are likely to seek help from local auditors to mask their opportunistic reporting when local governments and local SOEs have a shared interest to raise more cash to fund growth or to maintain listing status. Based on 5,268 company-years from 2001 to 2006, we find that local SOEs have a higher marginal propensity to receive a favorable audit report from local auditors when they anticipate raising new equity through a rights issue or when their exchange listing status is at stake.

Our paper builds on auditor choice and opinion studies and provides an enhancement for research design. In particular, we use a novel approach to capture the ability of corporate managers to secure a more favorable report from auditors. Previous studies typically compare the observed audit opinions before and after auditor switch to identify opinion shopping (e.g., Chan et al. 2006; Chow and Rice 1982; Krishnan and Stephens 1995). However, although we observe the opinions that companies receive from their chosen auditors, we do not observe those that they would have received from an alternative auditor. Comparing observed pre- and post-switch audit reports to draw inferences on opinion shopping also overlooks the possibility that opinion shopping could have occurred in the absence of an auditor switch (Lennox 2000). To mitigate these problems, we first develop the Big 4 audit opinion model and use this as a benchmark to predict the opinion types of non-Big 4 clients.<sup>2</sup> We then compare the *actual* opinions received by clients of local auditors with the opinions that we *predict* they would

<sup>&</sup>lt;sup>2</sup> Contrary to recent criticisms that the relatively superior quality of large audit firms has deteriorated in recent years, Lennox and Pittman (2010) provide evidence that Big 5 auditors in the U.S.A. consistently supplied higher quality external monitoring from 1981 to 2001. Recent research suggests that Big 4 auditors act more conservatively when market regulators impose new regulations (Carcello and Mastrolia 2008). In a Chinese context, Chan and Wu (2011) find that audit quality improves as a result of increased firm size through mergers. DeFond et al. (2000) find that top 10 auditors are more independent than their counterparts in China.



<sup>&</sup>lt;sup>1</sup> We define local governments at the provincial level. To capture the political influence of local governments, we follow Chan et al. (2006) in identifying local SOEs and local auditors. Specifically, we classify a listed company as a local SOE if the largest shareholder is a local government entity that owns at least 20 percent of the shares. We treat an audit firm as local if the firm resides in the same jurisdiction as the client and more than half of the total number of clients comes from the same jurisdiction as the audit firm. The argument is that if an audit firm has clients concentrated in one jurisdiction, the firm is most vulnerable to political influence from that jurisdiction.

receive had they used a Big 4 auditor.<sup>3</sup> The difference between the observed opinion and the predicted opinion reflects the ability of managers to obtain a better-than-expected opinion.

Our results are distinct from, but complementary to, existing evidence on the effects of auditor characteristics (size and locale), ownership structure, and institutions on auditor choice and audit quality in China (see Simunic and Wu [2009] for a detailed review).<sup>4</sup> As government intervention is a common phenomenon in countries with economies in transition, our research extends beyond a strict focus on economic incentives to an analysis that also incorporates social and political institutions that are expected to shape the client-auditor relationship. Chen et al. (2008) and Zhu and Chen (2009) find that local governments provide subsidies to help local SOEs boost their earnings above the regulatory threshold of rights offering and delisting. However, their studies do not examine the interaction between auditors and managers. We further find that local auditors play the role of "helping hand" in the corporate reporting process. Although our study is based on the institutional setting in China, our findings apply to countries around the world whose organizational form is also characterized by insider ownership and government control, and provide input into future policy deliberations by securities regulators in these countries.

Our results shed light on the behavior of managers and auditors under the influence of bureaucrats in China. Our findings highlight the importance of understanding political and economic institutions when analyzing the reporting behavior of corporate managers and auditors. To understand their reporting behaviors in a transition economy such as China, one must first understand the role and incentive of government and its influence on corporate and accounting affairs. One must also understand the usefulness of securities regulation based on accounting measures. Our results suggest that government regulators should be aware of the unintended consequences of basing rights-offering and delisting decisions on accounting earnings that are vulnerable to manager manipulation.

The next section explains how political and economic influences shape the client-auditor relationship in China, for the purpose of developing the research hypothesis in the third section. The fourth section describes the research methodology. The fifth section presents the empirical results and the sixth section concludes the paper.

#### INSTITUTIONAL ENVIRONMENT IN CHINA

Historically, the Chinese government was the sole funding source for SOEs. The establishment of the Shanghai and Shenzhen stock exchanges in the early 1990s shifted the financing of SOEs from the government to the market, and provided local governments with a new channel to attract equity capital into their own regions. However, despite the access to external capital, local governments still ultimately control many listed companies in China (71 percent in our sample). A typical listed company issues three major classes of share: state shares (held by government entities), legal-person shares (held by township and village enterprises, privately owned enterprises, and foreign companies), and tradable A-shares (held by individual investors). To avoid the loss of majority ownership, the government makes state shares non-tradable on the stock exchanges. As the other classes of shares are dispersed, local governments can, in many cases effectively control the board of directors.

<sup>&</sup>lt;sup>4</sup> To measure auditor quality, previous studies in China generally compare the frequency of audit qualifications issued, the level of audit fees charged, and the magnitude of discretionary accruals allowed, by auditors of varying classes (top 10 versus non-top 10, local versus nonlocal, more versus less economically client-dependent auditors).





<sup>&</sup>lt;sup>3</sup> Here, we are inspired by the methodology of Lennox (2000) who predicts the likelihood of companies receiving unfavorable audit opinions from incumbent and new auditors, and then compares the differences in predicted opinions with companies' dismissal decisions to identify opinion shopping. However, his setting does not involve the locality of auditors or the ownership of companies.

To guide the allocation of capital market resources to the better-performing companies, the central government implements a merit-based system in the approval process of initial and subsequent public equity offerings (Chen and Yuan 2004). For instance, a major criterion for companies' initial public offering (IPO) is to have at least two consecutive years of operating profits. After the IPO, companies can apply to raise additional capital through pre-emptive rights offered to existing shareholders (known as a rights offering in the U.S.A.). Securities regulation requires that rights-offering applicants maintain a minimum level of return on equity (ROE) in each of the three years prior to the application. For example, since 2001, the requirement has been a three-year average ROE (excluding non-operating income) of at least 6 percent. The type of audit opinion is another important consideration in the rights-offering approval process, and companies that receive non-clean opinions are unlikely to obtain approval. In addition to experiencing adverse stock price reactions and negative media coverage, companies with severe audit qualifications are subject to closer regulatory scrutiny and extra reporting requirements (e.g., audited interim financial reports). Securities regulations also set severe restrictions on stock trading for companies that report significant losses or negative equity, engage in fraudulent activities, or have net asset per share below par value. Worse, companies with two successive annual losses face the threat of delisting if their financial performance does not improve in subsequent periods. Evidently, these accounting-based regulations create incentives for companies to manipulate earnings and to avoid audit qualifications (Chen et al. 2001).

In response to the need for independent audit services created by foreign direct investments, China reestablished public accounting as a profession in the early 1980s. The accounting profession experienced rapid development following the establishment of the stock markets in the early 1990s. Initially, the majority of audit firms were local-government funded and hence were protected from the threat of litigation (Tang 1999). Because the sponsoring agencies tended to interfere in auditors' reporting decisions, in 1998 the central government required these agencies to disaffiliate themselves from the audit firms they sponsored. The disaffiliation program was intended to loosen the dependence of auditors on the government. However, many local auditors continued to maintain close personal and organizational networks with ex-bureaucrats, because SOE clients were economically important to them (Chan et al. 2006).

Another salient feature of the audit market in China is the prevalence of small local auditors and the fierce competition that exists among them. Although Big 4 auditors provide higher-quality audits, they account for only a small fraction of the market share (based on the number of clients) in China (about 8 percent in our sample). The remainder of the market is shared by other auditors who audit some 1,400 listed companies. Such a highly competitive market induces auditors to compromise audit quality for economically important clients (Chen et al. 2010).

The audit market in China is under the supervision of the Chinese Institute of Certified Public Accountants (CICPA), which is a quasi-department of the Ministry of Finance at the national level or the Bureau of Finance at the provincial or municipal level. Local government can exert its influence on audit firms through its influence over the CICPA at the provincial or municipal level (Tang 1999). Similarly, stock markets and listed companies are subject to the supervision of various government agencies, chief among them is the China Securities Regulatory Commission (CSRC), which has a relatively short history (e.g., compared with the Securities and Exchange Commission in the U.S.A.). Further, due to limited resources, regulators can investigate only a limited number of fraud cases. For example, only 52 companies were sanctioned by the CSRC between 2001 and 2007 (Chen et al. 2010). Nevertheless, regulatory enforcements and sanctions have always been the most important deterrent against accounting fraud in China (Chen et al. 2005). Depending on the severity of the fraud, the sanctions imposed upon offenders range from criticisms and warnings to significant monetary fines. For individuals, the enforcement of sanctions can lead to criminal **prosecution and penalization, including the** death penalty, although such penalties are rare.



Auditing: A Journal of Practice & Theory November 2012 The institutions for investor protection are relatively weak in China. In recent years, there have been an increasing number of legal cases against failed listed companies and their intermediaries (Chen et al. 2010). However, private investor lawsuits alleging accounting fraud and market manipulation have been largely unsuccessful, because the law sets a high burden of proof and explicitly forbids class action litigation.

#### **RESEARCH HYPOTHESIS**

As initial and subsequent public offerings are highly sought-after political and economic resources in China, local governments across the country lobby for the right to have their companies listed on the national stock exchanges. Once listed, the local government and the company will search for an efficient way to raise equity financing. By helping companies in their locales to obtain rights-offering approval or to fend off the threat of delisting, local governments reap the benefits from the companies' prosperity. These benefits include the generation of tax revenue, the provision of welfare (e.g., schooling, housing, and healthcare), infrastructure development, and the reduction in unemployment, because SOEs are expected to assume greater social responsibilities after they are listed. In addition to political and economic incentives, local governors also have personal interests to help their companies, as the performance of the local economy affects their career advancement (Li 1998). Although successful IPOs and new equity financing can benefit both local governments and local SOEs (win-win situation), delisting represents a lose-lose situation: the region loses the means to fund economic growth and the company loses future rent-seeking opportunities (government officials also lose face and potential promotion opportunities). To develop a strategy that is advantageous for all concerned, it is necessary that both parties join together. This is consistent with previous research findings that, to circumvent central government securities regulations, unlisted local governmentcontrolled entities often help their listed subsidiaries to boost earnings or avoid losses through related party transactions, assets and equity sales and purchases (at prices above or below the market value), fiscal subsidies, and restructuring (Aharony et al. 2000; Chen et al. 2008; Ding et al. 2007; Jian and Wong 2008; Liu and Lu 2007; Yang 2006; Zhu and Chen 2009).

A regulatory environment that places great importance on meeting earnings targets inevitably increases corporate earnings-management incentives. To facilitate earnings management, it is necessary for local SOEs to hire a compliant auditor who will not issue an unfavorable audit report that reveals the problem. As explained earlier, because their clientele is comprised mainly of local SOEs, local auditors are more vulnerable than nonlocal auditors are to the political influence of local government. Under these circumstances, they naturally have economic incentives to report leniently on local SOEs to mitigate political and economic costs (Chan et al. 2006).

In China's political and legal environment, the expected cost arising from regulatory or legal action is low, particularly for SOEs and their local auditors (Chan et al. 2006). Relative to others, local SOEs and local auditors, which are both under the same jurisdiction, enjoy the closest relationship and face the lowest risk because the political patronage of local government may shield them from any repercussions should their misbehavior be revealed (Anderson 2000). In contrast, it is much less convenient and more costly for other parties to act together. For example, local governments are unlikely to extend their influence to auditors outside their locales. Based on the above rationale, we expect that companies with rights-offering (delisting avoidance) incentives are more likely to receive a favorable opinion in general and, in particular, that this association is significantly strengthened when companies are controlled by local governments and audited by local auditors. We state our composite hypothesis as follows.





**H1:** There is a positive effect of rights-offering (delisting avoidance) incentives on managers' propensity to obtain favorable audit reports and this effect is strengthened when companies are controlled by local governments and audited by local auditors.

#### **RESEARCH METHODOLOGY**

#### Sample and Data

After excluding companies with incomplete data, our sample for estimating audit opinions includes 5,268 nonfinancial company-years drawn from the China Securities Markets and Accounting Research and Wind databases from 2001 to 2006. During this period there is little year-to-year variation in financial reporting rules and little change in the rights-offering and delisting requirements, or in the institutional environment. Our sample period ends in 2006 because China adopted a new set of accounting standards (moving even closer to IFRS) in 2007. Therefore, during this sample period the accounting data are more consistent and comparable and corporate and auditor-reporting behaviors are less likely to be affected exogenously. Table 1 shows the distribution of the sample and the number and relative frequency of the four types of opinion by auditor size and locality, and company ownership.

Panel A indicates that non-Big 4 and local auditors dominate the audit market and that local governments control the majority of listed companies. An average of 9.4 percent of listed companies receive non-clean (modified) opinions over the 2001–2006 period, and overall they receive these opinions less often from Big 4 than from non-Big 4 auditors (6.1 percent versus 9.7 percent). Local auditors are less likely to issue, and local SOEs are less likely to receive, modified opinions than their respective counterparts are. As previous studies suggest that modified opinions are affected by auditor locale and company ownership in China (Chan et al. 2006), we partition ownership into those audited by local auditors and those by nonlocal auditors.<sup>5</sup> Panel B shows that local auditors are less likely than nonlocal auditors to issue modified opinions to local SOEs (7.0 percent versus 8.2 percent, respectively;  $\chi^2 = 6.424$ , p = 0.011). However, the types of opinions issued to nonlocal SOEs are very similar for local and nonlocal auditors (14.1 percent versus 14.3 percent, respectively;  $\chi^2 = 0.001$ , p = 0.899).

#### **Predicting Audit Opinions**

As Big 4 auditors provide relatively superior quality service, we use a Big 4 audit opinion model as a benchmark to predict the opinion type that each non-Big 4 client would receive had they used a Big 4 auditor.<sup>6</sup> The dependent variable is audit opinion. China's Independent Auditing Standard (No. 7) specifies four types of audit opinion: unqualified, qualified, disclaimer, and adverse. Auditors also have the discretion to issue unqualified opinions with explanatory notes, similar to the "emphasis of a matter" in the U.S.A. Many consider that the addition of explanatory notes is effectively a form of quasi-qualification that reflects a compromise between managers and auditors (Haw et al. 2003; Xu 1998). Therefore, our

<sup>&</sup>lt;sup>6</sup> Note that we are *not* using the Big 4 model to predict the opinion that would be issued by a non-Big 4 auditor to a non-Big 4 client. Rather, we use the Big 4 model to predict the opinion that would be issued by a Big 4 auditor to a non-Big 4 client. If Big 4 auditors are more responsive to client risk than non-Big 4 auditors, then our approach should lead to a predictable difference between the opinions that would be issued by Big 4 auditors to non-Big 4 clients.



<sup>&</sup>lt;sup>5</sup> Per our definition of auditor locale, Big 4 auditors are regarded as nonlocal auditors and non-Big 4 auditors as local or nonlocal auditors, depending on the locality in which their clients reside (see footnote 1).

opinion rankings in order of increasing severity are unqualified (= 0), unqualified with explanatory notes (= 1), qualified (= 2), and disclaimer (= 3).<sup>7</sup> Because the dependent variable is ordered, we use the ordered probit regression model.<sup>8</sup>

Our control variables are based on previous literature, which reports that financial and market variables are related to audit qualifications (e.g., Chan et al. 2006; Chen et al. 2006; Chen et al. 2010; Dopuch et al. 1987; Lennox 2000; Wang et al. 2008). Financial variables include company size (log of assets), liquidity (current assets over current liabilities), financial leverage (long-term debt over shareholders' equity), return on assets (net income over assets), loss status (dummy), asset complexity (receivables and inventories over assets), and foreign shareholding (dummy). Market variables include stock returns (yearly market-adjusted returns), standard deviation of residuals (standard deviation of residuals from market model regression), and stock trading restrictions imposed by the regulator (dummy). In the model we also consider the auditors' economic dependence on their clients (i.e., client importance, defined as assets of a client over combined assets of all clients of an audit firm), companies' previous year audit opinions (clean or modified), and industries (12 categories) in which companies are engaged.

We also consider the institutional environment in which companies operate, as previous studies suggest that audit opinions vary with the level of institutional development in China (Chan et al. 2010; Wang et al. 2008). To measure institutions, we use the National Economic Research Institute Index of Marketization of China's Provinces, which contains a development score for each province and major municipality during our sample period (Fan and Wang 2001, 2003, 2004; Fan et al. 2007). The index is a proxy for the level of market development and also reflects the extent of government intervention in business. We average the scores of all five sub-indexes for each province over the period, and label provinces with scores above (below) the median as institutionally strong (weak) regions (Chan et al. 2010).<sup>9</sup>

Table 2 reports the results of Big 4 and non-Big 4 audit-reporting models based on the aforementioned variables. It appears that significant differences between Big 4 and non-Big 4 auditors exist. For variables with coefficients that are significant and consistently signed, the values are much larger in absolute magnitude for the Big 4 opinion model than for the non-Big 4 model. Results of a t-test of the difference in mean coefficients across the two groups suggest that Big 4 auditors are more sensitive to risk factors.<sup>10</sup> For example, Big 4 auditors are highly responsive to company profitability, prior-year audit opinion, and stock trading restrictions. An untabulated univariate analysis (t-test for mean difference and Wilcoxon Z-test for median difference) also suggests that Big 4 clients are significantly larger (log of client assets), report stronger accounting performance (higher return on assets and lower loss incurrence rate), and have a longer listing

<sup>&</sup>lt;sup>10</sup> We use Z-statistics to test the differences in mean coefficients between the two opinion models, where Z-statistics are the ratio of the difference in coefficient estimates between the two models to the sum of squared standard errors of the coefficients (Clogg et al. 1995).





<sup>&</sup>lt;sup>7</sup> There is no adverse opinion in our sample. We also treat unqualified opinions with explanatory notes as qualified opinions. Our main results are insensitive to this classification of opinions.

<sup>&</sup>lt;sup>8</sup> We also use a probit model where the binary (dependent) variable indicates a clean or modified opinion. Modified opinions include unqualified opinions with explanatory notes, qualified, and disclaimer opinions (Chan et al. 2006; Chen et al. 2001). Results from the binary probit model and the ordered probit model are qualitatively similar.

<sup>&</sup>lt;sup>9</sup> Based on the averaged scores over the period 1997–2005 for all five sub-indexes, the ranking of provinces and regions (from strong to weak) is Guangdong, Zhejiang, Shanghai, Fujian, Jiangsu, Tianjin, Beijing, Shandong, Liaoning, Chongqing, Hainan, Sichuan, Hebei, Anhui, Hubei, Henan, Jiangxi, Hunan, Guangxi, Jilin, Yunnan, Heilongjiang, Inner Mongolia, Shanxi, Shaanxi, Guizhou, Gansu, Ningxia, Xinjiang, and Qinghai. The index rankings are quite stable over the years. There was no significant change in the ranking of the provinces over time.

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Panel B: Audit Opinions of Companies with Different Ownerships by Auditor LocalityLocal SOEs (n = 3,744)Others (n = 1,524)Local AuditorsNon-Local AuditorsOthers (n = 3,744)Others (n = 1,524)Other Joon Local AuditorsNon-Local AuditorsOther Joon ModitorsNon-Local AuditorsOther Joon ModitorsNon-Local AuditorsOther Joon ModitorsOther Joon ModitorsOnesOpinionsOther Joon ModitorsOnesOpinionsOther Joon ModitorsOnesOpinionsOther Joon ModitorsOnesOpinionsOpinionsOther Joon Joon Joon Joon Joon Joon Joon Joo	Audi Nove				TABLE	1 (continued)				
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	eory		2,400	100	1,344	100	917	100	607	100

**TABLE 1** (continued)

Results of Ruditor Opinion Freuenon Woulds									
	Big 4	Auditors	Non-Big	4 Auditors	Test of Diff.				
Independent Variables (Expected Sign)	Coeff.	t-stat.	Coeff.	t-stat.	z-stat.				
Log of company total assets (–)	-0.089	-0.20	-0.027	-0.32	-0.12				
Current assets over current liabilities (-)	0.542	1.56	-0.247	$-2.63^{**}$	1.18				
Long-term debt over total equity (+)	-1.702	-1.11	0.085	0.60	-1.38				
Return on assets (–)	-7.585	-1.70*	-0.803	-3.13**	-3.12*				
Current year loss (+)	4.440	3.91**	1.977	14.74**	2.17				
Receivable and inventory over assets (+)	3.377	1.44	-0.709	-1.52	2.43*				
Prior-year audit opinion (+)	2.341	2.98**	1.466	17.30**	0.93				
Clients with foreign owners $(-)$	0.233	0.31	-0.025	-0.11	0.45				
Client importance (–)	0.512	0.44	0.002	0.015	0.22				
Trading restrictions (+)	3.234	2.46**	0.472	2.42*	2.24*				
Stock returns (?)	-2.972	-2.01*	-0.934	$-4.02^{**}$	-1.56				
Residual (?)	-9.385	-1.01	5.526	3.26**	-4.47 * *				
Institutional environment (+)	1.739	1.96	-0.334	-2.57*	1.92				
Industry (?)	Incl	uded	Inc	luded					
Pseudo R <sup>2</sup>	54.	21%	31.	44%					
(p-value)	(0.0)	00**)	(0.0)	00**)					
Sample Size	3	94	4.	874					

## TABLE 2 Results of Auditor Opinion Prediction Models

\*, \*\* Indicate statistical significance at the 5 percent and 1 percent levels, respectively.

All p-values are one-tailed.

Definition of Variables:

Audit opinion (dependent variable) = 0 for clean, 1 for unqualified with explanatory notes, 2 for qualified, and 3 for disclaimer opinions;

Log of company total assets = natural log of total assets at year-end;

Current assets over current liabilities = ratio of current assets to current liabilities at year-end;

Long-term debt over total equity = ratio of long-term debt to shareholder's equity at year-end;

Return on assets = ratio of net income to total assets at year-end;

Current year loss = 1 if the net income in the current year is negative, 0 otherwise;

Receivable and inventory over assets = ratio of sum of receivables and inventories to total assets at year-end;

Prior-year audit opinion = 1 for a modified opinion in the prior year, 0 otherwise;

Clients with foreign owners = 1 if the company has foreign-owned shares, 0 otherwise;

Client importance = 1 if the ratio of client assets to total client assets of the auditor is greater than the sample median, 0 otherwise;

Trading restrictions = 1 if the company's stocks are subject to trading restrictions by the stock exchange, 0 otherwise; Stock returns = common stock returns (including dividends) minus an equally weighted market return; Residual = standard deviation of residuals of the market model;

Institutional environment = 1 if the company locates in an institutionally weak region, and 0 otherwise; and Industry = set of 11 indicator variables for 12 industry classifications.

history than their counterparts. Significant reporting differences between the two groups of auditors suggest that there is scope for companies to obtain a different opinion.

We compare the observed opinions of non-Big 4 clients with the opinions that we predict these clients would receive had they used a Big 4 auditor. The difference between the observed and the predicted opinions captures the ability of managers to obtain better than expected audit opinions. Table 3 (Panel A) shows the transition matrix of the difference between these opinions. Results suggest that, while 4,275 (87.7 percent) non-Big 4 audit cases exhibit no difference in opinion type, 344 (7.1 percent) cases that would normally have received an unfavorable opinion from a Big 4



		Predicted (	Opinions							
Observed Opinions	Unqualified	Unqualified with Exp. Notes	Qualified	Disclaimer	Total					
Unqualified	4,177	126	18	78	4,399					
Unqualified with exp. notes	145	50	4	66	265					
Qualified	75	19	8	52	154					
Disclaimer	10	2	4	40	56					
Total	4,407	197	34	236	4,874					
Observed opinions relative to	predicted opinions	5:								
Better =	126 + 18 + 7	8 + 4 + 66 + 52 =	344	7.1%						
No Difference =	4,177 + 50 + 8	+ 40 =	4,275	87.7%						
Worse =	145 + 75 + 1	0 + 19 + 2 + 4 =	255	5.2%						
Total =			4,874	100.0%						

# TABLE 3 Differences between Observed Opinions and Predicted Opinions for Non-Big 4 Clients

The opinion prediction model is described in Table 2.

auditor nevertheless received a more favorable one from a non-Big 4 auditor. We note that, of these 344 observations with a better opinion, 294 (85.4 percent) do not involve an auditor switch. This is consistent with the argument that companies can receive a better opinion without having to dismiss the incumbent auditors (Lennox 2000; Teoh 1992). The 255 cases (5.2 percent) for which the observed opinions are worse than those predicted indicate that these companies have especially weak incentives to receive unqualified opinions (perhaps because the qualifications involved do not affect them seriously), given that they unexpectedly receive qualified opinions.<sup>11</sup> Untabulated results indicate that, relative to their counterparts, rights-offering applicants or delisting avoiders are more likely to obtain a *better* than a *worse* (83.7 percent versus 41.2 percent) or an *indifferent* audit report (83.7 percent versus 17.2 percent). As these results are at best suggestive, we next turn to multivariate analysis.

#### **Regressing the Difference in Audit Opinions**

We use a three-level dependent variable that indicates whether, relative to the expected opinion, the observed opinion is better (= 1), not different (= 0), or worse (= -1).<sup>12</sup> We test H1 by regressing this variable on rights-offering (delisting avoidance) incentives and government ownership and auditor locality. We code *Incentive* = 1 if companies apply for rights offerings in one of the next three years or report two consecutive annual losses, and 0 otherwise. We expect the coefficient of this variable to be positive. We use an indicator variable (*Local*) that codes 1 if local government-controlled companies choose a local auditor, and 0 otherwise. We have no *ex ante* prediction about the sign of this variable because it is not clear whether companies have motivation

<sup>&</sup>lt;sup>12</sup> We also apply a logistic model with the dependent variable coded as 1 for better opinions, and 0 for no difference in opinions. Our inferences do not change.





<sup>&</sup>lt;sup>11</sup> Results of t-test of differences in means suggest that the percentage of cases with a worse opinion (i.e., 5.23 percent) is significantly lower than that of cases with a better opinion (7.06 percent). Deleting the 255 cases or including them in the "no difference in opinion" group does not alter our main results.

to seek a better opinion in the absence of economic incentives. To examine whether the slope on the *Incentive* variable varies for the *Local* = 1 group versus the *Local* = 0 group, we introduce an interaction term between these two variables. The *Incentive* \* *Local* coefficient captures the incremental propensity of local government-controlled companies to obtain favorable reports from local auditors when companies have incentives to make rights offering or avoid exchange delisting.

#### MULTIVARIATE RESULTS

Table 4 reports the ordered logistic regression results based on the whole sample.<sup>13</sup> In Panel A, Column (1) displays the results of the baseline model testing whether the *Incentive* variable is significant.<sup>14</sup> Column (2) adds an interaction term to test how the *Local* variable moderates the strength of the association between the difference in audit opinion and the level of financial reporting incentive. The highly significant positive coefficient on *Incentive* (Column (1)) indicates that rights-offering applicants and delisting avoiders are more likely to obtain favorable audit reports than their counterparts. More importantly, the coefficient of 1.364 on *Incentive* \* *Local* (Column (2)) suggests that this likelihood is significantly enhanced (by approximately 64 percent = 1.364/2.127) for companies that are controlled by local governments and audited by local auditors (our target group), relative to companies that are controlled by nonlocal governments and audited by local soft or nonlocal auditors (the reference group). This is consistent with our prediction that local SOEs have stronger incentives to obtain favorable audit reports when they need to portray corporate performance in a better light in order to obtain favorable treatment from securities regulators.<sup>15</sup>

Table 4 (Panel B) shows a  $2 \times 2$  matrix to illustrate the tendency to obtain a different audit opinion classified by the company's reporting incentive. Estimated coefficients are obtained from the regression results. The first row of the matrix indicates that the impact factor on the probability of having a more favorable opinion among companies with strong reporting incentives is 3.442 for our target group and only 2.127 for the reference group. However, when companies face little financial reporting pressure (i.e., *Incentive* = 0), we observe that the impact factor is 0.049 lower for the target group than for the reference group. The columns of the matrix indicate whether the impact factor for a particular group varies between high and low financial reporting incentives. In both groups, this impact is significantly higher when companies are confronted with reporting pressures (i.e., *Incentive* = 1).

Five control variables are significantly associated with the propensity to receive a different opinion (Column (2)). Specifically, large companies are significantly less likely than small companies to receive a favorable report from their chosen non-Big 4 auditors (as opposed to the report they would receive if they use a Big 4 auditor). This is consistent with large companies being more concerned with adverse publicity or reputation and therefore these companies are less likely to

<sup>&</sup>lt;sup>15</sup> We also note that local auditors receive higher than average audit fees from local SOEs than from other companies with a difference of about 7 percent. They also have longer audit tenure with local SOEs than with other companies (3.7 years versus 2.6 years). This suggests that, in addition to intangible favors (e.g., political shelter and business referral), local auditors also benefit from charging higher audit fees or retaining their clients longer by allowing them to inflate their earnings.



<sup>&</sup>lt;sup>13</sup> We winsorize all continuous variables at the top and bottom 1 percent of their annual distributions to reduce the impact of extreme observations. The highest correlation among the independent variables is 0.218 (p < 0.01) between client listing age and the ratio of independent board members to the total number of board directors. None of the correlations exceeds 0.80, the point beyond which the threat of multicollinearity becomes a real concern (Judge et al. 1988).

<sup>&</sup>lt;sup>14</sup> Ordered logistic regression produces a common slope parameter but multiple intercepts. A test for the proportional odds assumption shows that our model is valid. As the intercept estimates are not a function of the independent variables, they have little relevance to the interpretation of the coefficients. For simplicity, we omit reporting the intercepts and yearly and industry dummies.

#### TABLE 4

#### **Results of Multivariate Ordered Logistic Regression**

# Panel A: Regression Results (Dependent Variable is the Difference between Observed and Predicted Opinions)

		(1)		(	2)	(3)	
Independent Variables	Sign	Coeff.	Z-stat.	Coeff.	Z-stat.	Coeff.	Z-stat.
Incentive ( <i>a</i> <sub>1</sub> )	+	2.218	18.26**	2.127	17.20**	1.179	19.69**
Local $(a_2)$	?	0.038	0.39	-0.049	-0.50	-0.003	-0.05
Incentive $*$ Local $(a_3)$	+			1.364	4.62**	0.703	3.79**
Log of company total assets $(a_4)$	?	-0.169	-3.04 **	-0.147	-2.63 **		
Current assets over current liabilities $(a_5)$	?	0.075	1.28	0.094	1.58	0.050	1.27
Long-term debt over total equity $(a_6)$	?	-0.781	-6.14 **	-0.804	-6.37**		
Receivable and inventory over assets $(a_7)$	?	0.978	2.74**	0.931	2.60**		
Auditor switch $(a_8)$	+	-0.359	-1.46	0.931	2.67**	0.005	0.06
Client listing age $(a_9)$	?	0.029	1.83	0.029	1.81	0.019	2.26*
Independent board members $(a_{10})$	_	-0.101	-0.37	-0.071	-0.26	-0.077	-2.65**
Institutional environment $(a_{11})$	+	0.644	6.41**	0.644	6.38**		
Pseudo R <sup>2</sup>		14.0	5%**	14.5	1%**	17.6	4%**
Sample size		4,	874	4,	874	4,	874

#### Panel B: Impact Factor on the Propensity to Obtain a Better Opinion (Based on Column (2))

	Local = 0	Local = 1
Incentive $= 1$	$a_1 = 2.127$	$a_1 + a_2 + a_3 = 3.442$
Incentive $= 0$	0	$a_2 = -0.049$

\*, \*\* Indicate statistical significance at the 5 percent and 1 percent levels, respectively.

All p-values are one-tailed.

Other variables are as defined in Table 2.

Variable Definitions:

Difference between observed and predicted opinions = 1 for a better opinion, 0 for no difference in opinion, and -1 for a worse opinion;

Incentive = 1 if the firm applies for rights offerings in one of the next 3 years or reports two consecutive years of losses, and 0 otherwise;

Local = 1 if local SOEs choose a local auditor, and 0 otherwise;

Auditor switch = 1 if the company switches its auditor in the current year, and 0 otherwise;

Company listing age = number of years the company has been listed on the stock exchange; and

Independent board members = ratio of independent board members to the total number of board directors.

engage in opinion shopping. A parallel situation exists for companies with high versus low levels of long-term debt. This is consistent with lenders of highly leveraged companies assuming a supplementary role in monitoring managerial behavior. In contrast, compared to their counterparts, companies with high levels of receivables and inventory are more likely to receive favorable reports from non-Big 4 auditors than from Big 4 auditors. This is reasonable since large auditors are more concerned about the client's asset complexity and audit risk than are small auditors. In addition, companies that switch auditors are more likely than non-switchers to receive favorable reports from local auditors (Chan et al. 2006). Finally, companies in regions of weaker institutions have a higher





propensity to receive better opinions from non-Big 4 auditors, which is consistent with the collusion argument that local SOEs are more likely to choose local auditors when institutions are less developed (Wang et al. 2008).

As four significant control variables discussed above are also used in Table 2 to construct the dependent variable, there is a potential mechanical correlation problem between these variables and the dependent variable in Table 4. To address this concern, we drop these variables and report the results in Column (3). The coefficients of the test variables continue to be significant. It appears that opinion shopping is likely to be associated with companies that often experience cash shortages after listing for a number of years and with companies that have a less independent board.

#### **Robustness Tests**

To provide additional assurance regarding the inferences we draw, we conduct a number of robustness tests and report the results in Table 5. First, we verify whether our results are sensitive to an alternative surrogate of auditor quality. Instead of using the Big 4 group in the first stage of the regression, we use the 15 audit firms that, in the opinion of the securities regulator, provide higherquality audit services in China (CSRC 2002).<sup>16</sup> We compare the opinions that companies receive from the incumbent auditor with those that we predict they would receive if they used one of the 15 government-designated audit firms. We replicate Table 4 (Column (2)) and report the results in Column (1). Second, we test whether our main results are robust to the alternative definition of financial reporting incentives. Specifically, we replicate the Table 4 analysis using high reporting incentives, defined as companies with a three-year average ROE slightly above the numerical threshold for rights offering (i.e., 6 percent < ROE < 7 percent), or with a current year ROE just above zero (i.e., 0 percent < ROE < 1 percent). We report the results in Table 5 (Column (2)). Third, we classify a listed company as an SOE if its largest shareholder is a government entity that holds 30 percent of outstanding shares (instead of 20 percent in our main results) to test whether the results are robust to ownership levels (Column (3)). Fourth, we exclude observations with unqualified opinions with explanatory notes from our sample to test whether quasi-qualification affects the results (Column (4)).

Finally, as unobservable company characteristics may bias the estimated opinion if they simultaneously affect both auditor choice and audit opinion, we attempt to alleviate this concern by employing the Heckman (1979) two-step procedure. We first estimate an auditor-choice model to generate the inverse Mills ratios. We then include these ratios in the Big 4 opinion prediction model. We argue that companies located in cities where Big 4 audit services are not available locally are more likely to choose a non-Big 4 auditor for convenience compared with companies located in major cities (e.g., Beijing, Guangzhou, Shanghai, and Shenzhen) where Big 4 auditors are physically present. We include an indicator variable (*City*) in the auditor-choice model but exclude it from the opinion model.<sup>17</sup> We re-estimate the opinion type and report the results in Table 5 (Column (5)).

<sup>&</sup>lt;sup>17</sup> Lennox et al. (2012) demonstrate the importance of imposing exclusion restrictions in the Heckman (1979) procedure. To the extent that more intense audit competition in major cities affects audit opinions, our exclusionary variable may not completely control for selection bias in the company's choice of auditor.



<sup>&</sup>lt;sup>16</sup> In response to a series of corporate scandals in the early 2000s that seriously undermined investors' confidence in corporate reports and stock markets, the CSRC selected 15 audit firms (including the Big 4) to conduct supplementary audits on companies that apply for IPOs or seasoned equity offerings (CSRC 2002). These 15 firms were chosen based on merit. Presumably, they must have maintained a proven track record in quality audit services in the past.

TABLE 5

	1/10/				
Summa	ry of Robu	stness Test	Results		
Independent Variables	(1) Coeff. (Z-stat.)	(2) Coeff. (Z-stat.)	(3) Coeff. (Z-stat.)	(4) Coeff. (Z-stat.)	(5) Coeff. (Z-stat.)
Incentive (+)	1.166	1.155	0.921	2.654	1.480
Local (?)	0.015	(12.02)** 0.194	$(13.37)^{**}$ -0.039	(17.68)**	(14.00)** 0.074
Incentive * Local (+)	(0.12) 1.235 (4.67)**	(1.56) 0.466 (6.62)**	(-0.80) 0.677 (2.50)**	(-1.25) 1.037 (2.05)**	(0.77) 1.225 (5.04)**
Log of client total assets (?)	$(4.07)^{1.1}$ -0.210 $(-3.16)^{**}$	$(0.03)^{++}$ -0.077 $(-2.93)^{**}$	$(3.39)^{**}$ -0.056 $(-2.08)^{*}$	$(2.93)^{++}$ -0.203 $(-2.91)^{**}$	$(5.04)^{++}$ 0.118 $(2.14)^{*}$
Current assets over current liabilities (?)	(-0.122) (-1.34)	0.027	0.053	(2.91) 0.171 (2.31)*	(2.14) 0.076 (1.31)
Long-term debt over equity (?)	(-1.54) -0.165 (-1.07)	-0.369 (-6.07)**	-0.433	(2.31) -0.860 (-5.23)**	(1.31) -1.344 (-4.92)**
Receivable and inventory over assets (?)	(-1.07) 1.058 (2.42)*	0.489	0.480	(-5.25) 1.793 (3.96)**	(-4.92) 1.417 (4.16)**
Auditor switch (+)	$(2.42)^{*}$ 0.243 (1.67)	0.168	0.198	0.180	0.292
Client listing age (?)	0.065	0.006	0.012	(-0.98) 0.049 (2.44)*	0.064
Independent board members (-)	-0.144	-0.019	(1.55) -0.004 (-0.028)	-0.051	0.073
Institutional environment (+)	(-0.148)	0.318	0.306	0.708	0.156
Pseudo R <sup>2</sup>	(-1.25) 25.11%	(0.02)** 10.28%	(0.23)** 12.85%	(3.67)**	(1.00) 30.31%
Sample size	3,483	4,874	4,874	4,609	4,874

\*, \*\* Indicate statistical significance at the 5 percent and 1 percent levels, respectively.

All p-values are one-tailed.

Dependent variable is the difference between observed and predicted opinions.

All variables are as defined in Tables 2 and 4.

(1) Use the 15 audit firms selected by the regulators as quality auditors to predict the opinion types.

(2) Set "rights-offering (delisting) incentive" variable equal to 1 if a listed firm reports a three-year average 6 percent < ROE < 7 percent or 0 percent < current year ROE < 1 percent, and 0 otherwise.

(3) Classify a listed firm as a SOE if its largest shareholder is a government entity that holds 30 percent of outstanding shares.

(4) Delete 277 observations having unqualified opinions with explanatory notes.

(5) Adjust selection bias by employing the Heckman two-stage model.

All of the robustness test results reach consistent conclusions regarding the experimental variables. In particular, the coefficient of *Incentive* \* *Local* remains substantially unchanged in statistical significance.

#### CONCLUSIONS

The process of transforming a socialist system into a market economy has created many opportunities for market participants to exploit the system for private gain. China's regulation of rights offering and delisting provides an opportune setting to examine how local level bureaucrats,





managers, and auditors interact to influence capital allocation decisions that depend on reported accounting earnings. Based on 5,268 company-years from 2001 to 2006, we find evidence that, with the help of local governments and local auditors, local SOEs in China are able to secure more favorable audit reports.

Our findings highlight the importance of understanding political and economic institutions when analyzing the behavior of managers and auditors. To better understand the corporate and auditor reporting behavior in an emerging economy, one must first understand the role and incentive of government and its influence on accounting and corporate economic affairs. Our results suggest that policy makers should be aware of the unintended consequences of basing capital resource allocation decisions on the accounting rate of return, which is often subject to managerial discretion.

Several caveats apply to our study. First, we do not quantify the expected costs and benefits associated with misreporting by managers and auditors. Second, as is common to all estimation models, our opinion prediction model may be subject to measurement errors due to omitted or noisy variables. To the extent that Big 4 and non-Big 4 clients differ in unobservable ways, the model estimated on Big 4 clients is a potentially deficient way in which to estimate the opinions that Big 4 auditors would issue to non-Big 4 clients. Finally, as our results are situation-specific and apply to a particular period, caution should be taken when drawing inferences from our results on the overall quality of auditing in China. Each of the above caveats provides a possible avenue of future inquiries. Similar to their Chinese counterparts, seasoned equity offering companies in the West are motivated by economic incentives to manage earnings in the year of the offering. Future research is encouraged to examine the generalizability of our results to other economies with different institutional, political, and cultural environments.

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