AUDIT COMMITTEES AND INSIDER TRADING AT U.S. BANKS

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Abstract

This paper studies the relationship between insider stock trades by audit committee members and financial concerns at U.S. banks during the 2000s. We initially show that banks with large amounts of discretionary loan loss accruals experience larger stock sales by audit committee members. These stock sales are then associated with banks experiencing subsequent financial problems, measured by firm performance, restatements, and the likelihood of receiving TARP assistance in 2008 and 2009. This suggests that legal insider trading by audit committee members can provide information about a bank's financial condition and financial statement quality. While this study is focused on commercial banks, the results likely apply to larger samples and to trading by other classes of insiders.

Keywords: Corporate governance, agency problems, insider trading, financial crisis, earnings management, audit committee

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Introduction

In a recent paper, Bebchuk, Cohen and Spamannn (2010) perform a clinical analysis on the executive compensation and stock selling activities at Lehman Brothers and Bear Stearns during the years preceding the U.S. financial crisis in 2008. They analyze the role that risk-alignment played in the investments these firms made, the compensation and stock selling practices of the firms, and the ultimate fates these firms suffered. They conclude that the risks were misaligned: that is, the executives benefited in good times, but did not suffer in bad times. As a result, the cash compensation they realized, including stock sales, prior to the debacle in the late 2000s made them less concerned about the risks associated with the firms' investments than external shareholders might have preferred.

The current study applies the approach taken by Bebchuk et al. (2010) to the audit committees at a large sample of commercial banks in the U.S. to see if incentives were similarly misaligned at these firms during the 2000s. Indeed they were. Banks where audit committee members sold more stock had worse subsequent performance, were more likely to restate their financial statements in following years, and were more likely to receive funding from the U.S. Treasury's Troubled Asset Relief Program (TARP) than were banks with lesser amounts of stock sales by audit committee members. Further, it appears that these banks engaged in more earnings management prior to selling their stock, possibly suggesting that these directors planned their stock sales in advance.

We focus on audit committees because they have the responsibility to insure the accuracy and credibility of a firm's financial reporting function, and are thus the directors who have the most control of and knowledge about the firm's financial statements. While other directors are just as responsible for the financial statements in fiduciary sense, they are likely relying on the audit committee's expertise, oversight and judgment in issuing the financial statements. And, in studying audit committee members we can only study their insider trading transactions because stock compensation is typically their only form of incentive compensation; since most audit committee members are independent directors, they do not receive salaries and their director stipends are not unique to audit committee members. [1] Insiders may engage in legal insider trading for a variety of rational and appropriate reasons. For example, given that they have their human capital tied to their firm, insiders may sell stock for diversification. Insiders may also sell stock for liquidity purposes, to transform non-cash

[1] The term "insider trading" is frequently assumed to refer to some illegal breach of fiduciary duties by executives or other directors. However, insider trading is not necessarily illegal. For purposes of this paper, it means all insider transactions relating to buying stock, selling stock, or exercising options. This use of the term "insider trading" is consistent with the extant literature. See Roulstone (2008) for example.

compensation into cash. This motive is especially relevant for directors since they receive relatively little cash compensation from the firm. But it is also possible that insiders opportunistically trade based on private information. Therefore, it is necessary to study the nature of any insider trading to better understand the determinants and the consequences of the insiders' actions on the firm as a whole.

This study contributes to the literature by expanding our understanding of corporate governance, insider trading and the U.S. financial crisis of the last 2000s. It is well-established that corporate insiders opportunistically time their stock sales, frequently at the expense of external stockholders (see, for example, Roulstone, 2008). The results in this study show that audit committee members, who are responsible for ensuring the quality of firm's financial reporting function, opportunistically time their stock sales, too. Further, it appears that the firms that had the most selling by audit committee members experienced the most subsequent problems. However, the results show that firms with the most audit committee ownership do not experience the same problems. The results in this study suggest that investors have reason to be concerned about the members of bank audit committees abusing their inside information and their stock ownership by timing their stock sales at the expense of common shareholders.

The remainder of this paper is as follows. A literature review and the motivation for this study are in the next section. The empirical methodology and then the data description follow. Then the results of the hypothesis tests and the empirical analyses are presented. The paper finishes with a short discussion followed by a concluding section.

Literature & Motivation

This study attempts to connect three separate but certainly related corporate governance literatures: stock ownership and compensation of directors, audit committee characteristics, and insider trading. Bebchuk, Cohen and Spamannn (2010) study the culture of stock sales, option sales, and executive compensation at Lehman Brothers and Bear Stearns during the 2000s. They conclude that the insiders realized so much cash compensation (through salary and stock compensation) in the years leading up to the financial crisis of 2008 that their incentives were not properly aligned with shareholders' incentives at the time of the crisis. As a result, they were encouraged to take risks with the firms' investments that could ultimately lead to large costs for the shareholders, but were unlikely to lead to large costs to the insiders themselves. In a separate paper, Bebchuk and Spamannn (2010) consider the larger sample of all banks and argue that bank executives expected to share in the gains that common shareholders' might have enjoyed, but were insulated from any losses that ultimately might have been realized by these shareholders as a result of the executives' excessively risky investment strategies.

The role of audit committees in carrying out a firm's corporate governance mandate has taken increased importance since the Sarbanes-Oxley Act (SOX) was enacted in 2002. SOX required that publicly-listed firms have an audit committee that is comprised entirely of independent directors. Further, SOX required audit committees to have at least one 'financial expert.' Since firms' audit committees serve as the primary monitor of their financial reporting function, improving the quality of audit committees should improve the quality of the financial information. A considerable amount of recent work has focused on the costs and benefits of SOX, giving particular attention to the role of board and audit committee effectiveness. Duchin, Matsusaka and Ozbas (2010) show that the value of adding independent directors to the board, which might be necessary for some firms to comply with SOX, is inversely related to the information costs associated with the firm. When the cost of acquiring information is low, adding independent directors is effective; when the cost is high, adding independent directors is not as effective. Their study compares performance in 2000 with performance in 2005, implicitly capturing the effects of SOX. Their conclusion is that there is a direct connection between regulatory requirements and the quality of firms' information environments.

Engel, Hayes and Wang (2009) specifically study the cash and stock compensation structures of audit committees. They find that audit committee members receive higher compensation when there is a greater demand for monitoring the financial reporting process. Further, they show that audit committee members receive higher cash and stock compensation than do compensation committee members, which is consistent with the notion that different directors add differential levels of value to the corporate governance function. Audit committee members are presumed to add greater value than other directors because they receive greater compensation. This is consistent with the notion that the financial reporting function is one of the board's most important and valuable responsibilities. They also show that the levels of audit committee compensation has increased significantly in the years following SOX, suggesting that boards recognize the increased importance and value of the financial reporting process.

A study by Carcello, Neal, Palmrose and Scholz (2011) finds that audit committee effectiveness can be compromised when there are unnecessary external factors affecting the financial reporting process, such as when the CEO becomes

overly involved in selecting directors. They show that greater CEO involvement leads to a higher likelihood of the firm having to restate the financial statements. DeZoort, Hermanson and Houston (2003) highlight the importance of the audit committee in ensuring the quality of financial reporting, despite any managerial influence. DeZoort, Hermanson and Houston (2008) examine this role before and after SOX, and find that audit committee members do indeed have greater responsibility post-SOX. Cohen, Gaynor, Krishnamoorthy and Wright (2010) also study the role of managerial influence giving particular attention to the insiders' incentives. When incentives are high they find a greater concern for earnings management, which would suggest that the audit committee's role is more important.

Finally, insider compensation and insider trading can convey critical information.Bergstresser and Philippon (2006) show that there is a strong positive relationship between CEO stock and option compensation and the use of discretionary accruals. Roulstone (2008) studies insider trading around earnings announcements and shows that insiders do trade on inside information, and that this does convey information to the market. Sawicki and Shrestha (2008) find strong evidence of insiders engaging in earnings management to time their trades. Insiders manage earnings downward when they wish to take advantage of opportunistic purchases; insiders manage earnings upwards when they wish to take advantage of opportunistic sales. Brochet (2009) finds that the information content from insiders' sales and purchases is greater following SOX relative to before shows that insiders are less likely to engage in opportunistic trading post-SOX.[2]This shows that the information content can vary over time given changes to the operating environment, and that insiders are aware of the opportunities presented to them.

Combining these three strands of literature should yield interesting analyses. Insider trading does convey valuable information to the market. Audit committees are responsible for monitoring the financial reporting process. This process is designed to ensure the quality of the information that the firm presents to the public about its operations, investments, risks and compensation, and other issues. Since the audit committee members have access to private information about the firm's financial condition which is not yet public, they have the opportunity to enjoy private benefits from this information. And, there seems to have been a particular misalignment between the risks that financial institutions were taking and their compensation structures prior to the financial crisis of 2008. These risks likely resulted in a severely weakened financial condition for the firm – which may have been known and anticipated by insiders with private information, such as members of the firm's audit committee. This study connects these three issues to evaluate the information content conveyed by insider trading at U.S. banks during the 2000-2009 period.

The interconnection of these three issues provides the basis for the hypotheses analyzed in this study. These hypotheses concern the motivation for insider trading by audit committee members at U.S. banks and the subsequent effects. Since audit committee members have private information concerning the quality of a firm's financial statements, the first hypothesis concerns whether or not they act on this information. Prior research suggests that they might (see, for example, Sawicki and Shrestha, 2008, which shows that insiders manage earnings downward when buying stock to obtain a lower price). This leads to thefirst hypothesis:

Hypothesis 1: Insider trading by audit committee members will be greater at banks that have engaged in greater earnings management or at banks that have lower quality financial reporting.

Hypothesis 1 analyzes whether or not there is a contemporaneous relationship between earnings management and insider trading, which would be consistent with the findings of Sawicki and Shrestha (2008), which shows that insiders manage earnings downward when buying in order to get a lower price.However, Roulstone (2008) and others suggest that some level of insider trading may be optimal. Bhagat and Bolton (2008) show that insider ownership is beneficial, so it is possible that insiders merely selling stock is not a negative signal about future performance. To better understand the implications of this insider trading, we need to analyze what happens *after* those trades take place. If those trades do convey negative private information, then we would expect to observe a weaker future financial condition of the bank. This leads to the second hypothesis of this study:

Hypothesis 2: Banks that have greater insider trading by audit committee members are likely to experience more negative post-trading effects, such as weaker performance and more restatements.

Hypothesis 2 follows from prior research that insider trading conveys private information to market participants. It is possible that there is an optimal level of insider trading that actually increases the value of the firm. Roulstone (2008), however, shows that insiders buy stock ahead of positive earnings announcements and sell stock

[2] Prior to SOX, insiders were required to file a Form 4 with the Securities and Exchange Commission within 10 business days. SOX now requires insiders to report trades via a Form 4 within 2 business days.

ahead of negative earnings announcements. Hypothesis 2 predicts a similar finding for insider trading by audit committee members, except we consider a more general type of performance than Roulstone (2008).

Methodology

This analysis will be performed in two related stages. In the first stage, we want to evaluate Hypothesis 1 and determine which firm characteristics lead to audit committee members buying or selling stock.[3] This analysis is performed with equation (1):

(1) $Audit\ Committee\ Trades_t = Discretionary\ Accruals_t + Last\ 2\ Years'\ Return_t + Last\ 2\ Years'\ Industry\ Return_t + Market\ Value_t + Capital\ Ratio_t + Audit\ Committee\ Ownership_t + Audit\ Committee\ Size_t + Audit\ Committee\ Independence_t + Dividend\ Ratio_1 + Deposit\ Ratio_t + Volatility_1$

The key variable of interest is *Discretionary Accruals*, a measure of earnings management for the sample firm in each year, calculated following the Modified Jones Model in Dechow, Sloan and Sweeney (1995). Higher levels of discretionary accruals are consistent with lower quality earnings.[4] In this model, *Discretionary Accruals* serves as a measure of the private information that insiders, and especially members of the audit committee, may have. The dependent variable, *Audit Committee Trades*,is measured in two different ways. First, we use the total number of trades, or the frequency of trading. Second, we use the total dollar amount of all trades, which represents the net sum of all trades made by the audit committee members in a given year. Year dummy variables in all analyses characterize insider trading over the entire decade.

In the second stage of this analysis, we want to see what the longer-term effects of prior audit committee trading has on the firm. In equation (2), we evaluate the *Financial Condition* of the firm following the insider trading.

(2) $Financial\ Condition_t = Audit\ Committee\ Trades_{t-1} + Last\ 2\ Years'\ Return_{t-1} + Last\ 2\ Years'\ Industry\ Return_{t-1} + Market\ Value_{t-1} + Capital\ Ratio_{t-1} + Audit\ Committee\ Ownership_{t-1} + Audit\ Committee\ Size_{t-1} + Audit\ Committee\ Independence_{t-1} + Dividend\ Ratio_{t-1} + Deposit\ Ratio_{t-1} + Volatility_{t-1}$

In equation (2), we utilize three proxies for *Financial Condition*: return on assets, a dummy for whether or not the firm subsequently restated its financial statements, and a dummy variable for whether or not the firm ultimately received TARP assistance from the U.S. Treasury.

The measure of insider trading used in this study is a unique measure. Most prior work on insider trading has used event study methodologies to study the information content of each individual trade. However, because the current study is considering longer-term, indirect effects of trading, it is more appropriate to consider a longer term measure of insider trading. This allows the analysis to better align the insider trading variable with the financial statement and firm performance variables, as well as with the risks the firm may be taking. The measure of insider trading is calculated as:

(3) $Net\ Trades_t = Stock\ Sales_t - Stock\ Purchases_t - Option\ Exercises_t,$

The measures for*Stock Sales*, *Stock Purchases* and *Option Exercises* are summed across allaudit committee members at each firm during each year. *Net Trades*is a firm-level measuring either the number of trades made by all audit committee members or the net dollar amount allaudit committee members received[5] trading their stock during the year.[6] We do not perform an event study on each trade, but rather analyze the longer-term effects of insider trading on financial statements and financial performance. In this analysis, our 'events' occur over a longer period, so using an aggregate measure of trading is more appropriate than using data on specific trades.

Data

The banks studied are all relatively large, publicly traded U.S.-based banks during the ten years from 2000-2009. Compustat's Bank database is used for the initial sample selection and for all financial statement variables. The Thomson Insiders' database provides the insider trading data. Insiders' stock sales, stock purchases and option exercises are obtained from their Form 4 filings with the Securities and Exchange Commission. This database is merged with the RiskMetrics' Directors database to identify specific audit committee members. RiskMetrics also provides other governance variables, including stock ownership,

[3] Option exercises are included in this study. Insiders exercising options constitutes an acquisition of stock.

[4] Qualitatively similar results are found when using *Discretionary Accruals* from year *t-1*.

[5] *Net Trades* could be positive or negative. It would be negative if the total stock purchases were greater than the total stock sales by the audit committee during a year. In this sample, only 16 of the 1,058 firm-year observations (1.51%) are negative and all of these are due to option exercises and not open market purchases.

[6] The raw dollar amount is used in the regression analyses. Qualitatively similar results are obtained when the log of net trades is used. More than 90% of the *Net Trades* values are between $0 and $10 million.

independence and demographic data for all board and audit committee members. Stock return data are obtained from CRSP. Information regarding restatements is obtained from Audit Analytics. And finally, information on which firms received TARP assistance is obtained from various public sources, including the U.S. Treasury, corporate press releases and ProPublica[7]. The final sample isan unbalanced panel of 159 unique banks during the 2000-2009 timeperiod with 1,058 firm-years.

The key variables of interest are the audit committee trading variables. *Audit Committee Trades – Number* represents the total number of trades made by all members of the firm's audit committee in a given year. *Audit Committee Trades – Value* represents the total dollar value of all trades made by all members of the firm's audit committee in a given year. Several other audit committee variables are included as control variables, including the total dollar amount of stock owned by the audit committee, the percentage of audit committee members who are independent, and the number of directors on the audit committee. The final analysis is a test of *SOX Compliance*, or whether or not all members of the firm's audit committee are independent.[8] As shown in equations (1) and (2), various standard bank-level characteristics are also included as control variables. All variables are defined in Appendix A. Table 1 presents the descriptive statistics for all firms and by sub-period. We can see that the average audit committee made 13.41 trades per year with net sales valued at $2,735,615. On average, this represents selling about 17% of the committee's average total stock ownership of $16,565,375 each year. Audit committees average 3.71 members, 92.88% of whom are independent. Over the entire period, 62.00% of audit committees are compliant with SOX; not surprisingly, this measure increases from 52.26% during 2000-2002 to 79.37% during 2007-2009.[9]Panel B shows that the number of audit committee members decreased during the 2000s, possibly indicating that committees removed non-independent directors in order to be *SOX Compliant*. Panel B also shows how ownership and trading behavior has changed over time. During the first sub-period from 2000-2002, directors owned the most stock, directors did the most net trading, and CEOs owned the most stock, compared to the later sub-periods. It is interesting to note how much lower the ownership and trading numbers were during the financial crisis sub-period, from 2007-2009. Audit committee net trades decreased from over $4.1 million during 2000-2002 to less than $1.8 million during 2008-2009 and CEO ownership decreased from over $134 million to less than $38 million during the same time periods. Many factors could be causing these changes: it could be that insiders own fewer shares, it could be that lower market valuations are causing it, and it could be that insiders were able to cash out and take money off the table prior to the crisis hitting, which would be consistent with the Bebchuk, Cohen and Spamann (2010) risk-alignment story.

[7]http://bailout.propublica.org/list/index

[8] Even though SOX did not become effective until 2002, this variable is applied to firms in 2000 and 2001 also as a measure of whether or not they would have been compliant. The results are qualitatively unchanged when the analysis is performed only on the 2002-2009 time period.

[9] According to SOX, the compliance should be 100% during 2003-2006 and 2007-2009. However, there is no standard definition of what it means for director to be 'independent.' The independence data used in this study is from RiskMetrics, and manual inspection of numerous proxy statements suggests that RiskMetrics has a higher standard of independence than do many firms. A number of firm proxy statements mentioned, for example, that a director had a business or family relationship with the firm, but that such relationship was immaterial and did not compromise the director's fiduciary duty to the firm. While the firm may consider this director to be independent, and thus the committee in compliance with SOX, RiskMetrics may classify this director as an affiliated director, which would explain why the SOX compliance numbers in this study are so much lower than 100%.

Results

The primary results of this study are presented in Table 3 and Table 4. In Table 3, we evaluate the determinants of net trading by audit committee members. Two measures of trading are considered: total number of trades and total net dollar value of trades. Specification (1) shows that none of the variables are significantly associated with a greater number of trades. This is not necessarily surprising; the number of trades made may not tell us anything about an insiders' private information. In some cases, insiders would acquire exactly one share of stock, only to later sell thousands of shares. Using the number of trades would treat these two transactions equally, when the economic consequences are certainly different. Specification (2) more appropriately captures these economic effects by using the total net dollar amount of trades as the dependent variable. And, it does seem that there is an association between *Discretionary Accruals*, or earnings management, and audit committee members selling their stock. Higher levels of *Discretionary Accruals* are associated with higher levels of net selling in the full sample and in all three sub-periods. The effect is highest during the financial crisis sub-period from 2007-2009.[10]This result is consistent with the findings of Sawicki and Shrestha (2008) in that insiders appear to be taking advantage of their private information. [11] Interestingly, the other audit committee variables are not consistently associated with net trading. Specifically, there is no relationship between the amount of stock the audit committee members own and the amount they sell; they sell when *Discretionary Accruals* are high. Audit committee members are also net sellers of stock following periods of strong performance, measured by *Last 2 Years' Return*. Selling stock following periods of strong performance makes perfect sense for any rational investor; however, if this selling was enhanced by low-quality financial statements it could have substantial and significant effects on the financial condition of the firm in the future.

The results in Table 3 suggest that audit committee members do opportunistically sell stock, but it does not show the post-trade effects. Those effects are presented in Table 4 where equation (2) regarding the post-trade financial condition of the bank is analyzed. Specifically, we consider the relationship between the dollar amount of net trading and the post-trade financial condition of the firm. [12] Three different measures of financial condition are considered: firm performance measured by return on assets in Panel A, whether or not the firm subsequently restated financial statements in Panel B, and whether or not the firm received funds from the U.S. Treasury's TARP in Panel C. To summarize the results, banks where the audit committees engaged in the most net selling had the weakest financial conditions following the year of trading. However, somewhat surprisingly, this effect does not seem to be dominated by any of the three sub-periods considered; the effect exists at similar levels in all three time periods.

In Panel A, the results show a significantly negative relationship between firm performance and *Audit Committee Trades*. Banks that had the most audit committee selling had the weakest performance in the following year.[13] This effect is consistent across all three sub-periods. This could be consistent with the firm having to correct for *Discretionary Accruals* in the prior year and having lower subsequent operating performance as a result. In Panel B, the results show that banks that had the most audit committee stock sold in year *t-1* were more likely to restate their financial statements in year *t*. This effect is also consistent across all three sub-periods. This could be consistent with the audit committee members selling based on private information about the bank's current and future financial statements (which isconsistent with the bank having greater *Discretionary Accruals* in year *t-1*). The final analysis in Panel C of Table 4 considers a unique characteristic of banks: many experienced such drastic problems during the 2008-2009 financial crisis that they needed capital injections from the U.S. Treasury through the Troubled Asset Relief Program.[14] Table 1 shows that 58.6% of the banks in this sample did ultimately receive TARP support.[15]The results in

[10] The coefficient of 6.116 in specification (5) is statistically significantly higher than the coefficients in (3) and (4).

[11] Technically this result is not the same as Sawicki and Shrestha (2008). They find that insiders manage earnings downward prior to making acquisitions of stock in order to obtain a lower buying price. But, then those insiders do acquire stock in the same period as when the earnings management occurs, which is the result that we find.

[12] As with the analysis in Table 3, untabulated results using the number of trades are generally insignificant.

[13] The primary specification does not include a measure for "Industry ROA" because all firms are banks and should have relatively similar industry performance. When a variable equal to the ROA of all firms in the sample firm's same 4-digit SIC code is included, the results are qualitatively unchanged.

[14] The U.S. Treasury stopped making TARP investments in October 2010. Thus, all banks that will ever receive TARP funds have been included in this study.

[15] As defined in Appendix A, if a bank received TARP funding in 2008 or 2009, this dummy variable is equal to 1 in all years that the bank appears in the sample. This makes the assumption that the bank characteristics that prompted the bank to need TARP money in 2008 or 2009 also existed in all prior years. The results in Table 4, Panel C for the 2007-2009 sub-period show the

Panel C support the notion that audit committee members selling their stock could have weakened the financial position of the bank, leading it to need TARP assistance. Banks that had the most selling were more likely to ultimately need funding from TARP. Interestingly, banks with the greatest audit committee stock ownership were less likely to need TARP assistance. This suggests that it is not the mere ownership of stock that could be problematic for firms, but it is the selling of stock based on private information about the firm's financial condition that could be problematic.

Finally, in Table 5 we consider a separate but related issue regarding audit committee structure. One of the primary mandates of the 2002 Sarbanes-Oxley Act was that all audit committee members must be independent of the firm. The rationale behind this is that independent audit committee members are better monitors of the financial reporting environment because they likely have fewer conflicts of interest. If this is indeed true, we might expect to observe a different relationship between audit committee trading and financial condition for firms that are compliant with SOX compared to those that are not SOX compliant. To analyze this, the equation (2) analysis from Table 4 is performed separately on two subsamples: those banks with 100% independent audit committees and those banks with less than 100% independent audit committees.[16] The results in Table 5 show that there does not appear to be a significant difference between these subsamples.[17] The results from Table 4, that firms with greater audit committee selling experience weaker subsequent financial condition, hold for both the compliant and not-compliant subsamples.[18] Thus, while audit committees being 100% independent may be beneficial for certain aspects of a bank's financial reporting environment, it does not appear to mitigate the propensity for insiders to sell stock when they may have private information about the bank's future financial condition.[19]

To ensure the above results are not limited to model specification, a number of robustness tests are performed. In the Table 3 analysis of equation (1) on the determinants of trading, stepwise regressions were performed beginning with only the *Discretionary Accruals* variable, and iteratively adding more control variables. *Total Assets* was considered as the firm size measure instead of *Market Value*. Rather than using audit committee governance variables for ownership, size and independence, the relevant variables for the full board were used. In all cases, the general tenor of the Table 3 results maintains: firms that have the highest levels of *Discretionary Accruals* have the highest levels of audit committee selling. In other tests, a lagged value of *Discretionary Accruals* was used; in these tests, there is a positive but insignificant relationship with the value of audit committee selling, suggesting that the relationship is contemporaneous. Finally, firm-level fixed-effects models were considered; the results from these tests were qualitatively the same as the results presented in Table 3.

In the analyses in Tables 4 and 5 of equation (2) on the post-trading financial condition of banks, similar robustness tests were performed. Stepwise regressions were performed beginning with only the *Audit Committee Trades– Value* variable. Alternate measures for different firm and corporate governance characteristics were also considered. In all cases, the results are qualitatively the same as those presented in Tables 4 and 5. Firm-level fixed-effects models were considered; the results from these tests were qualitatively the same as the results presented in Tables4 and 5. In a final robustness test, the SOX compliance analysis in Table 5 was modified. While SOX required all firms to have 100% independent audit committees, policies enacted in 2003 by the New York Stock Exchange and the NASDAQ exchange required all listed firms to have a majority of independent directors on their board. A stricter definition of compliance was considered: firms had to be both compliant with the SOX audit committee requirements and with the exchanges' board independence requirements. Using this stricter definition does not alter the results: regulatory compliance does not alter the relationship between

relationships for just the immediate period during the financial crisis.

[16] As discussed previously, there can be different definitions of what constitutes an 'independent' director. This study uses the classifications provided by RiskMetrics, which appears to be based on a higher standard of independence than what many firms are using.

[17] In untabulated results, rather than splitting the sample by SOX compliance, a *SOX Compliance* dummy variable was included in the Table 4 analyses. In all specifications, this variable was insignificant.

[18] In untabulated results, the respective coefficients between the compliant and not-compliant sub-samples were compared. Only the *Restatements* coefficients are statistically significantly different, and even than only at a *p*-value of 0.098. There is no statistical difference between the *Firm Performance* and *TARP Recipient* pairs of coefficients.

[19] A separate requirement of SOX was that all audit committees must have at least one member who is a "financial expert." This would suggest that audit committees are of a higher quality after SOX relative to before SOX. While this is not explicitly tested in the current study, the lack of differences between the three time period sub-sample results and the two SOX compliance sub-sample results suggests that the effects of audit committee trading is not affected by this requirement.

audit committee selling and the financial condition of the bank. [20] The primary result that audit committees that engage in the most selling are associated with banks that have weaker financial states was consistent through all robustness tests.

Discussion

The results discussed above provide significant support for the notion that audit committee members sell stock when they have informed and private knowledge about the future financial condition of their banks. While the methodology used in this study is somewhat novel, and the study is focused on banks, this finding is generally consistent with the prior insider trading literature. Insiders do trade on private information – and this does not appear to be absolved by the presumed fiduciary duty of the members of the audit committee to monitor the quality of the bank's financial reporting environment. These results are robust to the time period considered and to the measure of post-trading *Financial Condition* considered. Interestingly, the level of the dollar amount of stock owned by the audit committee is positively associated the future *Financial Condition* of the bank.[21] Thus, it is not merely the fact that audit committee members own a significant amount of stock and options, but it is what those directors do with the private information they have about the firm's financial reporting environment.Insiders manage earnings to take advantage of these opportunistic buying opportunities, but this appears to lead to weakened financial condition for the bank.

Several caveats are in order. The *Net Trades* measure used in this study is novel and unproven. It is, however, similar to the realized cash flow measures in Bebchuk, Cohen and Spamann (2010), and it does have a solid theoretical foundation. Another issue is whether or not this phenomenon is unique to audit committee members. This study focuses on the behavior of audit committee members because the Sarbanes-Oxley Act singled out the audit committee, and because prior research has shown that audit committees are indeed different from other board committees (e.g. Engel et al., 2010). Further, this study focused on audit committees because they should have the most private information about the bank's financial reporting quality and processes – and the most control over that financial reporting process. It is unclear whether or not these results would generalize to a larger group of insiders. Finally, this analysis identifies associations but not necessarily causality. It may be reasonable to assume that the earnings management leads to audit committee trading, but that this trading does not necessarily *cause* the weakened financial condition (although it may be highly correlated with the unobservable factors that do cause the weakened condition).

Conclusion

The purpose of this study was to analyze the insider trading behavior of members of commercial banks' audit committees during the 2000s. The sample was selected to study U.S. banks during the decade of the 2000s because the activity that occurred at these banks during this period may have contributed to the financial crisis of 2008 and 2009. This is where we are most likely to observe dislocations between the incentives the insiders have and the risks they are taking on behalf of shareholders. Audit committee behavior was specifically selected because audit committees have a unique fiduciary duty to monitor the firm's financial reporting environment. Prior research and recent regulations have specifically highlighted the responsibilities of the audit committees as being distinct from those of other board committees or of the board as whole. And, the insider trading was chosen because it can convey the presence of private information. Audit committees may be most likely to have private information about the bank's financial condition, and, thus, observing insider trading by them based on this private information may identify a significant principal-agent concern.

The results show that audit committee members at banks did sell substantial amounts of stock during the 2000s. The net selling of stock was indeed contemporaneously associated with the banks having larger amounts of discretionary accruals. More selling appears to have taken place at firms with the greatest degree of earnings management. And, subsequent to these insider trades being made, firms with the largest amounts of insider selling by audit committee members were associated with weaker financial conditions, as measured by firm performance, likelihood of restating financial statements, and likelihood of receiving TARP funding. However, this is not due to audit committee members owning more stock or options; the level of ownership is positively associated with better subsequent financial condition.

The implications from these findings are vast. While audit committee members may have different fiduciary responsibilities, it appears that their behavior is no different from all other insiders when it comes to insider trading. They, too, engage in opportunistic trading based on private information. This result is robust within this

[20] Again, performing the Table 4 analysis using a *SOX Compliance* dummy variable yielded positive but statistically insignificant results.

[21] This is consistent Bhagat and Bolton (2008) and other studies that have found a positive relationship between stock ownership and firm performance.

sample of U.S. banks during the 2000s. Banks were chosen because of their involvement in the financial crisis; and audit committees were chosen because of their unique role in monitoring the firm. However, it is reasonable to assume that these same results would maintain for larger samples of firms across different time periods and that they would maintain for all insider trading. These results should concern both regulators and investors as they suggest that insiders continue to take advantage of their unique information and realize benefits at the expense of external shareholders. Thus, while insiders owning stock may be beneficial, it seems that better mechanisms are needed to prevent those insiders from acting in their own self-interest to the detriment of outside shareholders.

References

1. Abbott, L., S. Parker, and G. Peters, 2004, "Audit Committee Characteristics and Restatements,"*Auditing: A Journal of Practice and Theory* 23:1, 69-87.
2. Agrawal, A., and S. Chadha, 2005, "Corporate Governance and Accounting Scandals,"*Journal of Law and Economics* 48:2, 371-406.
3. Archambeault, D. S., F. T. DeZoort, and D. R. Hermanson, 2008, "Audit Committee Incentive Compensation and Accounting Restatements,"*Contemporary Accounting Research* 25:4, 965-992.
4. Baker, M. and J. Wurgler, 2002, "Market Timing and Capital Structure,"*Journal of Finance* 57, 1-32.
5. Barber, B. and J. Lyon, 1996, "Detecting Abnormal Operating Performance: The Empirical Power and Specification of Test Statistics,"*Journal of Financial Economics* 41, 359-400.
6. Bebchuk, L. A., A. Cohen, and H. Spamann, "The Wages of Failure: Executive Compensation at Bear Stearns and Lehman 2000-2008," 2010 Harvard University working paper.
7. Bebchuck, L. A. and H. Spamann, 2010, "Regulating Bankers' Pay,"*Georgetown Law Journal*, Volume 98, 247-287.
8. Bergstresser, D. and T. Philippon, 2006, "CEO Incentives and Earnings Management," *Journal of Financial Economics* 80, 511-529.
9. Bhagat, S. and B. Bolton, 2008, "Corporate Governance and Firm Performance, *Journal of Corporate Finance* 14, 257-273.
10. Brochet, F. "Information Content of Insider Trades Before and After the Sarbanes-Oxley Act," *The Accounting Review* 85:2, 419-446.
11. Carcello, J. V., T.L. Neal, Z.V. Palmrose and S. Scholz, 2011, "CEO Involvement in Selecting Board Members, Audit Committee Effectiveness, and Restatements," *Contemporary Accounting Research*, forthcoming.
12. Cohen, J., L.M. Gaynor, G. Krishnamoorthy and A. Wright, "The Impact on Auditor Judgments of CEO Influence on Audit Committee Independence and Management Incentives," 2010 working paper.
13. Dechow, P. M., R. Sloan and A. Sweeney, 1995, "Detecting Earnings Management,"*The Accounting Review* 70, 193-226.
14. Dechow, P. M., R. Sloan and A. Sweeney, 1996, "Causes and Consequences of Earnings Manipulation: An Analysis of Firms Subject to Enforcement Actions by the SEC, *Contemporary Accounting Research* 13:1, 1-36.
15. DeZoort, F. T., R. Houston and D. Hermanson, 2003, "Audit Committee Support for Proposed Audit Adjustments: A Source Credibility Perspective," *Auditing: A Journal of Practice & Theory*, 22(2), 189-205.
16. DeZoort, F. T., R. Houston and D. Hermanson, 2008, "Audit Committee Support for Proposed Audit Adjustments: Pre-SOX versus Post-SOX Judgments," *Auditing: A Journal of Practice & Theory*, 27(1), 85-104.
17. Duchin, R. J. G. Matsusaka and O. Ozbas, 2010, "When are Outside Directors Effective?"*Journal of Financial Economics*, forthcoming.
18. Engel, E., R. M. Hayes and X. Wang, 2010, "Audit Committee Compensation and the Demand for Monitoring of the Financial Reporting Process,"*Journal of Accounting and Economics*, forthcoming.
19. Klein, A., 2002a, "Audit Committee, Board of Director Characteristics, and Earnings Management,"*Journal of Accounting and Economics* 33, 375-400.
20. Klein, A., 2002b, "Economic Determinants of Audit Committee Independence,"*The Accounting Review* 77:2, 534-452.
21. Petersen, M., 2009, "Estimating Standard Errors in Finance Panel Data Sets: Comparing Approaches,"*Review of Financial Studies* 22, 435-480.
22. Roulstone, D. "Insider Trading and the Information Content of Earnings Announcements," 2010 working paper.
23. Sawicki, J. and K. Shrestha, "Insider Trading and Earnings Management," *Journal of Business Finance & Accounting*, Volume 35:3-4, 331-346.

Appendix A. Description of Variables

Audit Committee Trades - Number – The total number of common stock purchases, common stock sales, and option exercises by all members of a firm's audit committee in a year.

Audit Committee Trades - Value – The net value of all common stock purchases, common stock sales, and option exercises by all members of a firm's audit committee in a year, as defined in equation (3). The value is equal to the cash paid for stock purchases and for option exercises, subtracted from the cash received for stock sales.

Audit Committee Ownership – The dollar amount of the common stock owned by all members of a firm's audit committee as of the beginning of a year.

Audit Committee Independence – The proportion of audit committee members who are neither employees of the firm nor affiliated with the firm in some manner.

Audit Committee Size – The number of directors serving on the firm's audit committee.

SOX Compliance – A dummy variable equal to 1 if all members of the firm's audit committee are independent, and equal to 0 otherwise.

Board Independence – The proportion of board directors who are neither employees of the firm nor affiliated with the firm in some manner.

Director Stock Ownership Value – The dollar amount of stock owned by the median director.

Director Stock Ownership Percent – The percent of stock owned by the median director.

CEO Stock Ownership Value – The dollar amount of stock owned by the firm's CEO.

CEO Stock Ownership Percent – The percent of stock owned by the firm's CEO.

CEO-Chair Duality – A dummy variable equal to 1 if the CEO is also the chair of the board, and equal to 0 otherwise.

Assets – The dollar amount, in millions, of the total assets of the firm. Logarithmic transformations are used in the analyses.

Market Value – The dollar amount, in millions, of the market value of the firm's equity. Logarithmic transformations are used in the analyses.

Return on Assets – Earnings before interest and depreciation divided by total assets.

Tobin's Q – The ratio of the market value of the firm's assets to the book value of assets.

Stock Return – The annualized stock return during the year for the firm

Loan Ratio – The ratio of book value of net loans to total assets.

Deposit Ratio – The ratio of total deposits to total assets.

Tier 1 Capital Ratio – The ratio of Tier 1 Capital to total assets.

Last 2 years' Return – Compound stock return over the preceding 2 years.

Last 2 years' Industry Return – Compound stock return over the preceding 2 years for all firms in the sample firm's 4-digit SIC group.

Dividend Ratio – Ratio of cash dividends paid to total assets.

Volatility – Standard deviation of monthly stock returns over the preceding 36-60 months.

Discretionary Accruals – A measure of earnings quality, calculated following the Modified Jones Model as in Dechow, Sloan and Sweeney (1995). Higher levels of discretionary accruals are associated with lower levels of earnings quality.

TARP Recipient – A dummy variable equal to 1 if the institution received funds from the U.S. Treasury's 'Troubled Asset Relief Program' during 2008 and 2009, and equal to 0 otherwise. This variable is the same for all years for each firm; if a firm received TARP funding in 2008, this variable is equal to 1 for all years that firm is in the sample.

Restated Financial Statements – A dummy variable equal to 1 if the institution restated its financial statements in the year following the sample year.

Table 1. Descriptive Statistics

This table presents the descriptive statistics for the primary variables in this study. All variables are as described in Appendix A. In Panel A, the descriptive statistics are presented for all firms and all years. In Panel B, the mean values for each variable are presented across three different time periods: 2000-2002, 2003-2006 and 2007-2009.

Panel A: All firms, all years

	Mean	Median	5th Percentile	95th Percentile
Audit Committee Variables:				
Audit Committee Trades - Number	13.41	6.00	0.92	52.18
Audit Committee Trades - Value	$2,735,615	$647,237	$0	$10,182,478
Audit Committee Ownership	$16,565,375	$5,695,343	$453,600	$54,677,306
Audit Committee Independence	92.88%	100.00%	66.67%	100.00%
Audit Committee Size	3.71	3.00	2.00	6.00
Audit Committee SOX Compliance	62.00%	100.00%	0.00%	100.00%
Other Governance Variables:				
Board Independence	71.93%	75.00%	47.37%	90.91%
Board Size	13.00	13.00	8.00	19.00
Director Stock Ownership Value	$2,341,085	$1,368,579	$249,879	$9,523,641
Director Stock Ownership Percent	0.15%	0.07%	0.00%	0.57%
CEO Stock Ownership Value	$89,189,031	$25,905,556	$1,704,555	$301,173,180
CEO Stock Ownership Percent	2.07%	0.83%	0.12%	9.08%
CEO-Chair Duality	63.66%	100.00%	0.00%	100.00%
Other Bank Variables				
Assets (in millions)	$63,116	$10,571	$2,771	$237,615
Market Value (in millions)	$9,090	$1,746	$404	$40,648
Return on Assets	0.90%	1.12%	-0.69%	1.89%
Tobin's Q	1.092	1.082	0.957	1.239
Stock Return	3.15%	3.76%	-49.62%	47.03%
Loan-to-Asset Ratio	61.56%	63.94%	34.91%	80.06%
Deposit-to-AssetRatio	68.22%	68.91%	47.99%	83.24%
Tier 1 Capital Ratio	10.61%	10.22%	7.04%	15.91%
Discretionary Accruals (x 100)	-0.026	-0.099	-1.022	1.558
TARP Recipient	58.60%	100.00%	0.00%	100.00%
Restated Financial Statements	10.96%	0.00%	0.00%	100.00%

Panel B: All firms, by subperiod

	Mean Values: 2000-2002 *(n=243)*	**Mean Values: 2003-2006** *(n=500)*	**Mean Values: 2007-2009** *(n=315)*
Audit Committee Variables:			
Audit Committee Trades - Number	10.89	14.62	13.79
Audit Committee Trades - Value	$4,149,411	$2,611,817	$1,767,980
Audit Committee Ownership	$23,365,968	$18,619,070	$8,256,412
Audit Committee Independence	87.44%	92.08%	98.43%
Audit Committee Size	4.33	3.65	3.27
Audit Committee SOX Compliance	52.26%	55.80%	79.37%
Other Governance Variables:			
Board Independence	68.76%	71.11%	75.65%
Board Size	13.95	12.93	12.31
Director Stock Ownership Value	$2,153,503	$2,865,850	$1,777,971
Director Stock Ownership Percent	0.11%	0.15%	0.18%
CEO Stock Ownership Value	$134,359,405	$101,525,195	$37,441,100
CEO Stock Ownership Percent	2.62%	2.26%	1.72%
CEO-Chair Duality	63.47%	70.19%	54.92%
Other Bank Variables			
Assets (in millions)	$54,040	$58,928	$76,764
Market Value (in millions)	$8,690	$10,435	$7,253
Return on Assets	1.20%	1.24%	0.15%
Tobin's Q	1.119	1.122	1.023
Stock Return	12.35%	12.02%	-17.81%
Loan-to-Asset Ratio	58.76%	61.54%	63.76%
Deposit-to-AssetRatio	68.22%	67.48%	69.39%
Tier 1 Capital Ratio	10.69%	10.32%	10.97%
Discretionary Accruals (x 100)	-0.112	-0.130	0.316
TARP Recipient	52.26%	57.60%	65.08%
Restated Financial Statements	13.17%	10.80%	9.52%

Table 2. Correlation Coefficients

This table presents the correlations coefficients for the primary variables in the study. Pearson correlation coefficients are below the diagonal, and Spearman rank coefficients are above the diagonal.

	Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1)	Audit Comm. Trades - Number	-	0.35	-0.04	0.07	-0.04	0.02	0.02	0.05	-0.01	-0.01	-0.04	0.01	0.02	0.06	0.09
(2)	Audit Comm. Trades - Value	0.49	-	0.13	0.16	0.05	-0.01	0.19	0.37	-0.13	-0.13	-0.15	0.05	0.26	-0.01	0.02
(3)	Audit Comm. Ownership	-0.05	0.09	-	-0.12	-0.18	-0.03	0.17	0.15	-0.02	-0.08	0.03	0.12	0.18	0.03	-0.13
(4)	Audit Comm. Independence	0.03	-0.01	0.02	-	0.18	0.10	-0.03	0.44	-0.25	-0.25	-0.15	0.16	-0.03	0.03	-0.03
(5)	Audit Committee Size	0.04	0.07	-0.17	-0.03	-	0.02	-0.08	0.09	-0.14	-0.01	-0.03	-0.06	-0.03	-0.02	0.14
(6)	Discretionary Accruals	0.01	0.06	-0.06	0.12	0.02	-	-0.14	0.03	0.01	-0.04	0.03	0.03	-0.04	-0.04	0.05
(7)	Last 2 years' return	0.04	0.00	0.16	-0.13	-0.07	-0.08	-	0.15	0.06	0.03	-0.13	-0.05	0.24	-0.04	-0.11
(8)	Market Value	0.20	0.30	0.12	0.00	0.14	0.05	0.04	-	-0.19	-0.29	-0.25	0.06	0.08	-0.02	0.13
(9)	Capital Ratio	-0.06	-0.02	-0.03	-0.07	-0.13	-0.05	0.08	-0.31	-	0.25	-0.17	-0.35	0.08	0.03	-0.14
(10)	Deposit Ratio	-0.10	-0.13	-0.07	-0.01	0.00	-0.02	0.00	-0.31	0.09	-	0.20	-0.64	0.10	0.04	0.03
(11)	Dividend Ratio	-0.19	-0.10	0.05	0.07	-0.07	0.02	-0.12	-0.24	-0.25	0.28	-	0.12	-0.04	0.03	0.00
(12)	Volatility	0.02	0.05	0.13	0.04	-0.07	0.03	-0.03	0.13	-0.26	-0.62	0.14	-	-0.16	-0.03	-0.10
(13)	Return on Assets	0.02	0.09	0.16	-0.16	-0.01	-0.12	0.31	0.34	0.09	0.16	-0.02	-0.17	-	-0.05	0.00
(14)	Restatements	0.07	-0.01	0.04	-0.04	-0.01	-0.03	-0.03	-0.06	0.02	0.05	0.02	-0.03	-0.03	-	0.07
(15)	TARP Recipient	0.14	0.03	-0.15	0.26	0.17	0.02	-0.12	0.08	-0.09	0.02	0.07	-0.02	0.03	0.07	-

Table 3. Determinants of Net Trades

This table presents the results from estimating equation (1) on the relationship between earnings management and audit committee trading. In specification (1), the dependent variable is *Audit Committee Trades – Number*. In specification (2), the dependent variable is *Audit Committee Trades – Value*. In specifications (3), (4) and (5), the dependent variable is *Audit Committee Trades – Value* and the analysis is performed on three different time periods. All other variables are as defined in Appendix A. Intercepts and year dummy variables are included but not presented. Ordinary least squares analysis is performed. Standard errors are corrected for clustering by firm and year. Regression coefficients are presented with t-statistics below in parentheses. * denotes significance at a 10% level, ** denotes significance at a 5% level, and *** denotes significance at 1% level.

	Audit Committee Trades - Number$_t$	Audit Committee Trades - Value$_t$	Audit Committee Trades - Value$_t$		
			2000-2002	2003-2006	2007-2009
	(1)	(2)	(3)	(4)	(5)
Discretionary Accruals$_t$	-13.599	2.186 **	3.622 **	4.184 **	6.116 ***
	(0.80)	*(2.26)*	*(1.98)*	*(2.47)*	*(3.01)*
Last 2 years' Return$_t$	0.802	0.086 **	0.498 **	0.223 **	0.545 **
	(1.21)	*(2.36)*	*(2.24)*	*(2.38)*	*(2.42)*
Last 2 years' Industry Return$_t$	1.478	0.055 *	0.281 *	0.133	0.225 **
	(0.35)	*(1.77)*	*(1.70)*	*(1.51)*	*(2.00)*
Market Value$_t$	1.543	0.369	0.267 **	0.265 **	0.933 ***
	(0.75)	*(4.48)*	*(2.17)*	*(2.24)*	*(6.65)*
Tier 1 Capital Ratio$_t$	-0.236	-0.046	-0.080	0.009	-0.158 ***
	(0.42)	*(1.17)*	*(1.47)*	*(0.14)*	*(2.82)*
Audit Committee Ownership$_t$	-2.018	0.003	-0.074	-0.003	0.163 *
	(1.35)	*(0.04)*	*(0.70)*	*(0.02)*	*(1.76)*
Audit Committee Size$_t$	1.373	0.113	0.174 **	0.091	0.007
	(1.78)	*(2.24)*	*(2.10)*	*(1.25)*	*(0.06)*
Audit Committee Independence$_t$	-2.943	0.591	0.852	0.042	0.619
	(0.29)	*(0.86)*	*(0.77)*	*(0.05)*	*(0.41)*
Deposit Ratio$_t$	-16.616	-1.626	-2.964 **	-2.239 *	-2.451 *
	(0.87)	*(1.65)*	*(2.27)*	*(1.61)*	*(1.83)*
Dividend Ratio$_t$	0.002	0.000	0.212	0.009	0.019 **
	(1.20)	*(0.99)*	*(1.10)*	*(0.98)*	*(2.11)*
Volatility$_t$	0.154	0.048	0.067 ***	0.052 ***	0.022 *
	(1.34)	*(3.60)*	*(3.85)*	*(2.86)*	*(1.94)*
R-squared	0.151	0.446	0.353	0.380	0.598
Number of Observations	1,058	1,058	243	500	315

Table 4. Effect of Net Trading on Financial Condition

This table presents the results from estimating equation (2) on the relationship between the dollar value of audit committee trading and bank financial condition. Three different measure of financial condition are considered. In Panel A, post-trading Return on Assets is the measure of financial condition. In Panel B, a dummy variable equal to 1 if firm restated financial statements in the year after the trading is the measure of financial condition. In Panel C, a dummy variable equal to 1 if the firm ultimately received funds from the U.S. Treasury through the Troubled Asset Relief Program is used as the measure of financial condition. All other variables are as defined in Appendix A. In each Panel, equation (2) is estimated for the entire sample across 2000-2009 and for three sub-periods. Ordinary least squares analysis is performed for Panel A, and logit analysis is performed in Panels B and C. Intercepts and year dummy variables are included but not presented. Standard errors are corrected for clustering by firm and year. Regression coefficients are presented with t-statistics for OLS and chi-square statistics below in parentheses. * denotes significance at a 10% level, ** denotes significance at a 5% level, and *** denotes significance at 1% level.

Panel A: Firm Performance as Financial Condition

	Financial Condition - Firm Performance	Financial Condition - Firm Performance		
(Ordinary Least Squares)		2000-2002	2003-2006	2007-2009
Audit Committee Trades – Value$_{t-1}$	-0.102 **	-0.142 **	-0.198 **	-0.172 ***
	(2.28)	*(2.13)*	*(2.38)*	*(3.09)*
Last 2 years' Return$_{t-1}$	0.004	0.001	-0.004	0.013 *
	(1.35)	*(1.02)*	*(1.22)*	*(1.68)*
Last 2 years' Industry Return$_{t-1}$	0.004 *	0.024 **	0.001	0.009 *
	(1.72)	*(2.49)*	*(0.26)*	*(1.81)*
Market Value$_{t-1}$	0.001 ***	0.001 **	0.001 ***	0.002 ***
	(3.04)	*(2.18)*	*(3.99)*	*(2.95)*
Tier 1 Capital Ratio$_{t-1}$	0.000	0.000	0.000	0.000
	(1.27)	*(1.45)*	*(0.74)*	*(0.96)*
Audit Committee Ownership$_{t-1}$	0.002 *	0.001 **	0.002 ***	0.001 **
	(2.01)	*(2.53)*	*(2.74)*	*(2.22)*
Audit Committee Size$_{t-1}$	-0.004 *	-0.001	-0.002	-0.003
	(1.71)	*(0.56)*	*(1.20)*	*(1.37)*
Audit Committee Independence$_{t-1}$	-0.004 **	0.001	-0.001	-0.022 *
	(1.97)	*(0.34)*	*(0.72)*	*(1.74)*
Deposit Ratio$_{t-1}$	0.006	0.028 *	0.000	-0.021
	(0.84)	*(1.60)*	*(0.02)*	*(1.34)*
Dividend Ratio$_{t-1}$	0.000	0.301 **	0.000	0.000
	(0.87)	*(2.29)*	*(0.76)*	*(0.71)*
Volatility$_{t-1}$	0.004 ***	0.002	0.005 ***	0.005 ***
	(6.35)	*(1.49)*	*(7.72)*	*(3.62)*
R-squared	0.424	0.414	0.547	0.510
Number of Observations	1,058	243	500	315

Panel B: Restatement as Financial Condition

(Logit estimation)	Financial Condition - Restatements	Financial Condition - Restatements		
		2000-2002	2003-2006	2007-2009
Audit Committee Trades – Value$_{t-1}$	0.007 ***	0.008 **	0.005 **	0.007 ***
	(6.70)	*(4.47)*	*(5.36)*	*(8.38)*
Last 2 years' Return$_{t-1}$	-0.018	-0.128	0.038	-0.036
	(0.39)	*(1.42)*	*(0.30)*	*(0.37)*
Last 2 years' Industry Return$_{t-1}$	-0.225 ***	-0.866 ***	0.341	-0.271 ***
	(7.77)	*(6.88)*	*(1.17)*	*(7.99)*
Market Value$_{t-1}$	-0.013	-0.003	-0.018	-0.020
	(0.91)	*(0.16)*	*(0.96)*	*(0.79)*
Tier 1 Capital Ratio$_{t-1}$	-0.008 *	-0.010	-0.003	-0.015 **
	(3.60)	*(1.42)*	*(0.30)*	*(5.16)*
Audit Committee Ownership$_{t-1}$	-0.009 *	-0.022 *	-0.024 **	-0.006 **
	(3.78)	*(3.64)*	*(6.22)*	*(5.26)*
Audit Committee Size$_{t-1}$	0.001	-0.009	-0.011	0.036
	(0.08)	*(0.58)*	*(0.67)*	*(1.30)*
Audit Committee Independence$_{t-1}$	0.094	0.167	0.134 *	0.167
	(1.44)	*(1.38)*	*(3.60)*	*(0.40)*
Deposit Ratio$_{t-1}$	0.071	0.159	0.066	-0.014
	(0.49)	*(0.63)*	*(0.30)*	*(0.05)*
Dividend Ratio$_{t-1}$	0.001	0.001	0.003 *	-0.001
	(0.87)	*(1.25)*	*(3.27)*	*(0.25)*
Volatility$_{t-1}$	0.001	0.004	0.002	0.004
	(0.71)	*(1.55)*	*(0.30)*	*(0.76)*
R-squared	0.132	0.171	0.134	0.210
Number of Observations	1,058	243	500	315

Panel C: TARP Recipient as Financial Condition

(Logit estimation)	Financial Condition - TARP Recipient	Financial Condition - TARP Recipient		
		2000-2002	2003-2006	2007-2009
Audit Committee Trades – Value$_{t-1}$	0.042 **	0.033 *	0.027 *	0.053 ***
	(5.02)	*(2.80)*	*(2.92)*	*(7.43)*
Last 2 years' Return$_{t-1}$	-0.189 **	-0.175 *	-0.119 *	-0.212 **
	(4.10)	*(2.92)*	*(3.59)*	*(5.18)*
Last 2 years' Industry Return$_{t-1}$	0.120	-0.300	-0.232	0.071
	(1.50)	*(0.50)*	*(0.67)*	*(0.76)*
Market Value$_{t-1}$	0.064 *	0.030	0.067 *	0.082 *
	(2.74)	*(0.61)*	*(3.03)*	*(2.97)*
Tier 1 Capital Ratio$_{t-1}$	-0.026 *	-0.025	-0.061 ***	-0.023
	(2.87)	*(1.26)*	*(8.77)*	*(1.14)*
Audit Committee Ownership$_{t-1}$	-0.110 ***	-0.096 **	-0.154 ***	-0.086 **
	(8.90)	*(5.13)*	*(9.34)*	*(6.13)*
Audit Committee Size$_{t-1}$	-0.011	0.013	-0.040	-0.026
	(0.44)	*(0.42)*	*(1.28)*	*(0.48)*
Audit Committee Independence$_{t-1}$	0.045	0.279	0.149	1.025 **
	(1.23)	*(0.90)*	*(0.76)*	*(5.99)*
Deposit Ratio$_{t-1}$	0.612	0.279	0.745	0.745
	(1.36)	*(0.42)*	*(1.44)*	*(1.16)*
Dividend Ratio$_{t-1}$	0.003	0.001	0.002	0.004
	(1.42)	*(0.78)*	*(0.75)*	*(1.16)*
Volatility$_{t-1}$	0.015 *	0.012 *	0.015 **	0.017 *
	(2.98)	*(3.03)*	*(4.04)*	*(3.22)*
R-squared	0.342	0.322	0.424	0.524
Number of Observations	1,058	243	500	315

Table 5. Effect of Net Trading on Financial Condition – By SOX Compliance

This table presents the results from estimating equation (2) on the relationship between the dollar value of audit committee trading and bank financial condition on subsamples sorted by whether or not the bank's audit committee is compliant with SOX.. Three different measure of financial condition are considered: post-trading Return on Assets,a dummy variable equal to 1 if the firm restated financial statements in the year after trading, anda dummy variable equal to 1 if the firm ultimately received funds from the U.S. Treasury through the Troubled Asset Relief Program. All other variables are as defined in Appendix A. Ordinary least squares analysis is performed on *Firm Performance* and logit analysis is performed on *Restatements* and *TARP Recipient*. Intercepts and year dummy variables are included but not presented. Standard errors are corrected for clustering by firm and year. Regression coefficients are presented with t-statistics for OLS and chi-square statistics for logit below in parentheses. * denotes significance at a 10% level, ** denotes significance at a 5% level, and *** denotes significance at 1% level.

	Firms Compliant With SOX			**Firms NOT Compliant With SOX**		
	Firm Performance *(OLS)*	Restate ments *(Logit)*	TARP Recipient *(Logit)*	Firm Performance *(OLS)*	Restate ments *(Logit)*	TARP Recipient *(Logit)*
Audit Committee Trades – Value$_{t-1}$	-0.004 *	0.012 **	0.046 **	-0.003 *	0.009 *	0.041 **
	(1.87)	*(4.25)*	*(5.13)*	*(1.76)*	*(2.85)*	*(4.09)*
Last 2 years' Return$_{t-1}$	.006 *	0.018	-0.121	0.000	-0.097	-0.323 **
	(1.61)	*(0.28)*	*(1.11)*	*(0.06)*	*(1.24)*	*(4.35)*
Last 2 years' Industry Return$_{t-1}$	0.005	-0.243 ***	0.051	0.000	-0.161	0.424 *
	(1.55)	*(7.38)*	*(0.58)*	*(0.13)*	*(1.14)*	*(2.99)*
Market Value$_{t-1}$	0.002 ***	-0.024	0.081 **	0.001	0.032	-0.030
	(2.86)	*(1.63)*	*(4.13)*	*(1.65)*	*(1.00)*	*(0.45)*
Tier 1 Capital Ratio$_{t-1}$	0.000	-0.007	-0.020	0.001 *	-0.013 **	-0.046 *
	(0.45)	*(1.23)*	*(1.44)*	*(1.88)*	*(4.14)*	*(2.93)*
Audit Committee Ownership$_{t-1}$	0.000	0.001	-0.116 ***	0.000	0.026	-0.104 **
	(0.68)	*(0.07)*	*(7.57)*	*(1.19)*	*(1.07)*	*(4.19)*
Audit Committee Size$_{t-1}$	-0.001 *	0.003	-0.008	0.000	-0.019	-0.015
	(1.83)	*(0.22)*	*(0.27)*	*(0.13)*	*(1.31)*	*(0.34)*
Deposit Ratio$_{t-1}$	0.007	0.083	0.634	0.003	-0.028	0.606
	(0.71)	*(0.47)*	*(1.32)*	*(0.78)*	*(0.12)*	*(0.90)*
Dividend Ratio$_{t-1}$	0.000	0.001	0.002	0.000	0.001	0.001 **
	(0.80)	*(1.43)*	*(0.61)*	*(0.28)*	*(0.26)*	*(5.07)*
Volatility$_{t-1}$	0.039 ***	0.009	0.185	0.033 ***	0.089	1.554
	(4.96)	*(0.04)*	*(0.38)*	*(5.22)*	*(0.23)*	*(1.49)*
R-squared	0.398	0.437	0.346	0.612	0.373	0.400
Number of Observations	653	653	653	405	405	405