# The Effect of Local Holdings on Audit Policy and Outcomes\*

# BOK BAIK\*\*

Seoul National University Seoul, Korea

#### **Abstract**

This paper examines whether local block holdings are associated with audit policy and outcomes. For local investors are long-term investors and they tend to invest a larger portion of their total investment in local companies, I posit that local block holders will be dedicated investors and have strong incentives to monitor management. Consistently I find that companies with local block holders are less likely to have unclean/going-concern opinions, and more likely to have long-term relationships with auditors. In addition, although I find weak evidence that the existence of local block investors affects audit fees, I do not observe any significant difference of audit fees between firms with local block holdings and firms with nonlocal block holdings. Overall, this paper shows that information advantage of local investors can have real effects on audit process through monitoring activities.

Keywords: local bias, audit quality, blockholders, audit outcome

# INTRODUCTION

Using an extensive dataset on institutional block holdings by geographically proximate investors (i.e., local institutional block holdings), I examine whether firms' audit policy and outcomes (i.e.,

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<sup>\*\*</sup> Associate Professor, College of Business, Seoul National University (bbaik@snu.ac.kr), phone: 82-2-880-2524.

audit fees, audit opinions, and auditor selection) systematically differ in the presence of local institutional block holders relative to firms with nonlocal institutional block holders and with no block holders. These variables are often used to proxy audit quality (Francis 2004).

Firms engage auditors to monitor firm activity related to material misstatements in financial statements and the going-concern nature of the firm.<sup>2)</sup> Prior studies suggest that block holders also have incentives to act as monitors of a broad set of firm activities, and I expect the audit policy and audit outcomes of the firm to be within the realm of the block holder's interests and influence. Recent evidence also suggests that information and cost advantages due to the geographic proximity of the block holder (local versus nonlocal) to the firm's headquarters may enable some block holders to better perform this monitoring function. Also, local investors tend to hold their holdings for longer periods than nonlocal investors (Kang and Kim 2008). Previous studies use institutional investors' stock trading style, such as portfolio turnover and diversification, as proxies for information advantages and show that certain types of institutional investors have consistent information advantages over other types of institutional investors (Bushee 1998; Ke and Petroni 2004). However, the approaches used in these papers to classify institutional investors into informed and uninformed investors are unclear in explaining the sources of information advantages that institutional investors have. Furthermore, their classifications of institutional investors themselves may simply identify some firm characteristics related to future stock returns. My classification attributes geographic proximity to be a major source of informational advantage for monitoring and thus is less likely to be subject to an endogeneity problem.<sup>3</sup> Using geographic proximity, I identify local block investors and investigate whether the likelihood of qualified audit opinions including going concern opinions, the likelihood of auditor changes,

I use the term audit policy to refer to auditor selection and payment decisions.
 Audit outcome represents the result of the audit process (i.e., an unqualified or
 qualified audit opinion).

<sup>2)</sup> With respect to fraud detection, SAS No. 99 requires that the auditors (1) gather information needed to identify risks of material misstatement due to fraud, (2) assess these risks after taking into account an evaluation of the entity's programs and controls and (3) respond to the results.

Gaspar and Massa (2007) and Kang and Kim (2007) document evidence on the exogeneity of local ownership.

and the level of audit fees differ systematically across firms with local institutional block holders, firms with nonlocal institutional block holders, and firms with no block holders.

Unlike small shareholders who free-ride corporate governance activities of other shareholders (Grossman and Hart 1980), block holders have strong incentives to monitor managerial performance and take actions that enhance firm value (Shleifer and Vishny 1986). For example, prior studies document that outside block holders play an important role regarding executive compensation policy (Mehran 1995; Bertrand and Mullainathan 2000) and top executive turnover (Denis et al. 1997; Bethel et al. 1998; Kaplan and Minton 1994; Kang and Shivdasani 1995). Evidence also suggests that takeover activity is affected by the presence of external block holders (Mikkelson and Partch 1989; Shivdasani 1993). Further evidence of the monitoring role of block holders is found in Dechow et al. (1996), who find that firms manipulating their earnings are less likely to have an external block holder.

More recent evidence suggests that local block holders, those geographically closer to investee headquarters, have certain advantages over nonlocal block holders that may enhance their ability to act as firm monitors. Several studies find evidence consistent with geographically proximate investors and analysts having an informational advantage, as evidenced by higher average returns (Baik et al. 2010; Coval and Moskowitz 2001; Ivkovic and Weisbenner 2005) and more accurate earnings forecasts (Malloy 2005). Additionally, closer proximity is expected to reduce monitoring costs for local relative to nonlocal block holders. Sussman and Zeira (1995) model bank monitoring costs as an increasing function of distance. Kedia and Rajgopal (2011) find that firms located near an SEC office are less likely to misreport financial information, consistent with firms assessing the probability of SEC oversight as a function of monitoring costs associated with distance. The enhanced ability of local block holders to act as monitors is evident in Kang and Kim (2008), who show that, relative to remote block holders, local block holders are more likely to engage in post-acquisition governance activities in targets, and that targets with local block holders experience higher abnormal announcement returns and better post-acquisition operating performance.

Given their incentives and abilities to monitor firm activities and influence corporate policy, I expect firms with block holders to be

more likely to select a higher quality auditor relative to firms with no block holders. In particular, I expect that increased oversight and ability to affect policy that enhances firm value by block holders, especially by local block holders, will also be evident in the audit outcomes of the firm; I expect a lower likelihood of qualified audit opinions, including going concern opinions. Results confirm a lower likelihood of qualified audit opinions, including a lower likelihood of a going concern opinion, for firms with local block holders relative to firms with nonlocal block holders and firms with no block holders.

Increased oversight of managerial activities and ability to influence corporate policy are also expected to decrease factors, such as earnings management, that may contribute to auditor turnover (Dechow, Sloan, and Sweeney 1996). Given evidence in prior studies suggesting enhanced opportunities to independently monitor managerial activities, I expect lower auditor turnover for local block holder firms in particular. Results confirm this expectation. I find a lower likelihood of auditor change for firms with local block holders relative to firms with nonlocal block holders and firms with no block holders.

Similarly, I also expect that the independent monitoring function of the local block holder moderates the importance of the auditor as a monitor. That is, local block holders will demand a higher quality audit as evidenced by higher audit fees (after controlling for the effect of auditor quality on audit fees) than non block holders. Interestingly, I find strong evidence that firms with nonlocal block holders pay higher audit fees, and weaker evidence (p-value = 0.10) that local block holder firms also pay higher audit fees relative to firms with no block holders, consistent with block holders influencing the demand for higher quality audits.

In summary, my evidence suggests clear differences in audit policy and audit outcomes for firms with local block holders relative to firms with nonlocal block holder and firms with no block holders. My results are consistent with the monitoring story by local block holders. In other words, local block holders with enhanced informational advantages can independently monitor firm activities

<sup>4)</sup> However, differences in auditor quality between local and nonlocal block holder firms may not be clear since geographic proximity for local block holders increases their ability to influence selection of a higher quality auditor while at the same time increasing their information advantages to independently monitor firm activity, potentially decreasing the importance of auditor quality relative to nonlocal block holders.

moderating the importance of auditor and audit quality relative to nonlocal block holder firms. Local block holder advantages to more closely monitor management and influence corporate policy also appear to enhance auditor stability, the auditor's opinion of the representational faithfulness of the firm's financial statements, and the auditor's opinion on the going concern nature of the firm relative to firms with nonlocal and no block holders.

My study contributes to the literature in several ways. To my best knowledge, this study is the first to examine the impact of local block holding ownership on audit policy and outcomes. Thus, my study adds new findings to the literature on the relation between monitoring mechanisms and audit attributes (Carcello et al. 2002). My results suggest that local block holders play an important monitoring role (Ayers et al. 2011) and in turn improve audit quality. My paper is also related to the extant research that examines the determinants and the economic consequences of audit quality (Choi and Kwon 2008; Choi et al. 2008; Francis, 2004). I extend the literature by providing new evidence that local investors influence audit quality. Second, previous accounting literature (Bushee 1998; Ke and Ketroni 2004) has focused on whether certain types of investors, such as transitory investors, have information advantages over other investors and whether such information advantages affect their investment decisions. However, it is not well known whether information asymmetry has real effects on audit procedures. This paper can show that the information advantage of investors can have real effects on audit process through monitoring of informed investors. Finally, I add to the literature on the effect of geographic proximity on portfolio performance and analyst performance, by providing evidence on the role of local investors in determining audit quality.

The rest of the paper is organized as follows. Section 2 provides literature review and my research questions. Section 3 describes the data and research design. Section 4 provides empirical evidence and Section 5 concludes.

#### LITERATURE REVIEW

### Local investors

Recent studies document that geography plays an important role in financial economics. For example, Coval and Moskowitz (1999) analyze the role of geographic proximity in the context of U.S. mutual fund managers and show that U.S. fund managers exhibit a bias toward locally headquartered firms, particularly with small, highly leveraged firms that produce nontraded goods. Coval and Moskowitz (2001) also show that on average fund managers generate an additional return of 2.65 percent per year from their local investments compared to their nonlocal investments. They argue that fund managers earn such abnormal returns in their local holdings as compensation for information they acquire about local companies. Ivkovic and Weisbenner (2005) examine the stock investments of U.S. households and show that individual investors exhibit a local bias to an even larger degree than professional money managers do. They also find that the average household generates an additional return of 3.7 percent per year from its local holdings relative to its nonlocal holdings. Moreover, Malloy (2005) shows that geographically proximate analysts provide more accurate earnings forecasts, update their forecasts more frequently and impact stock prices more than nonlocal analysts. In the context of acquisitions, Kedia et al. (2008) show that acquirers have a strong preference for local firms. They also show that bidder returns in local transactions are higher than those in nonlocal transactions.

Therefore, these findings suggest that investors can access to information more easily for local firms than nonlocal firms, which translates into better investment performance. Specifically, local investors could acquire information about the firm with lower costs than nonlocal investors. Geographically proximate investors may use less time and face lower costs associated with traveling and searching for information about a particular firm. They may follow the firm through local media reports. Furthermore, investors may have informal sources of information about local companies, such as conversations with employees, managers, suppliers of the firm, and customers. In particular, large shareholders, such as block holders, located near the firm can visit the firm and meet CEOs face-to-face

more often to obtain information.<sup>5)</sup>

In addition to their informational advantages, geographically proximate investors may have advantages in terms of monitoring costs over distant investors. Monitoring of management involves substantial costs to investors and such monitoring costs may be related to the distance between investors and the firm. Monitoring costs tend to increase with the distance from the firm because of extra communication costs or transportation costs incurred by investors. For example, Sussman and Zeira (1995) present a model in which banks face monitoring costs that increase in distance. Empirically, Peterson and Rajan (2002) and Degryse and Ongena (2005) show that transportation costs cause price discrimination in bank lending. In the context of U.S. venture capital, Lerner (1995) finds that the board membership of VCs in private biotechnology firms is partly determined by the distance between the firms and the venture capitalist. 6) Lerner argues that the monitoring costs associated with frequent visits and intensive involvement can be reduced if the venture capitalist is located near a company's headquarters. In addition, Kedia and Rajgopal (2011) show that the distance between firms and the SEC office is positively associated with the likelihood of financial misreporting, suggesting that firms behave as if they understood that the monitoring cost of regulators is an increasing function of distance. Choi et al. (2008) show that audit quality and audit pricing are influenced by geographic proximity of auditors to clients.

Furthermore, Coval and Moskowitz (2001) argue that fund managers' information advantages may be the result of improved monitoring capabilities of local firms, which suggests that the governance activities of investors may enhance their information advantage.<sup>7)</sup> For instance, shareholders who have their representatives on the

<sup>5)</sup> The sample period covers post regulation fair disclosure years. I acknowledge that this is not possible in the post regulation fair disclosure period.

<sup>6)</sup> Lerner (1995) shows that venture capital organizations located within five miles from a firm's headquarters are twice as likely to provide board members to the firm as those more than 500 miles away. Lerner argues that the transaction costs associated with frequent visits and intensive involvement prevent remote venture capitalist from actively participating in the governance activity in the firm.

<sup>7)</sup> Coval and Moskowitz (2001) suggest that the governance activities of geographically proximate investors may facilitate their information advantage over remote investors: "This information may be the result of improved monitoring capabilities or access to private information of geographically proximate firms." (pp. 812, 838) This observation suggests that geographically proximate investors may be better monitors than other investors.

board of directors are expected to have superior access to information about the firm.

In sum, geographically proximate investors may have significant advantages in terms of governance activities over remote investors. To the extent that local investors face lower transaction costs associated with their governance activities, they may be more likely to monitor managerial performance and pursue active governance strategies compared to nonlocal investors. Moreover, the governance activities of local investors may be more effective than those of nonlocal investors since investors located near the firm can closely monitor management and take governance actions quickly in respond to management decisions. Furthermore, such governance activities of local investors may have important influence on operating performance and firm value. In particular, Kang and Kim (2008) show that that local block holders are more likely to engage in post-acquisition governance activities in targets than are remote block holders, and targets of local block holders experience both higher abnormal announcement returns and better post-acquisition operating performance than do remote targets.

### **Block Holders**

I focus on block holders since unlike small shareholders who are likely to free-ride the corporate governance activities of other shareholders (Grossman and Hart1980), large shareholders have strong incentives to monitor managerial performance and take actions that enhance firm value (Shleifer and Vishny 1986). For example, Denis et al. (1997), Bethel et al. (1998), Kaplan and Minton (1994), and Kang and Shivdasani (1995) show that outside block holders play an important role in the process of top executive turnover. Specifically, they find that the probability of top executive turnover is positively related to the presence of outside block shareholder. In addition, Shivdasani (1993) shows that domestic large outside shareholders increase the likelihood that a firm is taken over, while Denis and Serrano (1996) shows that, if a takeover is defeated, management turnover is higher in poorly performing firms that have domestic block holders.

### **Audits**

A frontier work on auditing by Simunic and Stein (1996) provides an economic framework for audit quality. They develop a theoretical model that the economic costs of auditing vary with the size, complexity, riskiness, and other characteristics of the audited firm. Given the importance of monitors' oversight of the financial reporting and audit processes, it is plausible that audit policy and outcomes are influenced by monitoring mechanisms such as board characteristics and block holders (Beasley 1996; Chung and Lee 1998; Dechow et al. 1996). Prior research provides some evidence on the effect of monitoring mechanism on audit quality. Klein (2002), Beasley and Salterio (2001), and DeFond et al.(2002) suggest that boards with stronger governance attributes tend to value the services of high quality audit.

In this paper, I relate several audit attributes such as audit opinions, audit turnover, and audit pricing to the existence of block holdings. Audit opinions and auditor turnover may reflect audit quality. For example, DeFond and Subramanyam (1998) find that discretionary accruals are income decreasing during the last year with the previous auditor and insignificant during the subsequent years with the successor. Bradshaw et al. (2001) examine the association between accruals and auditor turnover and unclean opinions and find no evidence that auditors signal the higher likelihood of GAAP violations associated with high accruals via audit opinion or auditor changes. DeFond et al. (2002) and Reynolds and Francis (2000) also indicate that one of the most common measures to infer auditor behavior is to use the propensity to issue going concern qualifications. Chen and Church (1996) find that the market reaction to a bankruptcy announcement is less negative when the auditor has previously issued a going-concern report, suggesting that a going-concern report is more of a surprise to investors. The extant audit research indicates that audit quality is priced in the market (Choi et al. 2008). Carcello et al. (2002) also provide evidence that there is a positive relation between audit fees and board independence, diligence, and expertise, suggesting that the board of directors is likely to review and affect the overall audit scope and audit fee.

To the extent that local block holders curve managerial opportunism

and play a better monitoring role than nonlocal block holders, I expect that companies with local block holders are less likely to have unclean/going-concern opinions, more likely to have long-term relationships with auditors, and more likely to pay audit fees.

#### DATA AND RESEARCH DESIGN

#### Data

The initial sample includes all U.S. firm years populated in COMPUSTAT for the sample period of 1988-2005. I obtain information on institutional ownership from actual forms filed with the SEC on a quarterly basis. The SEC requires institutions managing more than \$100 million in equity to file a quarterly report of equity holdings more than 10,000 shares or \$200,000 in market value. To identify geographically proximate investors, I collect locations of institutions' headquarters from SEC filings, Nelson's Directory of Investment Managers, and Moody's Bank and Finance Manual. I define local investors as institutional investors whose headquarters are located within the same state as the firms' head quarters. I obtain a firm's auditors, auditor changes, unclean opinions from COMPUSTAT. For the analysis that requires information on going concern opinions and audit fees, I collect data from Audit Analytics. Due to data availability on Audit Analytics (i.e., the coverage of Audit Analytics is from 2000 to 2005), I have less sample size for the analysis on going concern opinions and audit fees. Accounting and stock return data are obtained from COMPUSTAT and CRSP.

## Research Design

To test the hypothesis, I estimate the following regression models that link audit attributes with the existence of local block holders and other control variables:

$$\begin{split} &P(Unclean=1) = \beta_0 + \beta_1 LocalBlock(NonlocalBlock) + \beta_2 Size \\ &+ \beta_3 BTM + \beta_4 AR + \beta_5 Inv + \beta_6 Debt + \beta_7 ROA + \beta_8 Bigfour \\ &+ \beta_9 Age + \beta_{10} Pastreturn + \beta_{11} Beta + \beta_{12} \ Re\ turn\ var + \varepsilon \end{split} \tag{1}$$

 $P(Goingconcern=1) = \beta_0 + \beta_1 Local Block(Nonlocal Block)$ 

$$+\beta_{2}Size + \beta_{3}BTM + \beta_{4}AR + \beta_{5}Inv + \beta_{6}Debt + \beta_{7}ROA +\beta_{8}Bigfour + \beta_{9}Age + \beta_{10}Pastreturn + \beta_{11}Beta +\beta_{12}Re turn var+ \varepsilon$$
 (2)

$$P(Auditorchange = 1) = \beta_0 + \beta_1 LocalBlock(NonlocalBlock) + \beta_2 Size + \beta_3 BTM + \beta_4 AR + \beta_5 Inv + \beta_6 Debt + \beta_7 ROA + \beta_8 Bigfour + \beta_9 Age + \beta_{10} Pastreturn + \beta_{11} Beta + \beta_{12} Re turn var + \varepsilon$$
(3)

$$\begin{split} Log(Fees) &= \beta_0 + \beta_1 LocalBlock(NonlocalBlock) + \beta_2 Size \\ &+ \beta_3 BTM + \beta_4 AR + \beta_5 Inv + \beta_6 Debt + \beta_7 ROA + \beta_8 Bigfour \\ &+ \beta_9 Age + \beta_{10} Pastreturn + \beta_{11} Beta + \beta_{12} \ Re\ turn\ var + \varepsilon \end{split} \tag{4}$$

where Size is the natural logarithm of market cap, BTM is book-to-market ratio, AR is accounts receivable deflated by total assets, Inv is inventory deflated by total assets, Debt is total debt deflated by total assets, ROA is operating income deflated by total assets, Bigfour is 1 for big four accounting firms, 0 otherwise, Age is the number of months since a firm's first appearance in COMPUSTAT, Past return is the preceding six-month return, Beta is estimated from the market model by using days -220 to -20 relative to the earnings announcement date, in which the market return is measured as the CRSP value-weighted return. Returnvar is the variance of the residual from the same market model.

Endogenity and self-selection issues may arise if I examine a contemporaneous relation between audit attributes and the existence of local block holdings. While local block holders exert monitoring efforts and affect audit quality, it is possible that local block holders self-select into those firms with high audit quality. To address this potential endogeneity and self-selection issues related to local block holding ownership and audit attributes, I utilize a lead-lag approach. In other words, I measure my explanatory variable and control variables in the year t-1 and the dependant variables in year t.

The key variable of interest is a dummy variable for the existence of local (nonlocal) block holders. I take the value of 1 if there exists local (nonlocal) block institutional ownership, 0 otherwise. Local (nonlocal) block institutional ownership is 1 if the firm has at least 5% of block equity holdings by institutional investors whose head-

Table 1. Descriptive Statistics of the Sample Firms

<del>_</del>	No.	Mean	Standard	Median
	observations		Deviation	
Unclean audit opinion dummy	56,340	0.28	0.45	0
Going-concern opinion dummy	19,711	0.07	0.25	0
Auditor change dummy	58,817	0.11	0.32	0
Audit fees (\$)	18,979	1,087,089	3,120,370	323,977
block institutional ownership	58,817	0.62	0.48	1
dummy				
local block institutional	58,817	0.12	0.32	0
ownership dummy				
Non-local block institutional	58,817	0.58	0.49	1
ownership dummy				
Market capitalization (\$bil)	56,462	1,804.5	10899.9	152.3
Book-to-market	58,817	0.37	1.30	0.45
Account receivables/total	56,329	0.17	0.14	0.14
assets				
Inventory/total assets	56,198	0.11	0.13	0.05
Total debt/ total assets	56,474	0.25	2.31	0.18
Operating income/total assets	58,817	-0.12	0.45	0.02
Dummy for big four audit firm	58,817	0.83	0.36	1
Age (months)	57,201	161.74	176.39	100.00
Past 6 month-return	57,201	0.04	0.53	0
beta	57,229	0.75	1.20	0.65
Variance of the residual from	57,215	0.002	0.008	0.001
the market model over the				
fiscal year				

The table reports descriptive statistics for the sample firms. The sample consists of firm-years with institutional ownership from CDA/Spectrum Institutional (13f) Holdings for the period 1988-2005 for which the locations of firm and institution headquarters are available. Block institutional ownership is 1 if the firm has at least 5% of block institutional ownership, 0 otherwise. Local (nonlocal) block institutional ownership is 1 if the firm has at least 5% of block equity holdings by institutional investors whose headquarters are located within the same (different) state as the firms' headquarters. Audit opinions and auditor fees are obtained from Audit Analytics for the period of 2000-2005. Auditors and audit opinions are obtained from Compustat Annual. Unclean audit opinion is an indicator variable, and is assigned the value of 0 for an unqualified opinion in year t and the value of 1 for any other opinion, including qualified, adverse or unqualified with explanatory language. Book-to-market and return on assets are winsorized at the 1st and 9.

 $9^{\rm th}$  percentiles. To measure beta and variance of the residual from the market model, I estimate market model parameters by using days -220 to -20 relative to the earnings announcement date. I use as the market return the CRSP value-weighted return.

quarters are located within the same (different) state as the firms' headquarters. The auditing literature provides guidance on the control variables (Choi and Dugar 2005; DeFond and Subramanyam 1998; Francis 2004; Higgs and Skantz 2006). The control variables that I use are firm size, book-to-market ratio, accounts receivable, inventory, debt, operating income, a big four dummy, age, past sixmonth return, beta, and return volatility. Detailed definitions of the control variables are summarized in Table 1. I also control for year dummy variables and industry dummy variables. For brevity, I do not include those variables in the results.

#### RESULTS

# **Descriptive Statistics**

Table 1 presents the descriptive statistics for the variables I use in the empirical analyses. 28% of the firms are associated with unclean audit opinions. Unclean audit opinion is an indicator variable, and is assigned the value of 0 for an unqualified opinion in year t and the value of 1 for any other opinion, including qualified, adverse or unqualified with explanatory language on COMPUSTAT. The average going concern opinion dummy is 0.07 and the mean auditor turnover dummy is 0.11. The mean (median) audit fees is \$1.09 (0.32) millions.

The mean block institutional ownership dummy is 0.62, indicating about 62% of my sample firms have a block institutional holder. 12% of the sample firms have a local block institutional holder while 58% of the sample firms show a nonlocal block institutional holder. The mean (median) firm size is \$1,804 (152.3) billions while the book-to-market ratio shows a mean (median) of 0.37 (0.45). The mean accounts receivable is 17% of total assets and inventory accounts for 11% of total assets on average. The mean leverage (debt/

<sup>8)</sup> I find that firms with both local and nonlocal block holders are more likely to use a Big 4 audit firm relative to firms with no block holders. Interestingly, I find that nonlocal block holder firms are slightly more likely to select a higher quality auditor than local block holder firms. This result suggests that the independent monitoring function of the local block holder may substitute to some degree for the monitoring function of the auditor, while the remote nonlocal block holders rely more on the auditor as monitor.

total assets) is 0.25. About 83% of the sample hire one of the big four firms during the sample period. The average age of the firms is 13.4 years and the mean preceding six-month return is 4% while the mean beta is 0.75. The mean (median) residual return volatility is 0.002 (0.001).

## **Existence of Local Block Holdings and Unclean Opinions**

Prior research indicates that not all institutions have incentives to monitor management (Bushee 1998; Gaspar et al. 2005). As discussed earlier, I predict that local block institutional holders are better monitors than nonlocal institutional holders and thus firms with local block holdings are less likely to have unclean opinion than those with nonlocal block holdings or firms with no block holdings.

I report the probit regression results for equation (1) in Table 2. In the first column, I include a dummy for the existence of block institutional ownership and the controls. I find that the coefficient on the block holding dummy is insignificant, suggesting that the block institutional holding itself is not related to unclean opinions. In the second column, I include a dummy for local block holdings and a dummy for nonlocal block holdings. Consistent with the prediction, I find that the coefficient on local block holdings is a significant -0.16 (*p*-value<0.01) while that for nonlocal block holdings is insignificant. This evidence is consistent with the beneficial effects of local block holder monitoring. This finding also confirms the view that institutional investors are not homogeneous. The coefficient estimates of the control variables are largely consistent with prior research.

# **Existence of Local Block Holdings and Going-Concern Opinions**

I also expect that the existence of local block holdings leads to a lower incidence of going-concern reports. Table 3 presents the probit regression results in equation (2).

It is noteworthy that my sample size is much smaller for the analysis since I employ the data from Audit Analytics. The sample consists of 19,711 firm-years. However, I lose a few observations in the regressions due to data availability for the controls. As shown in the first column, I find that the coefficient on the block holding

Table 2. Probit Regressions of Unclean Opinions on Block Institutional Ownership and Control Variables

	Dependent variable:				
	1 for unclean opinions, and 0 otherwise				
Independent variables	(1)		(2)		
	Parameter Estimate	p-value	Parameter Estimate	p-value	
1 for block institutional ownership, 0 otherwise	-0.03	0.15			
1 for local block institutional ownership, 0 otherwise			-0.16	<0.01	
1 for non-local block institutional ownership, 0 otherwise			-0.01	0.35	
Log (market capitalization)	0.06	< 0.01	0.06	< 0.01	
Book-to-market	-0.04	< 0.01	-0.04	< 0.01	
Account receivables/total assets	0.32	< 0.01	0.32	< 0.01	
Inventory/total assets	-0.34	< 0.01	-0.34	< 0.01	
Total debt/total assets	0.77	< 0.01	0.76	< 0.01	
Operating income/total assets	-1.04	< 0.01	-1.04	< 0.01	
1 for big four audit firms, 0 otherwise	0.19	< 0.01	0.18	< 0.01	
Log (age)	0.25	< 0.01	0.25	< 0.01	
Past 6 month-return	-0.15	< 0.01	-0.15	< 0.01	
beta	-0.02	0.03	-0.02	0.04	
Variance of the residual from the	30.35	< 0.01	30.52	< 0.01	
market model over the fiscal year					
Intercept	-2.88	< 0.01	-2.88	< 0.01	
Prob>Chi-square	<0.01		<0.01		
No. of observations	53,899		53,899		

The table reports the probit regressions estimating the likelihood of unclean audit opinions. The sample consists of firm-years with institutional ownership from CDA/Spectrum Institutional (13f) Holdings for the period 1988-2005 for which the locations of firm and institution headquarters are available. Block institutional ownership is 1 if the firm has at least 5% of block institutional ownership, 0 otherwise. Local (nonlocal) block institutional ownership is 1 if the firm has at least 5% of block equity holdings by institutional investors whose headquarters are located within the same (different) state as the firms' headquarters. Audit opinions are obtained from Compustat Annual. Unclean audit opinion is an indicator variable, and is assigned the value of 0 for an unqualified opinion in year t and the value of 1 for any other opinion, including qualified, adverse or unqualified with explanatory language. Book-tomarket and return on assets are winsorized at the 1st and 99th percentiles. To measure beta and variance of the residual from the market model, I estimate market model parameters by using days -220 to -20 relative to the earnings announcement date. I use as the market return the CRSP value-weighted return. p-values reported are two-tailed.

Table 3. Probit Regressions of Going-Concern Opinions on Block Institutional Ownership and Control Variables

	Dependent variable: 1 for going-concern opinions, and 0 otherwise				
Independent variables	(1)		(2)		
	Parameter Estimate	p-value	Parameter Estimate	p-value	
1 for block institutional ownership, 0 otherwise	-0.05	0.52			
1 for local block institutional ownership, 0 otherwise			-0.74	<0.01	
1 for non-local block institutional ownership, 0 otherwise			0.02	0.78	
Log (market capitalization)	-0.59	<0.01	-0.59	< 0.01	
Book-to-market	-0.33	<0.01	-0.33	< 0.01	
Account receivables/total assets	-1.97	<0.01	-1.98	< 0.01	
Inventory/total assets	0.99	< 0.01	0.99	< 0.01	
Total debt/ total assets	0.12	0.28	0.11	0.32	
Operating income/total assets	-1.71	<0.01	-1.72	< 0.01	
1 for big four audit firms, 0 otherwise	0.02	0.83	0.02	0.77	
Log (age)	0.09	0.03	0.09	0.05	
Past 6 month-return	-0.68	<0.01	-0.69	< 0.01	
beta	-0.06	0.28	-0.05	0.35	
Variance of the residual from the	29.37	<0.01	28.68	< 0.01	
market model over the fiscal year					
Intercept	-1.14	<0.01	-1.07	<0.01	
Prob>Chi-square	<0.01		<0.01		
No. of observations	18,524		18,5	18,524	

The table reports the probit regressions estimating the likelihood of going-concern opinions. The sample consists of firm-years with institutional ownership from CDA/Spectrum Institutional (13f) Holdings for the period 1988-2005 for which the locations of firm and institution headquarters are available. Block institutional ownership is 1 if the firm has at least 5% of block institutional ownership, 0 otherwise. Local (nonlocal) block institutional ownership is 1 if the firm has at least 5% of block equity holdings by institutional investors whose headquarters are located within the same (different) state as the firms' headquarters. Going-concern opinions are extracted from Audit Analytics for the period of 2000-2005. Book-to-market and return on assets are winsorized at the 1st and 99th percentiles. To measure beta and variance of the residual from the market model, I estimate market model parameters by using days -220 to -20 relative to the earnings announcement date. I use as the market return the CRSP value-weighted return. p-values reported are two-tailed.

Table 4. Probit Regressions of Auditor Changes on Block Institutional Ownership and Control Variables

		. 1	1 1		
	Dependent variable:				
	1 for auditor changes, and 0 otherwise				
Independent variables	(1)		(2)		
	Parameter		Parameter	m ====1====	
	Estimate	p-value	Estimate	p-value	
1 for block institutional ownership, 0	-0.001	0.97			
otherwise					
1 for local block institutional			-0.13	< 0.01	
ownership, 0 otherwise					
1 for non-local block institutional			0.01	0.56	
ownership, 0 otherwise					
Log (market capitalization)	-0.04	< 0.01	-0.04	< 0.01	
Book-to-market	0.02	0.22	0.02	0.22	
Account receivables/total assets	0.09	0.36	0.09	0.37	
Inventory/total assets	-0.64	<0.01	-0.63	< 0.01	
Total debt/ total assets	0.02	0.48	0.02	0.55	
Operating income/total assets	-0.42	< 0.01	-0.42	< 0.01	
1 for big four audit firms, 0 otherwise	-1.24	< 0.01	-1.24	< 0.01	
Log (age)	-0.04	<0.01	-0.04	< 0.01	
Past 6 month-return	-0.08	<0.01	-0.08	< 0.01	
beta	-0.04	0.04	-0.04	0.04	
Variance of the residual from the	0.76	0.62	0.74	0.63	
market model over the fiscal year					
Intercept	-0.86	<0.01	-0.86	<0.01	
Prob>Chi-square	<0.01		<0.01		
No. of observations	54,203		54,203		

The table reports the probit regressions estimating the likelihood of auditor changes. The sample consists of firm-years with institutional ownership from CDA/Spectrum Institutional (13f) Holdings for the period 1988-2005 for which the locations of firm and institution headquarters are available. Block institutional ownership is 1 if the firm has at least 5% of block institutional ownership, 0 otherwise. Local (nonlocal) block institutional ownership is 1 if the firm has at least 5% of block equity holdings by institutional investors whose headquarters are located within the same (different) state as the firms' headquarters. Auditors are obtained from Compustat Annual. Book-to-market and return on assets are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. To measure beta and variance of the residual from the market model, I estimate market model parameters by using days -220 to -20 relative to the earnings announcement date. I use as the market return the CRSP value-weighted return. p-values reported are two-tailed.

dummy is insignificant. In the second column, I decompose block holding ownership into local block holdings and nonlocal block holdings and report the results. Consistent with my prediction, my local block holding dummy is negatively associated with future going concern opinions (coefficient = -0.74, p-value <0.01), which suggests that the existence of local block holders achieve a reduction in the likelihood of going concern reports. However, I do not find such relation for nonlocal block holders. To the extent that going concern reports reflect lower quality financial statements, this result confirms the positive role of local institutional block holders in financial reporting quality. The above results so far suggest that local block holders who are informed investors play an important monitoring role in reducing the likelihood of unclean reports and going concern opinion. Below, I provide evidence about the effect of block holdings on auditor selection and audit payment decisions. That is, I examine the relation between the existence of local block holdings and audit quality by running regression models where auditor turnover and audit fees are the dependent variables.

# **Existence of Local Block Holdings and Auditor Turnover**

I identify auditor changes data from COMPUSTAT.<sup>9)</sup> Table 4 displays the probit regression results for equation (3). In column (1), I do not find any significant relation between the existence of block ownership and auditor turnover (coefficient = -0.001, p-value = 0.97). To further examine this issue, I include both a local block holding dummy and a nonlocal block holding dummy and run a regression. In column (2), I observe a significantly negative coefficient on the local block holding dummy (coefficient = -0.13, p-value <0.01), whereas the coefficient on the nonlocal block holding dummy is insignificant.

In sum, there is strong evidence that firms with local block holdings are less likely to change auditors in the future, consistent with prior research that local institutional investors have long investment horizons and play monitoring and governance roles (Kang and Kim 2008).

<sup>9)</sup> In an unreported analysis, I also perform the analysis using the Audit Analytics data for audit turnover in a reduced sample and obtain qualitatively similar results.

Table 5. Regressions of Audit Fees on Block Institutional Ownership and Control Variables

	D	Dependent variable: Log (audit fees)			
Independent variables	(1)		(2)		
	Parameter Estimate	p-value	Parameter Estimate	p-value	
1 for block institutional ownership, 0 otherwise	0.14	<0.01			
1 for local block institutional ownership, 0 otherwise			0.02	0.10	
1 for non-local block institutional ownership, 0 otherwise			0.05	0.01	
Log (market capitalization)	0.45	< 0.01	0.45	< 0.01	
Book-to-market	0.08	< 0.01	0.08	< 0.01	
Account receivables/total assets	1.11	<0.01	1.11	< 0.01	
Inventory/total assets	0.46	<0.01	0.46	< 0.01	
Total debt/ total assets	0.23	<0.01	0.23	< 0.01	
Operating income/total assets	-0.33	<0.01	-0.33	< 0.01	
1 for big four audit firms, 0 otherwise	0.19	<0.01	0.19	< 0.01	
Log (age)	0.14	<0.01	0.14	< 0.01	
Past 6 month-return	-0.13	<0.01	-0.13	< 0.01	
beta	0.05	<0.01	0.05	< 0.01	
Variance of the residual from the	4.60	<0.01	4.61	< 0.01	
market model over the fiscal year					
Intercept	9.00	< 0.01	9.01	< 0.01	
Prob>Chi-square	<0.01		<0.01		
No. of observations	17,729		17,7	17,729	

The table reports the regressions of audit fees on block institutional ownership and control variables. The sample consists of firm-years with institutional ownership from CDA/Spectrum Institutional (13f) Holdings for the period 1988-2005 for which the locations of firm and institution headquarters are available. Block institutional ownership is 1 if the firm has at least 5% of block institutional ownership, 0 otherwise. Local (nonlocal) block institutional ownership is 1 if the firm has at least 5% of block equity holdings by institutional investors whose headquarters are located within the same (different) state as the firms' headquarters. Audit fees are obtained from Audit Analytics for the period of 2000-2005. Book-to-market and return on assets are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. To measure beta and variance of the residual from the market model, I estimate market model parameters by using days -220 to -20 relative to the earnings announcement date. I use as the market return the CRSP value-weighted return. p-values reported are two-tailed.

# **Existence of Local Block Holdings and Audit Fees**

Table 5 reports the regression results for equation (4) where the dependant variable is the natural logarithm of audit fees. Interestingly, I do not find the relation between block holdings and audit fees systematically differs across firms with local block holders and those with nonlocal block holders. The result in column (1) shows that the coefficient on a block holding dummy is positive and statistically significant (p-value <0.10). The results are robust when I include a local block holding dummy and a nonlocal block holding dummy. The coefficients are both positive significant at the 10% level as reported in column (2). One interpretation is that both local and nonlocal block holders demand high quality audits and in turn leads to higher audit fees. For example, Carcello et al. (2002) provide evidence that there is a positive relation between audit fees and board independence, diligence, and expertise, suggesting that the board of directors is likely to review and affect the overall audit scope and audit.

# **Additional Analyses**

Prior studies suggest that stock ownership is a function of firm characteristics (e.g., Baik et al. 2010). Thus, my findings may not be able to distinguish between the following two possibilities. First, local block holders are good at selecting companies with good accounting practice. Second, local block holders monitor management and thus play an important role in audit outcomes. Although I use lagged variables in the main analysis, I further address this issue by running the following regression model in the first stage and estimate the regressions discussed in equations (1)-(4):

$$P(LocalBlock=1) = \beta_0 + \beta_1 Size + \beta_2 BTM + \beta_3 Pastreturn + \beta_4 Age + \beta_5 Price + \beta_6 Tunover + \beta_7 R & D + \beta_8 Re turn var + \beta_9 Accruals + \varepsilon$$
 (5)

where Size is the natural logarithm of market cap, BTM is bookto-market ratio, Past return is the preceding six-month return, Age is the number of months since a firm's first appearance in COMPUSTAT, Turnover is the average monthly volume to number of shares outstanding over the past six months, R&D is research and development expenses divided by total assets, Returnvar is the variance of the residual from the market model over the past one year, Accruals is the difference between income and operating cash flow, dividend by total assets.

In unreported analysis, I find that my inferences are unchanged after controlling for the self-selection and endogeneity issues. In other words, I continue to find that the existence of local block ownership is negatively associated with the likelihood of unclean reports, going concern opinions, and auditor turnover. Also, I find a positive relation between the existence of local block ownership and audit fees. The results suggest that self-selection and endogeneity do not drive the results

# SUMMARY AND CONCLUSION

In this paper, I examine whether audit policy and outcomes significantly differ between firms with local block holders and those with nonlocal block holders or those with no block holders. Since local investors are long-term investors and they tend to invest larger portion of their total investment in local companies, I expect that local block holders can be dedicated investors who have strong incentives to monitor management. Given that audit is about verifying accounting information, informed investors, especially informed block holders who have strong incentives and abilities to monitor management, can play an important role in audit process.

Consistently, I find that companies with local block holders are less likely to have unclean/going-concern opinions, and more likely to have long-term relationships with auditors. Although I find weak evidence that the existence of local block investors affects audit fees, I do not observe any significant difference between firms with local block holdings and firms with nonlocal block holdings. Overall, this paper shows that informed local investors can have real effects on audit process through monitoring.

Several caveats are in order. Although prior research suggests that local investors tend to hold their holdings for longer periods than nonlocal investors (Kang and Kim, 2008; Baik et al. 2010) and I find evidence that my key findings continue to hold when endogeneity issues are incorporated in the regression analysis, I acknowledge

that I do not completely rule out the possibility that my results reflect the aspects that local block holders tend to follow firms with good accounting quality. Second, I condition my analysis on the existence of institutional ownership on the SEC filing, which may potentially cover large firms only. Thus, it is important to note that my results may not generalize to all firms. Finally, audit opinions are related to only a few situations and thus may not differentiate audit quality for a broad set of firms. I am hoping that future research can shed light on these issues.

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