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## Address forms in Chinese audit opinions



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## ABSTRACT

Although forms of address are widely used in textual and other types of disclosure, empirical evidence of their effects is rare. China provides a unique setting in which to test the economic consequences of the forms of address used in audit reports. From 2003 to 2011, about 60% of auditors surveyed addressed their clients by their real names in audit opinions, while the others used honorifics. Based on a sample of Chinese audit opinions, I report the following findings. First, the announcement of an audit opinion that uses the client's real name elicits a greater market response than the announcement of an opinion featuring an honorific form of address. Second, the effects of real-name forms of address are stronger in firms with weak board governance. Third, the association between audit fees and audit risk factors, such as loss-making, is stronger in firms that are addressed by their real names in audit reports. I conclude from these findings that the forms of address used in audit opinions may reveal private information on audit quality. The results of this study are consistent with the power-solidarity effect described by sociolinguists.

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**1. Introduction**

Digital indicators are widely used in financial reports to communicate private information. In addition to numerical information, textual information plays an important role in corporate disclosure. With the development of computer technologies, the textual analysis of financial reports has become increasingly common in developed capital markets. However, powerful tools for analyzing textual information are rare in China. For example, no emotion-mapping dictionary is available for use with Chinese financial reports. Therefore, Chinese audit reports provide a unique opportunity to examine the consequences of different forms of address. Due to the traditional politeness principle embedded in the Chinese language, two main types of address can be observed in audit opinions. From 2003 to 2011, about 60% of clients surveyed were addressed by their real

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names, while the others were addressed using honorifics ('guì gōng sī'). The clear distinction between these two types of address makes it easy to empirically analyze forms of address in Chinese audit opinions.

In ancient China, particular styles of writing were used to communicate political opinions. In a classic text entitled *Chūn qiū*, Confucius used subtle words to convey profound meanings. The aim of this research was to determine whether auditors select forms of address to disclose specific information about audit quality. I test two hypotheses, based respectively on the theories of audit quality and sociolinguistic theory. I find that audit opinions that address clients by their real names yield greater market returns than opinions featuring honorific forms of address. I also find that the effects of forms of address are more pronounced in firms with weak board governance. Finally, the relationship between audit fees and audit risk factors, such as loss-making, is stronger in firms addressed by their real names in audit opinions than firms addressed using honorifics. Viewed collectively, these findings suggest that independent auditors have a greater incentive to address clients by their real names. The results are consistent with the power-solidarity effect described by sociolinguists.

This study contributes to the literature in the following ways. First, it provides further evidence on textual disclosure via forms of address. The results show that the rules of the Chinese language affect communication between a company and its investors. Second, the findings of this paper suggest that investors distinguish between 'clean' opinions by textual differences, as the imperative of client confidentiality prevents potential investors from viewing unaudited financial reports. This conclusion may shed light on the insufficiency of information in the existing audit-report system. Finally, the results of the study indicate that digital indicators such as board independence are related to the consequences of textual information, suggesting that textual and numerical information interact.

The remainder of the paper is organized as follows. Section 2 provides background information on the topic under study, such as a review of the relevant literature in the fields of audit quality and sociolinguistics. In Section 3, I describe the study's methodology, with attention to the research sample and model. Section 4 provides the results of tests of the consequences of different forms of address. I conclude the paper with a summary of the findings and their implications for future research.

## 2. Address forms in audit reports: background and relation to past research

Despite important research on the information content of English-language text, evidence of the effects of forms of address is rare. China provides a unique setting in which to analyze the forms of address used in audit reports. I propose that auditors' choice of address affects the market reaction to audit reports. This hypothesis is based on three assumptions. First, as an unaudited financial report cannot be observed by investors, auditors have an incentive to reveal information on audit quality. Second, common guidelines for modes of address are accepted by all stakeholders in China's capital market. Third, there is some variation in the forms of address used in audit reports, due to power-related motives and the Chinese tradition of polite language.

### 2.1. Are all clean opinions the same?

I focus on clean opinions because they are not differentiated by numerical information. The audit quality of a client firm that receives a clean opinion depends on the quality of the client's unaudited financial report. However, investors cannot observe unaudited financial reports, due to client confidentiality. Auditors issue clean opinions to three types of clients. Firms in the first category receive clean opinions in return for high-quality unaudited reports. Second, firms that offer poor-quality unaudited reports but accept all of their auditors' suggestions for adjustment also receive clean opinions. Firms of the third type, which offer poor-quality reports and refuse to make all of the adjustments proposed by auditors, receive clean opinions only if the risk of litigation is low. Clearly, the audit quality of the second type of firm is higher than that of the third type. However, it is difficult to evaluate the audit quality of firms in the first category. Investors cannot differentiate between firms that receive clean opinions in return for high-quality reports because the audit service is unobservable. Some researchers argue that auditors are under pressure to issue unmodified opinions because modified opinions have a huge negative effect on clients (Sun and Wang, 1999; Zhao, 2007; Simunic and Wu, 2009). However, other researchers point out that auditors have an incentive to circumvent pressure from investors and regulators, and thus engage in collaborative governance with independent directors (Zhao and Zhou,

2013). Approximately 90% of the sampled audit opinions issued in China from 2003 to 2011 were clean. I hypothesize that auditors issuing clean opinions and offering high-quality services have an incentive to reveal information to the market. Therefore, different types of clean opinion have distinct consequences.

## 2.2. Information-conveying function of corporate textual disclosure

Several aspects of textual disclosure, such as readability, tone and keyword frequency, are subject to managers' discretion. According to past research, managers' reporting incentives affect the consequences of textual disclosure. First, the short-term market returns to an earnings-release announcement are positively related to the level of optimism conveyed in the textual content of the earnings-release report (Henry, 2008; Demers and Vega, 2011; Davis et al., 2012). Loughran and McDonald (2011) find a similar association between market returns and optimism in the text of 10-K Securities and Exchange Commission filings. Second, the level of optimism expressed in an earnings report is positively associated with future market returns (Feldman et al., 2009). Third, De Franco et al. (2011) find a positive relationship between the readability of analysts' reports and the stock-turnover rate. Finally, Loughran and McDonald (2011) find evidence to suggest that the trading volume of small investors is positively associated with the readability of their annual reports. Taken together, these findings indicate that textual disclosure provides investors with private information.

Merkley (2011) finds that when a company's financial performance is in decline, its management is likely to disclose more information on research and development in the text of financial reports to assure the market of the long-term value of the company. Second, Nelson and Pritchard (2007) find that the greater the litigation risk faced by a firm, the more cautionary language managers use. Third, the mispricing of changes of accruals is larger when a firm discloses more information on competition in its annual report (Li et al., 2011).

It is worth mentioning that managers are also likely to provide obfuscatory information when firm performance declines. As demonstrated by Li (2008), firms with more complicated annual reports have less persistent positive earnings. Consistent with this result, Tama-Sweet (2009) finds that managers release more optimistic information when they plan to exercise their stock options, suggesting an opportunistic incentive for textual reporting.

## 2.3. Analysis based on theories of sociolinguistics and audit quality

Audit quality is traditionally believed to depend on auditors' competence and independence (DeAngelo, 1981). Clearly, investors will respond to textually disclosed information on auditor competence or auditor independence. As shown by sociolinguists, people use language to define their relationships with others. The term 'forms of address' denotes the words used by speakers to designate the people with whom they are talking. Such words can be used to communicate information about the relationship between speaker and addressee. Ervin-Tripp (1972) proposes that an address system is composed of a series of choices made by speakers. For example, a faculty member who wishes to address the dean by his first name will check whether expectations of status marking exist before using this form of address. The relative formality of the relationship between the faculty member and the dean will also affect the former's choice of address. Zhang (2009) posits that in China, choices of forms of address are driven by psychological as well as cultural factors. Accordingly, the authors of Chinese literary works use distinct forms of address to convey particular information.

### 2.3.1. Power-solidarity effect and politeness principle

Two sociolinguistic theories help to explain the consequences of different forms of address in audit opinions. The first is the power-solidarity theory suggested by Brown and Gilman (1960), according to which the use of real-name forms of address represents a relationship of equal power between auditor and client. Based on this assumption, I hypothesize that the use of real names in audit opinions indicates a greater degree of auditor independence. The second useful sociolinguistic theory is the politeness principle proposed by Brown and Levinson (1978), who suggest that speakers use honorifics to address people of higher status. Accordingly, auditors may use honorific forms to suggest that clients are important. Although investors respond positively to both auditor independence and client importance, an event study may help to determine

which of the two factors is dominant. For example, if the market returns on audit opinions with real names are higher than those on audit opinions with honorific forms of address, the power-solidarity effect can be assumed to be more pronounced in Chinese audit opinions. However, if there is no difference in the market returns on these two types of address, it can be assumed either that the power-solidarity effect and the politeness principle are non-existent, or that these two effects are evenly matched and cancel each other out. The full set of permutations leading to these results is presented in the following figure (see Fig. 1).

‘Auditor independence’ refers to the likelihood of auditors reporting a breach in its client’s accounting system. The theoretical probability of reporting a breach usually decreases in practice, because a client can impose costs on an auditor by terminating the audit service. Therefore, auditor independence is assumed to be positively related to characteristics such as audit size (DeAngelo, 1981; Dye, 1993). ‘Opinion shopping’ describes the practice of searching for an auditor willing to comply with the client’s needs by issuing an unqualified opinion. This phenomenon is of concern to both regulators and investors. Investors require information on auditor independence to evaluate a firm’s audit quality, even when the firm has received a clean opinion. I hypothesize that auditors’ choice of forms of address provides information on auditor independence, for two reasons. First, forms of address are of concern to clients when auditors issue clean opinions. Second, sociolinguistic theories suggest that different forms of address reflect different relationships between clients and auditors.

Brown and Gilman (1960) propose that pronoun usage is governed by power and solidarity semantics. Brown and Ford (1961) identify a natural progression in the forms of address chosen by English speakers from mutual title with first name to mutual first name, indicating that power differences between levels of society are less important in modern social interactions. According to Scotton and Zhu (1983), honorifics such as ‘lo shi’ (‘teacher’) were retained in Chinese forms of address after 1949. Such honorific titles convey respect for the addressee, indicating that power difference is still important in China. With the development of China, the popularity of honorific titles continues to depreciate and addresses based on the solidarity effect, such as ‘tóng zhi’ (comrade), are supported by the government. As discussed in these literatures, I expect that real name address suggests a smaller power differential between auditor and client. I also hypothesize that the more balanced the auditor–client relationship, the more independent the auditor is likely to be.

In China, words such as ‘gui’ (‘esteemed’) are used in honorific forms of address to convey the speaker’s respect. For example, the Chinese word ‘gui xìng’ means ‘your esteemed name’ in English. In contrast, words such as ‘b’ are used in self-abasing forms of address. For example, the Chinese word ‘b rén’ means ‘your humble friend’ in English. Both honorifics and self-abasing forms of address can positively affect face, which is consistent with the politeness principle proposed by Brown and Levinson (1978). Therefore, I hypothesize that

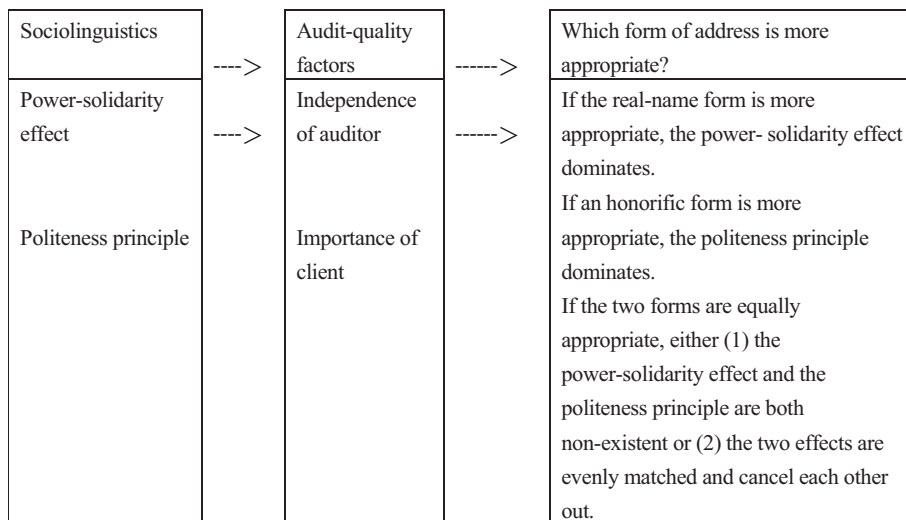


Figure 1. Paths leading to three possible sets of results of the event study.

the use of honorifics to address clients in audit opinions provides information on the importance of the clients. An important client is likely to elicit greater effort from an auditor, leading to higher audit quality.

### 2.3.2. Forms of address in China: tradition and modernity

Changes in forms of address in China, whether arising from cultural, commercial or historical developments, may have important organizational consequences. The authors of *Chūn qiū*, one of the most famous texts of the Pre-Qin era, used forms of address to express opinions on political events. For example, when references to the king of Qi are downgraded from ‘qí hóu’ (‘King Qi’) to ‘qí rén’ (‘Guy Qi’), the reader infers that the king’s behavior is contrary to the welfare of his people.<sup>1</sup>

In modern China, political and business organizations select forms of address that both maximize the power-solidarity effect and conform to the politeness principle. For example, when a faculty member wishes to address his superior, the most common form of address comprises position title and last name. According to the theory of power solidarity, position titles reveal information on power difference, and may thus lead to bureaucratic delay. The local government of Shanghai has released an official document that deals specifically with forms of address. The General Office of the Communist Party of China Shanghai Municipal Committee requires members of the Communist Party, especially party cadres, to address each other as ‘tóng zhì’ (‘comrade’) in official documents. The government is clearly concerned that forms of address featuring titles such as ‘secretary’ or ‘minister’ will lead to bureaucratic and organizational inefficiencies.

Forms of address are also of concern to commercial organizations. Before 1999, the company Lenovo experienced steady growth due to its exceptional performance. With the expansion of the company’s management hierarchy and personnel, the probability of a manager’s being addressed by his or her last name accompanied by the word ‘zǒng’ (‘chief officer’) significantly increased. The Chief Executive Officer of Lenovo, Yuanqin Yang, was concerned that the company’s cohesion would be compromised by the power effect of this form of address. He thus established two forms of address for himself: ‘lǎo yáng’ (‘Old Yang’) and his first name. His goal was to eliminate the power effect and create a family culture for the company.<sup>2</sup> Huawei, another Chinese company, responded positively to the restructuring of forms of address at Lenovo. A special report was published in an internal newspaper named ‘Management Optimization’ on the decision to implement Lenovo’s reforms at Huawei.<sup>3</sup> These two cases indicate that forms of address concern both the government of China and Chinese companies.

## 2.4. Research opportunities provided by China

China provides a unique opportunity for textual analysis of the forms of address used in audit opinions for two reasons. First, the difference between the two types of address is very clear. Therefore, the variable capturing ‘form of address’ is not ambiguous. In addition, the tests can be conducted in the absence of an emotion-mapping dictionary for the Chinese language. Second, more than 10,000 audit opinions using identifiable forms of address were issued from 2003 to 2011, providing a sufficiently large sample to capture the whole market. In addition, the ratio of real names to honorifics is about 6:4, which allows me to examine not only the consequences of forms of address, but also the moderating effects of auditor and client characteristics.

### 2.4.1. Forms of address in Chinese audit opinions

About 90% of China’s listed companies receive standard unqualified audit opinions. There is no variation in digital indicators in these opinions, providing a clean setting in which to examine the consequences of different forms of address. The following table provides examples of the forms of address used in Chinese audit opinions.

As shown in Table 1, the first company is addressed by its full name, whereas the second company is addressed as ‘guì gōng sī’ (‘your esteemed company’). In the United States, auditors address their clients

<sup>1</sup> See Xiong (2007), Spirit of Chinese people in the Spring and Autumn: imperial power and academia in traditional context of China, Xi’an: Shaanxi Normal University General Publishing House Co., Ltd., 105–111.

<sup>2</sup> See <http://tech.sina.com.cn/news/it/1999-11-1/10141.shtml>.

<sup>3</sup> See <http://iye.net.blog.163.com/blog/static/3148921200861933851979/>.

Table 1  
Forms of address used in Chinese audit opinions.

Real-name address	Honorific address
To the shareholders of ABC Co., Ltd., We have audited the accompanying consolidated balance sheet of ABC and its subsidiaries as of ...	To the shareholders of XYZ Co., Ltd., We have audited the accompanying consolidated balance sheet of XYZ [ <i>'guì gōng sī'</i> ('your esteemed company')] and its subsidiaries as of ...
<ul style="list-style-type: none"> <li>Opinion</li> </ul> In our opinion, the financial statements give a true and fair view of the financial position of ABC Co., Ltd and the Group as of 31 December 2006, and of its financial performance and its cash flows for the year then ended, in accordance with the Accounting Standards for Business Enterprises and China Accounting System for Business Enterprises	<ul style="list-style-type: none"> <li>Opinion</li> </ul> In our opinion, the financial statements give a true and fair view of the financial position of <i>'guì gōng sī'</i> (your esteemed company) and the Group as of 31 December 2006, and of its financial performance and its cash flows for the year then ended, in accordance with the Accounting Standards for Business Enterprises and China Accounting System for Business Enterprises

by their real names or use abbreviations (such as 'your company'). The abbreviated form would be translated as 'n gōng sī' if the politeness principle were neglected, which would have no positive effect on face. Following the Chinese politeness principle, however, the abbreviation is transformed into an honorific (*'guì gōng sī'*). *'Guì gōng sī'* means 'your esteemed company' in English. This unique setting enables me to divide forms of address in Chinese audit opinions into two categories.

#### 2.4.2. Distribution of forms of address in China from 2003 to 2011

Before 2003, all auditors addressed their clients using honorifics (*'guì gōng sī'*). In 2003, regulators revised the standards for independent audit and recommended a new style for the text of audit opinions. The guidelines on the new standards provide an example of a clean opinion in which a real-name address is used. Forms of address are thus subject to auditors' discretion, as this example is provided only for guidance; the use of real names is not mandatory. Since 2003, two forms of address have been used in Chinese audit opinions. The following table presents the distribution of forms of address since 2003.

As shown in Table 2, the proportion of real-name forms of address increased every year between 2003 and 2009. In 2006, there was a particularly substantial increase in the relative use of real-name forms of address. However, the proportion of honorific addresses has fluctuated around the 30% level since 2006. On average, the audit opinions that use honorifics account for approximately one third of the full sample. Thus, it is clear that real names were favored by auditors during the research period.

#### 2.4.3. Forms of address in audit opinions: habit or choice?

If auditors never change the style in which they address their clients, the variation in address forms may be driven by habit rather than choice. To rule out this possibility, I conduct several tests of the distribution of forms of address. Table 3 presents the distribution by year and CPA firm. The results indicate that about

Table 2  
Distribution of forms of address used by certified public accounting (CPA) firms from 2003 to 2011.

Year	Honorific	%	Real name	%
2003	558	52.00	515	48.00
2004	555	51.68	519	48.32
2005	561	49.73	567	50.27
2006	414	35.00	769	65.00
2007	399	31.79	856	68.21
2008	434	30.52	988	69.48
2009	435	29.71	1029	70.29
2010	524	32.35	1096	67.65
2011	506	27.16	1357	72.84
Total	4386	36.30	7696	63.70

The frequency statistics are based on the full set of usable observations obtained in the event study.

Table 3  
Proportion of real-name forms of address used by CPA firms during the sample period.

Proportion of real-name forms of address	Frequency	Percentage	Cumulative frequency	Cumulative percentage
0	70	12.37	70	12.37
0–33%	74	13.07	144	25.44
33–66%	112	19.79	256	45.23
66–100%	171	30.21	427	75.44
100%	139	24.56	566	100.00

63% (13.07 + 19.79 + 30.21) of the CPA firms used different forms of address for different clients in the same year. Next, I check the distribution of forms of address by CPA firm and the first-signing auditor. Of the 2,659 resulting observations, 586 use different forms of address, which accounts for 22% of the sample. Defining an auditor as the first-signing auditor in a CPA firm in a year gives 6025 observations, of which 587 use different forms of address during the sample period. The results indicate that the variation in forms of address is at least partly driven by auditor choice. Table 3 also reveals that 12% of the CPA firms solely used honorifics in their opinions between 2003 and 2011, which may indicate that variation in forms of address is partly driven by auditors' habits. These habit-driven observations weaken the difference between the consequences of the two forms of address.

### 3. Research methodology

#### 3.1. Research model

As discussed in the previous section, I hypothesize that the market reaction to audit opinions using clients' real names is higher if the power-solidarity effect dominates. To test my hypothesis, I build the following model to examine the consequences of forms of address.

$$CAR_{[-3,3]} = \beta_0 + \beta_1 ARF + \beta_2 UE + \beta_3 SIZE + \beta_i INDUSTRY + \beta_j YEAR$$

$CAR_{[-3,3]}$  denotes the market response to the announcement of an audit opinion over the short-term window of  $[-3, 3]$ . The cumulative abnormal returns are calculated using either the market model ( $RCAR_{[-3, 3]}$ ) or market-adjusted returns ( $ACAR_{[-3, 3]}$ ). The capital asset pricing model (CAPM) is as follows.

$$DR = \alpha + \beta MR + \varepsilon$$

where  $DR$  denotes firms' daily returns including the reinvestment of cash dividends.  $MR$  denotes the tradable value-weighted daily market returns including reinvestment of cash dividends. Both items are extracted from the China Stock Market Accounting Research database. I estimate beta over 120 trading days before the event window. Observations are deleted if the adjusted  $R^2$  of the market model is negative.

$ARF$  is a dummy variable that takes the value of 1 if an auditor addresses the client by its real name, and 0 otherwise. Thus,  $\beta_1$  is designed to capture the consequences of forms of address. If the power-solidarity effect dominates,  $\beta_1$  is expected to be significantly positive. Conversely,  $\beta_1$  is expected to be significantly negative if the politeness principle is dominant.

$UE$  denotes change in earnings from  $t - 1$  to  $t$  divided by total assets, which captures unexpected earnings.

$Size$  is the natural logarithm of total assets in year  $t$ .

$Industry$  and  $Year$  are dummy variables to control for industry and year effects.

If the characteristics of auditors or clients affect the choice of the form of address, the coefficient  $\beta_1$  may capture market returns that are unrelated to the form of address. Therefore, I use the following treatment-effect model to deal with the potential endogeneity of variable  $ARF$ .

$$CAR_{[-3,3]} = f(ARF, UE, SIZE)$$

$$ARF = f (TO; RSB; LOSS; SP; ARTA; INVTA; GROW; BELOW; OCFTA; STATE; DINDEP; COM; DE; SIZE)$$

where *TO* is a dummy variable that takes a value of 1 if firms change their auditors in *t*, and 0 otherwise. *RSB* denotes auditors' ranking based on clients' total assets. *ROA* is the net income in year *t* divided by total assets in *t* – 1. *LOSS* is equal to 1 if a firm suffers a loss in year *t*, and 0 otherwise. *SP* is equal to 1 if a firm's *ROA* lies in the window [0, 0.01], and 0 otherwise. *ARTA* denotes accounts receivable in year *t* divided by total assets in *t* – 1. *INVTA* is inventory in year *t* divided by total assets in *t* – 1. *GROW* denotes the change in sales from *t* – 1 to *t* divided by total assets in *t* – 1. *BELOW* denotes below the line items divided by total assets in *t* – 1. *OCFTA* signifies net cash flow from operating activities divided by total assets in *t* – 1. *STATE* is equal to 1 if the firm is a state-owned company, and 0 otherwise. *DINDEP* is equal to 1 if the proportion of independent directors to all members of the board is higher than 1/3, and 0 otherwise. *COM* is equal to 1 if a firm sets up all four committees, and 0 otherwise. *DE* is the debt to asset ratio.

To determine whether the information conveyed in forms of address is related to corporate governance, I build the following model to examine the moderating effects of *DINDEP* and *COM* on the consequences of forms of address. As noted in the previous paragraph, *DINDEP* and *COM* capture firms' board quality. A significantly negative coefficient of *DINDEP*\**ARF* or *COM*\**ARF* indicates that the market returns to audit opinions in which clients are addressed by their real names are higher when corporate governance is weak.

$$CAR_{[-3,3]} = f (AFR, DINDEP, DINDEP * AFR, COM, COM * AFR, UE, SIZE)$$

Finally, I use the following model to test the effects of forms of address on the relationship between audit fees and corporate risk factors.

$$LFEE = f (AFR, RISK, RISK * AFR, ControlVariables)$$

Here, *LFEE* is the natural logarithm of audit fees in year *t*. *LOSS*, *SP*, *ARTA*, *BELOW* and *OCFTA* are corporate risk factors. *SEO*, an auditor risk factor, is a dummy variable equal to 1 for firms whose returns on equity are in the range [0.06, 0.065]. Past research has shown that all of these six risk factors are of concern for auditors (Zhang et al., 2006; Wu, 2012; Zhu and Sun, 2012).

### 3.2. Sample and data

My sample is composed of Chinese audit reports issued between 2003 and 2011. I focus solely on clean opinions because this type of opinion lacks numerical information. Forms of address can be identified in 13,217 of the observations with complete financial data and returns data. Deleting observations with missing data gives 12,064 observations that can be used to test the research hypotheses. The sample size is smaller when the expected market return is based on the market model, because observations with a negative adjusted *R*<sup>2</sup> from the CAPM are deleted. Data on most of the research variables are available from the China Stock Market Accounting Research (CSMAR) database. I use 10,101 observations to test the audit-fee model. Approximately 2000 firm-year audit-fee observations are missing from the CSMAR database. The data on address forms are collected manually from annual reports.

Finally, I winsorize each continuous variable by year in the top and bottom 1% to remove the effect of potential outliers. The outlier-adjusted descriptive statistics are provided in Table 4.

As shown in Table 4, the mean value of *ARF* is 0.637, which indicates that over 60% of the companies are addressed by their real names in audit opinions. In addition, the mean value of *SP* is 0.13, indicating that more than 10% of Chinese firms make a small profit.

## 4. Empirical results

### 4.1. Consequences of forms of address

The observed market responses to different forms of address are presented in Table 5. The results indicate that *ARF* is positively related to both types of cumulative abnormal returns, suggesting that the market returns to audit opinions that address companies by their real names are higher than those that use honorific



Table 4  
Descriptive statistics.

Variable	<i>n</i>	Minimum	Maximum	Mean	Median	Std. Dev.
ACAR <sub>[-3, 3]</sub>	12,064	-0.339	1.056	0.001	-0.008	0.087
RCAR <sub>[-3, 3]</sub>	11,969	-0.344	0.618	-0.002	-0.008	0.084
LFEE	10,101	11.918	15.664	13.173	13.122	0.583
ARF	12,064	0.000	1.000	0.637	1.000	0.481
UE	12,064	-0.404	0.373	0.002	0.003	0.054
TO	12,064	0.000	1.000	0.183	0.000	0.387
RSB	12,064	1.000	71.000	21.801	18.000	15.049
ROA	12,064	-0.184	0.560	0.049	0.038	0.071
LOSS	12,064	0.000	1.000	0.080	0.000	0.272
SP	12,064	0.000	1.000	0.128	0.000	0.334
ARTA	12,064	0.000	0.619	0.118	0.088	0.112
INVTA	12,064	0.000	1.496	0.207	0.152	0.209
GROW	12,064	-0.666	4.083	0.150	0.085	0.343
BELOW	12,064	0.000	0.262	0.018	0.010	0.025
OCFTA	12,064	-0.353	0.574	0.059	0.055	0.107
STATE	12,064	0.000	1.000	0.622	1.000	0.485
DINDEP	12,064	0.000	1.000	0.386	0.000	0.487
COM	12,064	0.000	1.000	0.685	1.000	0.465
DE	12,064	0.036	0.955	0.488	0.501	0.197
SIZE	12,064	19.061	27.071	21.618	21.448	1.227

ACAR<sub>[-3, 3]</sub> denotes the cumulative abnormal return in the window [-3, 3], based on market-adjusted returns.

RCAR<sub>[-3, 3]</sub> denotes the cumulative abnormal return in the window [-3, 3], based on the capital asset pricing model.

ARF is a dummy variable that takes a value of 1 if the auditor addresses the client by its real name, and 0 otherwise.

UE denotes a change in earnings from  $t - 1$  to  $t$  divided by total assets in  $t$ .

TO is a dummy variable that takes a value of 1 if firms change their auditors in period  $t$ , and 0 otherwise.

RSB denotes an auditor's ranking based on clients' total assets.

ROA is net income in year  $t$  divided by total assets in  $t - 1$ .

LOSS is equal to 1 if the firm suffered a loss in year  $t$ , and 0 otherwise.

SP is equal to 1 if the firm's ROA is in the range [0, 0.01], and 0 otherwise.

ARTA denotes accounts receivable in year  $t$  divided by total assets in  $t - 1$ .

INVTA denotes inventory in year  $t$  divided by total assets in  $t - 1$ .

GROW denotes the change in sales from  $t - 1$  to  $t$  divided by total assets in  $t - 1$ .

BELOW denotes below the line items divided by total assets in  $t - 1$ .

OCFTA denotes net cash flow from operating activities divided by total assets in  $t - 1$ .

STATE is equal to 1 if the company is a state-owned company, and 0 otherwise.

DINDEP is equal to 1 if independent directors constitute more than a third of the members of the board, and 0 otherwise.

COM is equal to 1 if a firm sets up all four committees, and 0 otherwise.

DE is the debt to asset ratio.

SIZE is the natural logarithm of total assets in  $t$ .

Table 5  
Economic consequences of forms of address in audit opinions.

	ACAR <sub>[-3, 3]</sub>		RCAR <sub>[-3, 3]</sub>	
	Coefficient	<i>p</i> -Value	Coefficient	<i>p</i> -Value
<i>Intercept</i>	-0.0012	0.96	-0.0280	0.16
<i>ARF</i>	0.0036	0.03	0.0029	0.07
<i>UE</i>	0.0862	0.00	0.0174	0.37
<i>SIZE</i>	0.0010	0.21	0.0024	0.00
<i>n</i>		12,064		11,969
<i>F Test</i>		6.43***		10.28***
<i>R</i> <sup>2</sup>		0.0199		0.0338
<i>Industry</i>	Controlled		Controlled	
<i>Year</i>	Controlled		Controlled	

The *p*-values are based on standard errors clustered by firm. All of the variables are defined in Table 4. \*, \*\*, \*\*\* denote significance levels at 10%, 5% and 1% respectively.

Table 6  
Treatment-effect model.

	ACAR <sub>[-3, 3]</sub>		RCAR <sub>[-3, 3]</sub>	
	Coefficient	p-Value	Coefficient	p-Value
<i>Intercept</i>	-0.0239	0.29	-0.0451	0.04
<i>ARF</i>	0.0253	0.03	0.0193	0.08
<i>UE</i>	0.0841	0.00	0.0158	0.28
<i>SIZE</i>	0.0017	0.04	0.0029	0.00
<i>LAMBDA</i>	-0.0135	0.06	-0.0102	0.14
<i>ARF: selection model</i>				
<i>Intercept</i>	0.7197	0.02	0.7183	0.03
<i>TO</i>	0.0883	0.01	0.0837	0.01
<i>RSB</i>	0.0113	0.00	0.0114	0.00
<i>ROA</i>	0.9395	0.00	1.0290	0.00
<i>LOSS</i>	0.1130	0.04	0.1166	0.04
<i>SP</i>	0.0465	0.23	0.0441	0.26
<i>ARTA</i>	0.0589	0.66	0.0921	0.49
<i>INVTA</i>	0.1767	0.03	0.1737	0.03
<i>GROW</i>	-0.0256	0.57	-0.0399	0.39
<i>BELOW</i>	-0.5989	0.31	-0.4741	0.44
<i>OCFTA</i>	0.1938	0.15	0.1814	0.19
<i>STATE</i>	-0.0765	0.01	-0.0816	0.00
<i>DINDEP</i>	0.0213	0.39	0.0188	0.45
<i>COM</i>	-0.0847	0.00	-0.0801	0.01
<i>DE</i>	0.2359	0.00	0.2621	0.00
<i>SIZE</i>	-0.0672	0.00	-0.0682	0.00
<i>n</i>		12,064		11,969
<i>Wald Chi<sup>2</sup></i>		792.24***		959.53***
<i>Industry</i>	Controlled		Controlled	
<i>Year</i>	Controlled		Controlled	

All of the variables are defined in Table 4. \*, \*\*, \*\*\* denote significance levels at 10%, 5% and 1% respectively.

addresses. This result also indicates that a portfolio based on the forms of address used in clean opinions will obtain a cumulative abnormal return of 0.3% in the [-3, 3] event window. This evidence is consistent with the power-solidarity effect rather than the politeness principle.

To deal with the potential endogeneity of *ARF*, I construct a treatment-effect model to determine whether the results displayed in Table 5 are robust. As shown by the selection model of *ARF* in Table 6, *ARF* is positively related to *TO* and *RSB*, which suggests that firms are more likely to be addressed by their real names when they change their auditors or their auditors are small CPA firms. This result also suggests that auditor characteristics are related to forms of address. For instance, a client is more likely to be addressed by its real name when the following conditions apply: (1) the client's return on assets is higher; (2) the client has a larger inventory; (3) the client is a non-state-owned listed firm; and (4) the client is smaller. After controlling for endogeneity, *ARF* is still significantly positive in the returns model, indicating that the results shown in Table 5 are robust.

In addition to enriching the literature on textual disclosure, the findings have implications for audit standard setting. For instance, the Public Company Accounting Oversight Board (PCAOB) is now facing a dilemma: should auditors disclose more information in audit opinions?<sup>4</sup> It could be argued that greater disclosure is good for investors; however, it may also impose huge costs on auditors. The current study sheds light on this debate by showing that auditors have an incentive to reveal information in textual differences, which is consistent with amendments to audit standards in European audit markets that require more information to be disclosed in audit opinions.

<sup>4</sup> PCAOB Release No. 'Concept release on possible revisions to PCAOB standards related to reports on audited financial statements and related amendments to PCAOB standards' (2011).

Table 7  
Forms of address and board quality.

	ACAR <sub>[-3, 3]</sub>		RCAR <sub>[-3, 3]</sub>		ACAR <sub>[-3, 3]</sub>		RCAR <sub>[-3, 3]</sub>	
	Coefficient	p-Value	Coefficient	p-Value	Coefficient	p-Value	Coefficient	p-Value
<i>Intercept</i>	-0.0018	0.94	-0.0286	0.15	-0.006	0.82	-0.0335	0.09
<i>DINDEP</i>	0.0030	0.25	0.0028	0.28				
<i>DINDEP*ARF</i>	-0.0056	0.09	-0.0061	0.06				
<i>COM</i>					0.0061	0.03	0.0067	0.01
<i>COM*ARF</i>					-0.0063	0.09	-0.0052	0.13
<i>ARF</i>	0.0058	0.00	0.0052	0.01	0.0079	0.01	0.0064	0.02
<i>UE</i>	0.0861	0.00	0.0173	0.37	0.0862	0.00	0.0174	0.37
<i>SIZE</i>	0.0010	0.22	0.0024	0.00	0.0011	0.19	0.0025	0.00
<i>n</i>		12,064		11,969		12,064		11,969
<i>F test</i>		6.06***		9.67***		6.08***		9.81***
<i>R<sup>2</sup></i>		0.020		0.034		0.020		0.034
<i>Industry</i>	Controlled		Controlled		Controlled		Controlled	
<i>Year</i>	Controlled		Controlled		Controlled		Controlled	

The *p*-values are based on standard errors clustered by firm. All of the variables are defined in Table 4. \*, \*\*, \*\*\* denote significance levels at 10%, 5% and 1% respectively.

#### 4.2. Effects of corporate governance on the market response to real-name forms of address

Empirical evidence suggests that in emerging markets, independent audits and corporate governance substitute for each other as investor-protection mechanisms. For instance, Choi and Wong (2007) find that firms in weak legal environments have an incentive to hire high-quality auditors. Similarly, Fan and Wong (2005) show that firms facing serious agency problems due to ultimate-ownership structure are more likely to hire Big-5 auditors. In this section, I aim to determine whether the market response to real-name forms of address is greater in firms with weak corporate governance. If so, it can be assumed that forms of address convey information about audit quality. I use board quality as a measure of corporate governance because it concerns all stakeholders in China's stock market. As shown in Table 7, both *DINDEP\*ARF* and *COM\*ARF* are significantly negative, suggesting that the market response to real-name forms of address is greater when there are fewer independent directors or board committees.

#### 4.3. Effects of forms of address on the relationship between audit risk factors and audit fees

In this section, I attempt to determine whether forms of address affect the association between audit risk factors and audit fees. Simunic (1980) posits that audit fees are positively related to audit risk factors because auditors suffer the litigation costs associated with audit failure. I expect the coefficients of the interaction of *ARF* and the audit risk factors to be significantly positive, in accordance with the power-solidarity effect. As shown in Table 8, the coefficients of *ARF\*LOSS*, *ARF\*SP* and *ARF\*SEO* support my conjecture. *SP* and *SEO* capture the risk that the manager has an incentive to engage in earnings management to meet the income target of the listing and seasoned equity offering regulations. Therefore, the results suggest that auditors that address clients by their real names are more concerned about earnings management.

#### 4.4. Test of the role of signing auditors' habits in determining forms of address

As shown in Table 4, some auditors use different forms of address during the research period, while others do not. Therefore, some forms of address may be driven by habit instead of choice. I define *DUM* as a dummy variable denoting the effect of habit. *DUM* is equal to 1 if the first-signing auditor uses different forms of address during the research period, and 0 otherwise. I expect the coefficient of *DUM\*ARF* to be significantly positive, because the market response to a real-name address will be strong if forms of address are not determined by habit. The results are shown in Table 9. Unfortunately, both *DUM* and *DUM\*ARF* are insignificant, indicating that *DUM* does not capture the effect of habit.

Table 8  
Test of audit fees.

	Expected sign	Coefficient	p-Value
<i>Intercept</i>		5.2930	0.00
<i>ARF</i>	?	-0.0554	0.02
<i>ARF*ROA</i>	-	0.2850	0.23
<i>ARF*LOSS</i>	+	0.0988	0.02
<i>ARF*SP</i>	+	0.0504	0.05
<i>ARF*ARTA</i>	+	0.0286	0.78
<i>ARF*BELOW</i>	+	-0.4362	0.37
<i>ARF*OCFTA</i>	+	0.0555	0.56
<i>ARF*SEO</i>	+	0.0846	0.08
<i>RSB</i>	-	-0.0058	0.00
<i>ROA</i>	-	-0.4270	0.05
<i>LOSS</i>	+	-0.0378	0.29
<i>SP</i>	+	-0.0258	0.24
<i>SEO</i>	+	-0.0692	0.10
<i>ARTA</i>	+	0.1569	0.09
<i>INVTA</i>	?	-0.1769	0.00
<i>GROW</i>	?	0.0359	0.07
<i>BELOW</i>	+	0.8255	0.05
<i>OCFTA</i>	+	-0.0481	0.55
<i>STATE</i>	-	-0.0903	0.00
<i>DE</i>	?	0.0212	0.66
<i>SIZE</i>	+	0.3595	0.00
<i>n</i>			10,101
<i>F test</i>			72.58***
<i>R<sup>2</sup></i>			0.5667
<i>Industry</i>	Controlled		
<i>Year</i>	Controlled		

SEO is a dummy variable equal to 1 for firms whose returns on equity lie in the range [0.06, 0.065]; the *p*-values are based on standard errors clustered by firm. All of the variables are defined in Table 4. \*, \*\*, \*\*\* denote significance levels at 10%, 5% and 1% respectively.

Table 9  
Test of the role of auditors' customary behavior in determining forms of address.

	ACAR <sub>[-3, 3]</sub>		RCAR <sub>[-3, 3]</sub>		ACAR <sub>[-3, 3]</sub>		RCAR <sub>[-3, 3]</sub>	
	Coefficient	p-Value	Coefficient	p-Value	Coefficient	p-Value	Coefficient	p-Value
<i>Intercept</i>	-0.0005	0.99	-0.0282	0.16	-0.0023	0.93	-0.0305	0.13
<i>DUM</i>	-0.0008	0.61	0.0003	0.87	0.0010	0.70	0.0025	0.32
<i>DUM*ARF</i>					-0.0029	0.39	-0.0035	0.27
<i>ARF</i>	0.0034	0.05	0.0029	0.08	0.0051	0.04	0.0049	0.04
<i>UE</i>	0.0863	0.00	0.0173	0.37	0.0864	0.00	0.0175	0.36
<i>SIZE</i>	0.0010	0.22	0.0024	0.00	0.0011	0.20	0.0024	0.00
<i>n</i>		12,064		11,969		12,064		11,969
<i>F test</i>		6.23***		9.95***		6.09***		9.69***
<i>R<sup>2</sup></i>		0.020		0.034		0.020		0.034
<i>Industry</i>	Controlled		Controlled		Controlled		Controlled	
<i>Year</i>	Controlled		Controlled		Controlled		Controlled	

DUM is equal to 1 if the first signatory uses different forms of address in the research period, and 0 otherwise; the *p*-values are based on standard errors clustered by firm. All of the variables are defined in Table 4. \*, \*\*, \*\*\* denote significance levels at 10%, 5% and 1% respectively.

#### 4.5. Tests using shorter event windows around audit-opinion announcements

The most commonly used window in event studies is [-1, 1]. If the event is particular, the research window is extended. For example, Sikes et al. (2014) use [-2, 2] as a test window in which to investigate

Table 10  
Tests using  $[-1, 1]$  and  $[-2, 2]$ .

	$ACAR_{[-2, 2]} [-2, 2]$		$RCAR_{[-2, 2]} [-2, 2]$		$ACAR_{[-1, 1]} [-1, 1]$		$RCAR_{[-1, 1]} [-1, 1]$	
	Coefficient	<i>p</i> -Value	Coefficient	<i>p</i> -Value	Coefficient	<i>p</i> -Value	Coefficient	<i>p</i> -Value
<i>Intercept</i>	0.0051	0.83	-0.0272	0.11	0.0142	0.51	-0.0279	0.03
<i>ARF</i>	0.0031	0.04	0.0024	0.09	0.0025	0.06	0.0018	0.12
<i>UE</i>	0.0743	0.01	0.0106	0.52	0.0550	0.03	-0.0016	0.91
<i>SIZE</i>	0.0007	0.40	0.0020	0.00	0.0002	0.75	0.0018	0.00
<i>n</i>		12,064		11,969		12,064		11,969
<i>F TEST</i>		6.07***		8.49***		5.30***		6.17***
<i>R</i> <sup>2</sup>		0.018		0.027		0.017		0.019
<i>Industry</i>	Controlled		Controlled		Controlled		Controlled	
<i>Year</i>	Controlled		Controlled		Controlled		Controlled	

The *p*-values are based on standard errors clustered by firm. All of the variables are defined in Table 4. \*, \*\*, \*\*\* denote significance levels at 10%, 5% and 1% respectively.

Table 11  
Consequences of forms of address; *p*-values based on Newey–West adjusted standard errors.

	$ACAR_{[-3, 3]}$		$RCAR_{[-3, 3]}$	
	Coefficient	<i>p</i> -Value	Coefficient	<i>p</i> -Value
<i>Intercept</i>	-0.0012	0.97	-0.0280	0.19
<i>ARF</i>	0.0036	0.03	0.0029	0.07
<i>UE</i>	0.0862	0.00	0.0174	0.37
<i>SIZE</i>	0.0010	0.23	0.0024	0.00
<i>n</i>		12,064		11,969
<i>Adjusted R</i> <sup>2</sup>		0.0174		0.0313
<i>Industry</i>	Controlled		Controlled	
<i>Year</i>	Controlled		Controlled	

The *p*-values are based on Newey–West adjusted standard errors. All of the variables are defined in Table 4.

the consequences of poison pills. In the emerging market of China, this event window could be extended further, for two reasons. First, information leakage is possible in this environment. Second, all listed firms are subject to a daily price limit on trading of 10%. To address these characteristics of the Chinese market, Chen et al. (2009) use multiple test windows, such as  $[-1, 1]$ ,  $[-2, 2]$  and  $[-5, 5]$ . Li (1999) and Chen and Zhang (1999) all conduct tests with larger event windows. In this paper, I use  $[-3, 3]$  as the main test window, because the sample is composed solely of clean opinions, and the differences between forms of address are subtle. However, to fully capture the market reaction to different forms of address, I also use the windows  $[-1, 1]$  and  $[-2, 2]$  in additional tests. The results are presented in Table 10. As shown in the table, shorter windows give smaller coefficients of *ARF*. When *CAR* is based on market-adjusted returns, the coefficient of *ARF* drops from 0.0031 to 0.0025 as the window shrinks from  $[-2, 2]$  to  $[-1, 1]$ . The results of tests using  $RCAR_{[-2, 2]}$  and  $RCAR_{[-1, 1]}$  show similar trends. Somewhat unexpectedly, however, the test of  $RCAR_{[-1, 1]}$  produces a significantly positive coefficient of *ARF* (one-tailed test; *p*-value = 0.12), indicating that the evidence is weaker for the  $[-1, 1]$  window.

#### 4.6. Statistics based on Newey–West adjusted standard errors

The *p*-values in the previous tests are based on standard errors clustered by firm. However, heteroskedastic panel data may still lead to biased results. To rule out this possibility, I conduct a sensitivity test using the method of standard-error adjustment recommended by Newey and West (1987). As shown in Table 11, *ARF* is still significantly positive, indicating that the results are robust to differently adjusted standard errors.

## 5. Conclusion

This study investigates the consequences of auditors' use of different forms of address in the unique research setting provided by the Chinese market. From 2003 to 2011, about 60% of the listed firms under study were addressed by their real names in audit opinions, while the others received audit opinions featuring honorific forms of address. Based on a sample of Chinese audit opinions, I report the following findings. First, there are greater short-term responses to the announcement of audit opinions using real names than to audit opinions featuring honorifics. Second, the market response to real-name opinions is stronger for firms with weak board governance. Third, the association between audit fees and audit risk factors is stronger for firms that receive audit opinions with real-name forms of address. The findings of this study provide further evidence on textual disclosure via forms of address.

As many as 2000 years ago, nuanced words were used to convey profound meanings in the classic Chinese text *Chūn qiū*. More specifically, forms of address were used to convey the authors' political opinions. The results of the current study suggest that this traditional use of language has been preserved. This study also sheds light on the significance of the flexibility of the Chinese language in modern financial reports.

One limitation of this study is common to all studies of audit opinions. As the real process of auditing cannot be observed, I was unable to test the possibility that auditors make adjustments to neutralize the negative effects of honorific address. This paper is also limited by the inability to identify items in the sample in which forms of address reflect auditors' customary practice rather than their choice. In future research, this limitation could be addressed by surveying more transparent forms of disclosure or through experimental research.

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## References

- Brown, R., Ford, M., 1961. Address in American English. *J. Abnorm. Soc. Psychol.* 62, 375–385.
- Brown, R., Gilman, A., 1960. The pronouns of power and solidarity. In: Sebeok, T.A. (Ed.), *Style in Language*. MIT Press, pp. 253–276.
- Brown, P., Levinson, C.S., 1978. Universals in language usage: politeness phenomena. In: Goody, E.N. (Ed.), *Questions and Politeness: Strategies in Social Interaction*. Cambridge University Press, Cambridge, pp. 56–62.
- Chen, X., Li, M., Rui, M., Xia, L., 2009. Judiciary independence and the enforcement of investor protection laws: market responses to the '1/15' notice of the Supreme People's Court of China. *China Econ. Quart.* 9 (1), 1–28 (in Chinese).
- Chen, X., Zhang, T., 1999. Market responses to capital restructure—empirical study on capital restructure in the Shanghai stock market in 1997. *Econ. Res. J.* 9, 47–55 (in Chinese).
- Choi, J.H., Wong, T.J., 2007. Auditors' governance functions and legal environments: an international investigation. *Contemp. Account. Res.* 24 (1), 13–46.
- Davis, A.K., Piger, J.M., Sedor, L.M., 2012. Beyond the numbers: Managers' use of optimistic and pessimistic tone in earnings press releases. *Contemp. Account. Res.* 29 (3), 845–868.
- DeAngelo, L.E., 1981. Auditor size and audit quality. *J. Account. Econ.* 3 (3), 183–199.
- De Franco, G., Hope, O., Vyas, D., Zhou, Y., 2011. Ambiguous Language in Analyst Reports. Working paper, University of Toronto.
- Demers, E., Vega, C., 2011. Linguistic Tone in Earnings Announcements: News or Noise? Working Paper, INSEAD.
- Dye, R.A., 1993. Auditing standards, legal liability, and auditor wealth. *J. Polit. Econ.* 101 (5), 887–914.
- Ervin-Tripp, S.M., 1972. On sociolinguistic rule: alternation and co-occurrence. In: John, J. (Ed.), *Directions in Sociolinguistics*. Gumperz and Dell Hymes. Rinehart and Winston, New York, pp. 213–250.
- Fan, J.P.H., Wong, T.J., 2005. Do external auditors perform a corporate governance role in emerging markets? Evidence from East Asia. *J. Account. Res.* 43 (1), 35–72.
- Feldman, R., Govindaraj, S., Livnat, J., Segal, B., 2009. Management's tone change, post earnings announcement drift and accruals. *Rev. Acc. Stud.* 15, 915–953.
- Henry, E., 2008. Are investors influenced by how earnings press releases are written? *J. Bus. Commun.* 45, 363–407.
- Li, F., 2008. Annual report readability, current earnings, and earnings persistence. *J. Account. Econ.* 45, 221–247.

- Li, F., Lundholm, R., Minnis, M., 2011. The impact of perceived competition on the profitability of investments and future stock returns. Working Paper, University of Michigan and University of British Columbia.
- Li, Z., 1999. Empirical study: information contents of audit opinions. *Account. Res.* 8, 16–22 (in Chinese).
- Loughran, T., McDonald, B., 2011. When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks. *J. Finance* 66 (1), 35–65.
- Merkley, K.J., 2011. Narrative Disclosure and Earnings Performance: Evidence from R&D Disclosures. Working paper, Cornell University.
- Nelson, K., Pritchard, A., 2007. Litigation Risk and Voluntary Disclosure: The Use of Meaningful Cautionary Language. Working paper, Rice University.
- Newey, W., West, K., 1987. A simple positive semi-definite, heteroskedasticity and autocorrelation consistent covariance matrix. *Econometrica* 55, 703–708.
- Scotton, C.M., Zhu, W., 1983. Tongzhi in China: Language change and its conversational consequences. *Lang. Soc.* 12 (4), 477–494.
- Sikes, S.A., Tian, X., Wilson, R., 2014. Investors' reaction to the use of poison pills as a tax loss preservation tool. *J. Account. Econ.* 57, 132–148.
- Simunic, D.A., 1980. The pricing of audit services: theory and evidence. *J. Account. Res.* 18 (1), 161–190.
- Simunic, D.A., Wu, X., 2009. China-related research in auditing: a review and directions for future research. *China J. Account. Res.* 2 (2), 1–25.
- Sun, Z., Wang, Y., 1999. Empirical study on explanatory paragraphs and changing of audit opinion. *Intern. Audit. China* 6, 10–15 (in Chinese).
- Tama-Sweet, I., 2009. Do managers alter the tone of their earnings around stock option grants and exercises? Dissertation, Department of Accounting and the Graduate School of the University of Oregon in California State University.
- Wu, X., 2012. Corporate governance and audit fees: evidence from companies listed on the Shanghai Stock Exchange. *China J. Account. Res.* 5 (4), 321–342.
- Xiong, Y., 2007. Spirit of Chinese people in the Spring and Autumn: imperial power and academia in traditional context of China. Shanxi Normal University General Publishing House Co., Ltd, Xian, pp. 105–111 (in Chinese).
- Zhang, S., 2009. Exploring the Origins of Bingcheng from the perspective of language, literature and culture. *Soc. Sci. China* 5, 154–167 (in Chinese).
- Zhang, Q., Zhang, M., Dai, J., 2006. Review of research on audit pricing in China. *Account. Res.* 6, 87–93 (in Chinese).
- Zhao, Z., 2007. Small profit, independent directors and auditing. *Account. Res.* 4, 90–94 (in Chinese).
- Zhao, Z., Zhou, J., 2013. Independent directors with industrial expertise, business complexity and audit fees. *China Account. Finance Rev.* 1, 39–79.
- Zhu, K., Sun, H., 2012. The reform of accounting standards and audit pricing. *China J. Account. Res.* 5 (2), 187–198.