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# INFLUENCE OF OUTSIDE BOARD MEMBERS FROM MAIN BANK TEAM ON EARNINGS MANAGEMENT

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***Abstract:*** *There has been increasing academic interest in determining whether and how outside board membersaffect firm performance. A well-documented economic phenomenon in Japan is the role of banks on their corporate clients. Specifically, this study examines whether outside board members from the main bank team, as well as different types of bankswithin the main bank team,impact earnings management after the global financial crisis in 2008. We found that the main bank team does not affect managerial opportunistic accounting policies. Our results also show that the involvement of commercial banks, which have outside board members and stockholders in the focal firms, is not related to their clients' earnings management. However, stock ownership by trust banks is positively related to their clients' earnings management. These findings are consistent with the Tokyo Stock Exchange stockholding data from 1986 to 2011, which illustrates a higher percentage of stock ownership by trust banks and a lower percentage by commercial banks after 2000.*

***Keywords:*** *Corporate governance, Earnings management, Main bankteam, Outside board member*

## 1. INTRODUCTION

Japanese banks generally have very close ties with their client firms, which is called the "main bank relationship" in the literature (Yamori and Murakami, 1999). Firms with close ties to banks are less likely to suffer from financial distress, and the main bank relationship plays a role in mitigating the problem of information asymmetry (Hoshi,Kashyap and Scharfstein,1990; Hoshi,Kashyap and Scharfstein,1991). It is common that banks perform both commercial and investment banking functions in

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Japan (Gao, 2008), and nearly every Japanese firm has a main bank[1] behind it for support. For the purpose of clarity, we define "banks" in this study as being "main banks in themain bank team" (MBs in MBT), which may consist of a commercial bank, a trust bank and/ora governmental bank[2]. Nevertheless, most Japanese firms transact with several banks, including governmental banks on occasion.TheMBT mainly provides firms with syndicated loans to reduce default risk. MBs in MBTare private and/or public, with trust banks being private and engaging primarily in the trust business (Campbell and Hamao, 1993), facilitating the provision of credit services by general commercial banks (Nemoto,Fukunuma andWatanabe, 2006). In contrast, governmental banks are public and do not take the initiative in lending funds to firms. The commercial banksgenerally have informational advantages compared with governmental banks. In the integration of a few banks' syndicated loans, governmental banks endorse the decisions of commercial MBs in general. However, governmental banks are the first to loan to financially distressed small and medium-sized firms, as well as start-up firms, in accordance with state industrial policies.The commercial banks in MBT cannot afford to lend funds to client firms after the global financial crisis in 2008. Therefore, the role of the governmental bank in MBT is important to support client firms in an emergency.

Corporate governance is an institutional behaviorthat aims to provide corporate leaders with discipline and/or economic incentives to act in a manner that benefits stakeholders. The corporate governance structure in Japan differs from that of other developed countries in some important respects. Most notably, the governance system is considered to be bank-oriented or bank-controlled in Japan, where banks control firms by owning stock in them. In addition, MBTssend representativeoutside board members (OBMs) to theirclients' boards in exchange for extending assistance to them. Although the MBTgovernance structure in Japan is currently viewed as a source of inefficiency (Sueyoshi, Goto and Omi, 2010), the OBMs from MBTdo perform an important monitoring role in the corporate governance system, mitigating an agency cost and an information asymmetry in Japan (Kaplan, 1994; Kaplan and Minton, 1994; Morck and Nakamura, 1999).

There has been increasing interest in determining whether and how OBMs, inside directors and corporate supervisors affect firm performance. The inside director, or *Torishimariyaku* in Japanese, is a person who leads a certain area of a company. In this paper, these include both the senior and executive directors, such as CEO and CFO. The supervisors, or*Kansayaku* in Japanese, arepeople sitting on the board who monitor the activities of the board members to ensure that no fraudulent or illegal acts take place (Pong and Kita, 2006). Supervisors are elected in a stockholders' meeting and work for stockholders by attending directors' meetings and reporting internal incidents to stockholders in the shareholders' meeting. Additionally, OBMs from MBTalso represent a key mechanism for monitoring managers and providing support for making important decisions as well.Thus they are an important component of the corporate governance system in Japan.

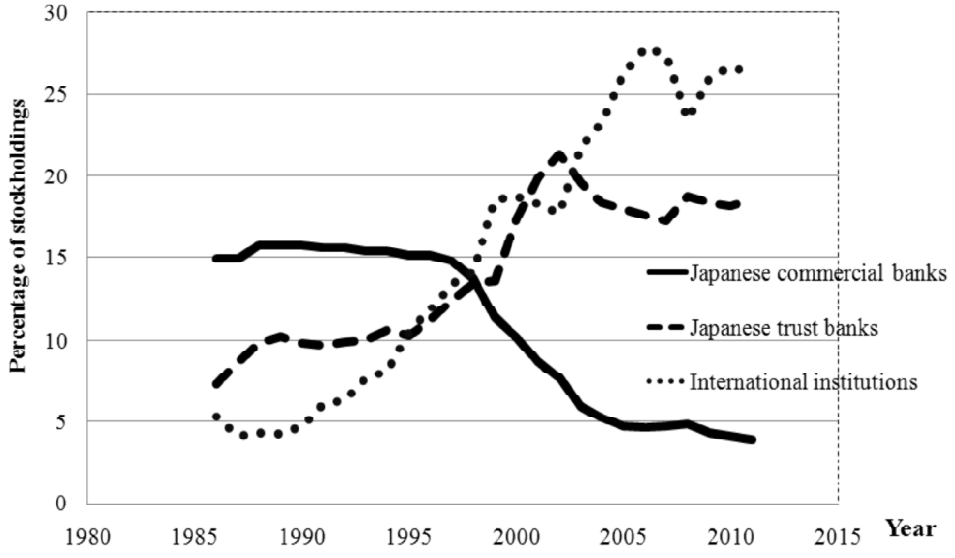


**Figure 1. Time Series of the Average Stockholdings of Institutional Investors in all Firms in the Tokyo Stock Exchange from 1986 to 2011.**

The percentage of public companies'shares held by Japanese commercial banks started to fall in the early 1990s, declining until 2011, with international institutions and Japanese trust banks[3] purchasing many sharesthat were sold by commercial banks(see Figure 1). Note that there is a crossover phenomenon near 2000. Both the lines representing percentage of stockholding of trust banks and international institutions crossed above the line of commercial banks. (Due to the Tokyo Stock Exchange and Bank of Japan not releasing any data on stock ownership by governmental banks, shareholdings of government banks are not included in Figure 1.)As of 2014, international institutions account for about 26% of total shareholdings in the Tokyo Stock Exchange, with Japanese trust banks holding about 18%. Thismight have negative implications for public firms in Japan, especially when the financial health of their MBs is weakened and there are significant falls in stock value among bank-dependent Japanese firms (Shin,Fraser and Kolari, 2003).This phenomenon raises a new challenge for both firms and MBTsin Japan.

Specifically, this article examines how the OBMs from MBTs functionfor their corporate clients, by considering the monitoring and supporting roles of MBTs in Japan and assessing OBMs' effects on earnings management of their corporate clients. Earnings management is commonly defined as the choice by a manager ofspecific accounting policies or actions affecting earnings to achieve some specific reported earnings objectives (Scott, 2009). These effects are examined from various internal and external factors of the firms. Here, 'internal' factors refer to thoseaffectingcorporate

governance through a number of corporate personnel variables, such as CEO ownership and board members holding CPA licenses; while 'external' factorsrefer to the percentage of OBMs from MBTs and the percentage of stock ownership by MBTs.

Some accounting scholars have investigated the role of general OBMs in corporate earnings management. For example, Klein (2002) found that outside directors would deter corporate earnings management in US firms. Peasnell,Pope and Young (2005) conductedtheir study using UK data, but also found that outside directors would deter corporate earnings management.In Japan, Iwasaki (2009) examined the influences of OBMs from corporateparent companies, affiliated companies, and large stockholders, on earnings managementin Japan. Iwasaki (2009) did not specifically examine whether OBMs from MBT are helpful in monitoring the firm's management of earnings or not. There are various studies on earnings management using sample data from the US, UK, Australian, China, Spain, and France(see Bedard,Chtourou and Courteau, 2004; Davidson,Goodwin-Stewart and Kent 2005; Firth Fung and Rui,2007; Vafeas, 2005; Xie,Davidson and DaDalt2003; Yang and Krishnan, 2005; Osma and Noguer, 2007; Piot and Janin, 2007). These existing studies, however, did not examine the specific influences of OBMs from different types ofMBT on the earnings management of their corporate clients. Importantly, our paper aims to find out whether OBMs impactnot only each bank in MBT, but also the whole MBT in Japan. In addition,we will address other important factors influencing earnings management after the global financial crisisin 2008.

Our paper contributes to the literature in several aspects. First, to the best of our knowledge, there is nostudy focusing on the impact of OBMs within MBTs in Japan on the earnings management of their corporate client.Our study examines whether OBMs from MBTsreduce a corporate client's earnings management. Second, on June 1, 2009, the Japanese firewall regulations for banks, securities firms, and insurance companies were revised. The revision reduced governmental restrictions and relied more upon industry self-regulation, a move which is expected to make Japanese financial institutions more competitive. The firewall regulations were originally designed to prevent a conflict of interest between customers and investors, and to prevent banks from abusing their dominant bargaining position on their corporate clients.It is interesting, therefore, to learnhow these changes affected firms' earnings management. We use the data from 2010 in this study. Finally, our study investigates the relationships among earnings management and a number of other factors, such as the percentage of stock ownership by commercial banks, trust banks, governmental banks, and international institutions, which have not yet been examined in previous studies.This paper provides more insight into the factorsinfluencingearnings management, especially in Japan. By focusing on OBMs from MBT, we are able to compare our findings with the results of previous research that deal with insurance companies and financial institutions using data from 1999 to 2001 (Yazawa, 2004). This studywould be potentially usefulfor investors, company executives, certified

public accountants, tax authorities, and academics when making their financial decisions in Japan.

The remainder of this paper is organized as follows: Section 2 presents a review of the literature; Section 3 outlines the sample selection procedure and describes the variables used in the analysis; Section 4 reports the empirical results; Section 5 provides the sensitivity analyses; and Section 6 presents conclusions of this study.

## 2. LITERATURE REVIEW

It is hard to offer a precise definition of MB (Kawai, Hashimoto and Izumida, 1996). The definition of MB is different depending on the scholars. Midorikawa (2008) attempted to marshal the definition of MB in previous MB literature. These definitions include large shareholdings by a bank and transfer bank employees as OBMs in the literature[4] definitely.We argue an earnings management with regard to these two characteristics in this chapter.

### 2.1. Bank ownership and earnings management

There is aconflict of interest problembetween agent and principal(Jensen and Meckling, 1976). Managers serve as shareholders'agents and have an incentive to take actions that do not maximize the welfareof the principal (Shleifer and Vishny, 1989).The ownership structures, relating with agency costs, affect corporate clients' earnings management. Increasingagency costs motivate the use of accounting-based compensation plans by managers. Therefore, ownership structures might have an impact on managers' opportunistic earnings management.

In US, Chung, Firth and Kim (2002) found that when institutional investors own a large portion of a client firms' shares, there is less opportunistic earnings management. They argue that substantialinvestment makes institutional investors monitor the financial accounting qualities of client firms'. Institutional investors play an important role in the governance of their clients by closely monitoring decision-making activities within the firms.

In Japan, Shuto (2010) investigated whether stable stockholders, such as financial institutions[5], resist the managers' opportunistic accounting policy choices. He reported that the financial institutions as stable stockholders prevent managers from avoiding the income-increasing. However, the research uses the data of prior to 2000. So, we have a motivation to extend the research. In terms of Japanese firms, MBT has an ownership of corporate clients as stable stockholders. The ownership by MBs is important for managers to plan and perform long-term strategies. However, these managers as agents might not reach their firms'goalsor have a motivation to manipulate earnings. Therefore, MBs are responsible for monitoring managers'behaviors as stable stockholders (Aoki, 1990).

We argue that ownership by MBTaffects earnings management.MBT holds a large fraction of voting rights in many firms. According to the antimonopoly act, a bank can

invest up to 5% of a firm's equity. MBT can be a stockholder as well as a lender to their corporate clients to mitigate information asymmetryand agency costswhen collaborating with their team members. Thus, MBTs large equity influences corporate clients' investment decisions and reduces agency costs. Concentrated ownership can provide incentives for MBT to monitor managerial accounting policy choices. Therefore, ownership by MBT affects mitigating corporate clients'earnings management.

In addition, we argue for each bank in MBT. MBT consists of a commercial bank, a trust bank, and a governmental bank. The role of MBs has dramatically changed since the early 1990s. Numata and Takeda (2010) pointed out that a restructuring of banks and firms in financial trouble decreased the role of the MB as a provider of both insurance and monitoring services to client firms. Hanazaki and Horiuchi(2004) doubted whether MBs have a monitoring mechanism or not. Kobori, Tsai and Wu (2014) could not find the relationship between MBs and corporate clients' earnings management. Thus, the traditional role of MBs has changed. We further discuss the relationship between ownership structure by a commercial bank, a trust bank and a governmental bank in MBT and earnings management. The goals and roles of these banks are different and each bank does not perform the same function when dealing with clients' earnings management.

First of all, we discuss the governance of a commercial bank in MBT. Both the commercial bank and the corporate client tend to build up an intimate, stable, and long-term relationshipthat does not create an agency problem. The bank influences their clients to borrow more than enough to keep a stable interest income flow for the bank when there are less investment opportunities. The bank in MBT, as a stable stockholder, gets the benefit of supplying retail services. The bank is a trustee on outstanding bond issues, as well as a primary supplier of foreign exchange and other fee-based services. The bank inMBT will get the income from large clients (Scher, 1997). Therefore, a commercial bank in MBT keeps a stable relationship with corporate clients to mitigate information asymmetry, as well as to gain income from the offered commercial services. They resist clients' opportunistic accounting choices. Ownership by a commercial bank in MBT is negatively related to earnings management.

Next, we argue the governance role of a trust bank in MBT. In the 1990s, traditional cross-shareholdings between firms decreased and ownership of firm shares by MBs dropped significantly. Since then, the capital market has functioned well, giving trust banks the released mutual stock between firms and other banks. In addition, the insurance companies and banks established trust banks (e.g., the Master Trust Bank of Japan, Japan Trustee Service Bank, and Trust &Custody Service Bank). These trust banks have increasingly owned the released stocks in the market. Concentrated ownership can provide incentives for a trust bank in MBTto monitor managerial performances. Suzuki (2005) reported that trust banks in MBTs are large stockholders in client firms. They behave as stable stockholders as they are within the top 20 ranked stockholders in client firms.In addition, Midorikawa (2008) pointed out that current

trust banks in MBTs could be activist investors. These activist investors might reduce earnings management (Park and Shin, 2008). Trust banks have a motivation to sell the corporate clients' stocks when their profitability is poor.The stockownership by these banks limits the ability to manipulate earnings. Based on the point of Midorikawa (2008)and Suzuki (2005), ownership by a trust bank in MBTmitigates clients' earnings management.

Finally, we discuss whether governmental bank ownership in MBT plays an important role in earnings management. As a comprehensive governmental bank is introducedto better serve society and help promote the economy, it lends funds to the firms in line with a national monetary policy. The goal of a governmental bank in MBT carries out lending funds as apolitical decision. The bank does not have an initiative to lend funds, for instance, a syndicated loan[6]. The bank follows the financing determination, the syndicate loan,ofthe first ranked commercial or trust bank in MBT. Theexcessive lending by the governmental bank deprives financial services of private banks (Nemoto *et al.*, 2006). However, a commercial bank and a trust bank in MBT could not afford to lend funds to clients afterthe global financial crisis in 2008. The governmental bank took the lead in lending funds and then took on the risk of bad debts. However, the main purpose of a governmental bank is not necessarily to monitor the corporate clients. Therefore, themanager in the client firm might not fear monitoring by a governmental bank in MBT and might be more apt to maximize their benefits. Based on these arguments, ownership by a governmental bank in MBT does not mitigate client firm's earnings management.

### 2.2. Outside board members from MBT and earnings management

The extent to which increased levels of OBM representation on the board of directors benefit shareholders is the subject of much debate. The empirical evidence on the efficacy of the monitoring that OBMs provide appears to depend on the setting in which it is examined (Xie *et al.*, 2003). OBMs are sent to corporate clients that are in need of an experienced senior financial officer and that have come to rely on their banks for fulfilling needs (Scher, 1997). OBMs are expected to monitor the corporate clients'opportunistic accounting behaviors. In the earnings management research arena, the research focuses on mitigating earnings management by monitoring of OBMs.

Klein (2002) found that independent directors would deter corporate earnings management in US. Using UK data, Peasnell *et al.* (2005) also concluded that independent directors would deter corporate earnings management. External directors are presumed to be more independent than internal directors and, therefore, better perform their monitoring roles in audit committee. In addition, Park and Shin (2004) found a negative association between the degree of accrual manipulation (represents earning management) and the proportion of independent board members on the board in Canada. On the other hand, Xie *et al.* (2003) found that the presence of independent directors from US investment banks is negatively related to the level of earnings

management, whereas the proportion of independent directors with financial backgrounds, such as working experience with commercial or investment banks, is unrelated to earnings management in an overall board analysis.

The Japanese literature on the impact of corporate governance on earnings managementis vast. Some authors (e.g.,Iwasaki, 2009; Yazawa, 2004) investigated the relation between board characteristics and earnings management. Yazawa (2004) found that independent directors from financial institutions,including insurance companies, are notrelated to discretionary accruals. More recently, Iwasaki (2009) found that the independent boards of supervisors regulate earnings management. However, these papers do not focus on the OBMs from MBT. Compared with other financial institutions, OBMs from MBT are more involved in the daily financial transactions of client firms. They are superior in possessing information about the firm operations. These OBMs can effectively monitor client firms' behavior (Diamond, 1984; Fama, 1985). Thus, the information asymmetry problem is mitigated to a large extent, and MBT can monitor managers in order to prevent behavior corresponding to moral hazards from occurring under conditions of asymmetric information through OBMs from MBT. Thus, Japanese corporate governance mechanisms, such as OBMs from MBTmonitoring, help agency problems and then mitigate managers' opportunistic accounting choices.

There are three arguments on the transfer of bank employees, OBMs from MBT, in previous literature:(1) the role of symbol (Yamanaka, 2002), (2) reduction of monitoring costs (Aoki, 1994), and (3) senior (high-wage) personnelemployment (Scher, 1997). However, Midorikawa (2008) insisted that the transfer of bank employees corresponds with each bank's strategies. The transfer of bank employees is also different in each bank's goals. Therefore, the monitoring effects by banks employees, OBMs from each bank in MBT,might have a different effect on managerial opportunistic accounting operations.

We argue the OBMs from differenttypes of banks in MBT. At first, we review the commercial bank in MBT.Midorikawa (2008) reported on outside supervisors from commercial banks in MBs.Outside supervisors are appointed by the top executives of MB as a symbol. It might have not an impact on a regulating manager's earnings management becausea conflict of interest does not arise between them. However, a commercial bank in MBT has a purpose in sending OBMs to monitor corporate clients. OBMs from a commercial bank in MBT are sent to the corporate clients to mitigate the monitoring costs, gather valuable information for their banks, and perform credit analysis. Therefore, their monitoring has a negative impact on a manager's earnings management.

The purpose of a trust bank in MBT is to manage both institutional and mutual fund investments. Traditionally, a trust bank is considered weak in credit analysis, compared with a commercial bank. Their lending is based on real estate (Saporoschenko, 2002). Trust banks finance commercial real estate and industrial

projects with long-term loans (Aoki, 1994). They have a long-term relationship along with long-term loans. Therefore, OBMs from a trust bank are expected to maximize corporate clients' profits and income capability over a long period. On the other hand, they also have a role in reducing information asymmetry to diminish monitoring costs for their banks. Therefore, they place emphasis on advisory orfinancial decisions and caneasily detect financial problems because they operate daily management as an investment or financial expertise[7]. These OBMs mitigate client firms' earnings management.

Finally, in terms of a governmental bank in MBT, the Japanese business practice of *Amakudari* is an important tool for commercial firms. *Amakudari* is the system of retired bureaucrats parachuting into positions as advisers and executives in private firms. Some firms have accepted these personnel from governmental banks[8] as OBMswhile maintaining close transactional ties with these banks in the future (Scher, 1997). The main role of these OBMs is to connect appointed firms with their governmental banks. Therefore, they do not positively mitigate firms' earnings management.

## 3. SAMPLE AND METHODOLOGY

Our sample consists of firms listed on the Japanese stock exchanges in 2010, along with the following criteria:

1. The firm was listed on at least one stock exchange in Japan[9].
2. The firm's fiscal year starts on April 1 and ends on March 31 of the following year.
3. The firm does not belong to the banking, securities, insurance, or utilities industries.
4. Compliance with foreign accounting standards was not required.
5. Firms with an audit committee were excluded from the sample because audit committees are not common in Japan.
6. The OBMs from MBT who served the same firm for more than ten years were excluded from the sample (Peasnell et al., 2000; Yazawa, 2004). Since such directors or supervisors have been involved in decision-making at the same firms for a long time, there is an adequate reason to believe that they are actually working in the companies' best interests.

The financial data of sample firms, financial institutions' details, and securities reports necessary for the study were obtained from the EOL[10] database (PRONEXUS INC., 2014). The amount of shares held by each stockholder and OBMs from MBTwere drawn from the *Stock and Shares Report*of *Yuuka Shouken Houkokusyo*(2010). The accounting data was derived from the firms' consolidated financial statements for the period examined in this work. The data used to conduct this research consisted of

about 1,900 firm-year observations retrieved from the EOL database. We used data from 2010 to investigate the relationships among banks, firms, stock markets, and accounting firms because, as noted above, the barrier between banking and broker operations was lifted in June 2009. In addition, we examine the effect of the global financial crisis of 2008 on MBT.Table 1 shows the types of banks examined in this work.

**Table 1**
**Main bank team**

| | |
|---|---|
| Commercial banks | 5,945 |
| Trust banks | 993 |
| Governmental banks | 263 |
| Total | 7,201 |
| Average number of main banks in main bank team associated with a company | 3.79 |

We employed absolute discretionary accruals as a proxy for earnings management (see Klein, 2002).The discretionary accruals were estimated from total accruals minus nondiscretionary accruals.

We measured total accruals by using the modified Jones model.This modified model is used by Shuto (2010) and Kobori et al. (2014). Following the previous research, this paper usedthe modified Jonesmodel to control the effects of changing industry-wide economic conditions on total accruals. By estimating a firm's nondiscretionary accruals, a firm-year control sample was assigned to an estimationportfolio that consistedof similar firms matched on the basis of the Tokyo Stock Exchangeindustry classification codes and fiscal year. There are 36 industries in the Tokyo Stock Exchange classification codes. In this paper, five industries lacked the data needed to compute the nondiscretionary accruals, and therefore, only 29 industries were considered in this work.

We estimated each sample firm's total accruals by running the following model for each firm to get upcoming coefficients on each independent variable:

$$(IB_{it} - CFO_{it}) \,/\, AT_{it-1} = \beta_1(1/AT_{it-1}) + \beta_2\{(SALE_{it} - SALE_{it-1}) - (AR_{it} - AR_{it-1})\}/AT_{it-1} + \beta_3 (PPE_{it}/AT_{it-1}) + \varepsilon_{it} \quad \text{(Model 1)}$$

where *i* is the index of the firm, *t* is the index of the time period, and all variables and their definitions are as follows:

*IB* = net income before extraordinary items, which is defined as net income, minus gains from extraordinary items, plus losses from extraordinary items;

*CFO* = net cash flow from operational activities;

*AT* = total assets;

*SALE* = sales revenue;

*AR* = accounts receivable;

$PPE$ = gross property, plant, and equipment;

$\varepsilon$ = error term.

We used the above model to estimate the value of [(IB-CFO)/AT] and calculate the difference between the raw value and the estimated value of [(IB-CFO)/AT]. This difference is the estimated error term of the regression model, also called "discretionary accruals." To control for performance, the discretionary accruals of each firm-year were matched to a portfolio with similar industry classification. Finally, the difference between each firm's discretionary accruals and the average of portfolio firms' accruals was analyzed to determine whether OBMs from MBTwere related to earnings management using multiple regression analysis. The dependent variable was the absolute value of discretionary accruals. The independent variables are listed in Table 2 and are discussedin the Literature Review (Section 2). By using firm data from 2010 in the EOL database, the MBT monitoring model below allows us to analyze whether OBMs from commercial banks, trust banks, governmental banks, as well as other important dynamics, suchas stock ownership, CPA specialist, board member compensation, etc. affect banks clients'corporate earnings management in Japan after the global financial crisis in 2008. Our least squares regression modelsare as follows:

**MBT monitoring model**

$$|ADA|_t = \beta_0+\beta_1 BANKB_{it}+\beta_2 BANKO_{it}+\beta_3 CEO_{it}+\beta_4 INTER_{it}+\beta_5 CPA_{it}+\beta_6 COPM_{it}+\varepsilon_{it} \quad \text{(Model 2)}$$

**MBs in MBT monitoring model**

$$|ADA|_{it} = \beta_0+\beta_1 BANKBC_{it}+\beta_2 BANKBT_{it}+\beta_3 BANKBG_{it}+\beta_4 BANKOC_{it}+\beta_5 BANKOT_{it} +\beta_6 BANKOG_{it}+\beta_7 CEO_{it}+\beta_8 INTER_{it}+\beta_9 CPA_{it}+\beta_{10} COMP_{it}+\varepsilon_{it} \quad \text{(Model 3)}$$

where $i$ is the index of the firm, $t$ is the index of the time period.

We also controlled for confounding factors that may be related to our measure of discretionary accruals based on the previous literature. First, we controlled for the fact that some of the sample firms may be in conditions that give them particular incentives to manage earnings, which has nothing to do with the quality of their corporate governance practices. It has been shown that firms have a tendency to use income-increasing accruals. We controlled for this with the percentage of CEO stock ownership (*CEO*). In US-based research, higher holdings by the CEO may improve incentives for value maximizing behavior, as well raise the motivation to manipulate earnings to improve the apparent performance of the firm in periods surrounding stock sales (Cornett,Marcus and Tehranian, 2008). This suggests that higher stockholdings by executives might encourage managers to manipulate earnings so that they can protect their own interests. In other research (Aboody and Kasznik, 2000; Klein, 2002; Yermack, 1997), CEOs manage investors' expectations on earnings downwards prior to the issuance of stock option awards. On the other side, Warfield,

Wild and Wild (1995) found a negative relationship between managerial stockholdings and the absolute value of abnormal accruals. Therefore, no *a priori* prediction is made in this work on this issue.

Next, we also controlled for the percentage of compensation of all OBMs from MBs (*COMP*). Board members have to maximize stockholder value to maintain their incentives. Previous research (Kaplan, 1994; Kubo, 2001; Xu, 1997) has reported a number of possible linkages between executive compensation and firm profits in Japan. In particular, studies have shown that executives might be motivated by high compensation and tenure to improve corporate performance, as seen with Kanebo, Ltd., Nikko Cordial Corporation, and Yamaichi Securities Co., Ltd (Skinner and Srinivasan, 2012). In the earnings management literature, Shuto (2007) reported that executives have managed earnings to increase their compensations in Japan.

Third, we controlled for two monitoring mechanisms that decrease the need for an efficient board. *CPA* represents that one of the board members is a CPA.*CPA*is an indicator variable that captures the effect on earnings management of having an accounting specialist on the board. Prawitt, Smith and Wood (2009) showed that effective internal controls can improve the quality of financial reporting, finding a negative relationship between overall internal audit function quality and discretionary accruals. In addition, Raghunandan,Rama and Read (2001) found that audit committees that include a financial expert have greater interactions with their internal auditors. Bedard *et al.* (2004) investigated whether having at least one financial expert, such as a CPA or financial analyst, on a firm's audit committee had any effects on the quality of its public financial information. Their results showed that increased financial expertise at the executive level seems to decrease the likelihood of both positive and negative discretionary accruals.The percentage of stock ownership of international institutions (*INTER)* captures the effect of institutional investors who are in a position to monitor the financial reporting process.Monitoring by institutional stockholders can effectively limit the actions taken by executives, making them focus more on firm performance and less on opportunistic or self-serving behaviors (Cornett *et al.*, 2008). Activist institutional stockholders might further reduce earnings management, and such activism by large institutions has become increasingly visible in recent years (Park and Shin, 2004). In Japan-based research, Shuto (2006) found that stock ownership by financial institutions limits the ability to avoid income-decreasing accruals, whereas the percentage of stocks held by international investors is not statistically related to such accruals. However, the monitoring carried out by institutional stockholders, such as international institutional investors, is expected to be negatively associated with discretionary accruals.

Financial institutions in our study includedMBTscomprised ofcommercial banks, trust banks, and governmental banks. Insurance companies were not included in financial institutions. Institutional stockholders includedboth these financial institutions and international institutional investors.

**Table 2**
**Description of variables**

| *Variable* | *Description* |
|---|---|
| Dependent variable | |
| *ADA* | Absolute value of discretionary accruals |
| Independent variables | |
| *BANKB* | The percentage of outside board members from main bank team |
| *BANKBC* | The percentage of outside board members from commercial bank in main bank team |
| *BANKBT* | The percentage of outside board members from trust bank in main bank team |
| *BANKBG* | The percentage of outside board members from governmental bank in main bank team |
| *BANKO* | The percentage of stock ownership of main bank team |
| *BANKOC* | The percentage of stock ownership of commercial bank in main bank team |
| *BANKOT* | The percentage of stock ownership of trust bank in main bank team |
| *BANKOG* | The percentage of stock ownership of governmental bank in main bank team |
| *CEO* | The percentage of CEO stock ownership |
| *INTER* | The percentage of stock ownership of international institutions |
| *CPA* | If one of the board members is a CPA, then the variable is 1, otherwise 0 |
| *COMP* | The percentage of compensation of all OBMs from MBs |

## 4. EMPIRICAL RESULTS

The empirical results showthat OBMs from MBT can affect earnings management at banks' client firms.

**Table 3**
**Descriptive statistics of variables**

| *Variables* | *Mean* | *St. Dev.* | *Min.* | *Q1* | *Median* | *Q3* | *Max.* |
|---|---|---|---|---|---|---|---|
| *ADA* | 0.029 | 0.042 | 0.000 | 0.007 | 0.017 | 0.034 | 0.494 |
| *BANKB* | 0.066 | 0.088 | 0.000 | 0.000 | 0.000 | 0.111 | 0.571 |
| *BANKBC* | 0.058 | 0.082 | 0.000 | 0.000 | 0.000 | 0.100 | 0.545 |
| *BANKBT* | 0.005 | 0.027 | 0.000 | 0.000 | 0.000 | 0.000 | 0.571 |
| *BANKBG* | 0.003 | 0.017 | 0.000 | 0.000 | 0.000 | 0.000 | 0.200 |
| *BANKO* | 4.160 | 4.394 | 0.000 | 0.000 | 3.365 | 6.560 | 48.380 |
| *BANKOC* | 3.683 | 4.032 | 0.000 | 0.000 | 2.930 | 5.595 | 48.380 |
| *BANKOT* | 0.362 | 1.143 | 0.000 | 0.000 | 0.000 | 0.000 | 23.320 |
| *BANKOG* | 0.115 | 0.655 | 0.000 | 0.000 | 0.000 | 0.000 | 12.600 |
| *CEO* | 0.030 | 0.077 | 0.000 | 0.000 | 0.001 | 0.016 | 0.694 |
| *INTER* | 2.674 | 5.918 | 0.000 | 0.000 | 0.000 | 2.760 | 73.450 |
| *CPA* | 0.300 | 0.458 | 0.000 | 0.000 | 0.000 | 1.000 | 1.000 |
| *COMP* | 0.087 | 0.069 | 0.000 | 0.039 | 0.072 | 0.116 | 0.545 |

Table 3 shows the descriptive statistics for each variable. Banks in Japan are prohibited from owning more than 5% of a firms' stock.The average stock holdings by banks are below 5%. However, banks can obtain more than 5% of stock to rescue client firms in special cases. The MAX of stock ownership by banks shows more than

5%.*ADA*represents the absolute values of discretionary accruals and reflectsthe combined effect of increases and decreases in earnings on earnings management.

We report the empirical results for the multiple regression models in Table 4. The *F*-test for the statistical goodness-of-fit of the empirical modelsis significant at the 0.05 level. The adjusted $R^2$ value is 0.004 for model (2) and 0.007 for model (3). This suggests that our models would make a good predictor of the dependent variable in terms of independent variables.

At first, we present the results of estimating MBT monitoring model (2) examining the relationship between OBMs from MBT(*BANKB*), the percentage of stock ownership byMBT (*BANKO*),and earnings management. These variables are not related to*ADA*. Each MB in MBT is a fellow clients'financial distress with squad.But they are also usually a rival.This indicates thatthey do not tacklemitigating managers' opportunistic earnings management within the team. With respect to the control variables, the estimate of the *CEO*(-0.032) coefficient is negative and statistically significant at the 0.05 level, which does not support the view that higher levels of CEO ownership lead to an increase in earnings management. This is in line with Warfield et al. (1995), who showed evidence that the more stocks that are held by the CEO, the less likely that the firm engages in earnings management.The coefficient of *CPA* (-0.004) is negative and significant, suggesting that if one or more of the board members holds a CPA license, then the firm may incur a negative impact on earnings management. A possible explanation is that CPAs have a fiduciary duty to perform their legal responsibilities, and thus are more likely not to pursue earnings management. This finding is consistent with the results of Bedard, *et al.* (2004), Prawitt *et al.* (2009), and Raghunandan *et al.* (2001).

Next, we show the results of MBs in the MBT monitoring model. We found that the percentage of OBMs from commercial banks (*BANKBC*) or trust banks (*BANKBT*), and the percentage of stock ownership by commercial banks (*BANKOC*), governmental banks (*BANKOG*) or international institutions (*INTER*), and the percentage of compensation of all OBMs (*COMP*) are not related to earnings management of banks' client firms. The percentage of OBMs from governmental banks (*BANKBG*) and the percentage of stock ownership of trust banks (*BANKOT)* are positively related to the absolute value of discretionary accruals, whereas the percentage of CEO stock ownership (*CEO*) and a board member who has CPA certificates (*CPA*) are negatively related to the absolute value of discretionary accruals.

The coefficients on *BANKBG* (0.136) and *BANKOT* (0.002) are positive, whereas those on *CEO* (-0.029) and *CPA*(-0.004) are negative. The estimated coefficients of *BANKBG*, *BANKOT* and *CPA* are all statistically significant at the 0.1 level, and the coefficient of *CEO* is statistically significant at the 0.05 level. To analyze further, the *BANKBG* variable has a statistically significant positive sign at the 0.1 level, indicating that OBMs from governmental banks increase earnings management. This positive relationship may be due to the borrowing firms' level of debt or reconstructing efforts.

The coefficient of the *BANKOT* variable is positive and statistically significant at the 0.1 level, suggesting that trust banks exert a positive impact on earnings management. This is consistent with the fact that trust banks had a high level of stock ownership percentage in 2010 (see Figure 1). The percentage of CEO stock ownership (*CEO*) is also negatively associated with *ADA*(consistent with Warfield et al. (1995)). In addition, there is also a statisticallynegativeassociation between *CPA* and*ADA*(consistent with Bedard, *et al.* (2004); Prawitt *et al.* (2009), and Raghunandan *et al.* (2001)).

In summary, our results do not find that each entire MBT mitigates the managers' opportunistic earnings management (as suggesting by Hanazaki and Horiuchi (2004) and Kobori *et al.* (2014)). Our experiment findings suggest that a greater percentage of OBMs from governmental banks in MBT or a higher level of stock ownership by trust banks in MBT can induce firms to manage earnings. In contrast, having a CPA on the board or greater stock ownership by the CEO can deter firms from manipulating earnings.

**Table 4**
**Results of multiple regression models of MBT monitoring model and MBs in MBT monitoring model**

Panel A: MBT monitoring model

| *Variables* | *Coefficient* | *St. Dev.* | *t-value* | *p-value* | |
|---|---|---|---|---|---|
| *Intercept* | 0.030 | 0.002 | 16.230 | 0.000 | *** |
| *BANKB* | 0.007 | 0.011 | 0.660 | 0.511 | |
| *BANKO* | 0.000 | 0.000 | 1.000 | 0.316 | |
| *CEO* | -0.032 | 0.013 | -2.470 | 0.014 | ** |
| *INTER* | 0.000 | 0.000 | -0.290 | 0.772 | |
| *CPA* | -0.004 | 0.002 | -1.870 | 0.062 | * |
| *COMP* | 0.684 | 0.666 | 1.030 | 0.305 | |
| Adjusted *R*-square | 0.004 | | | | |
| N | 1,900 | | | | |

Panel B: MBs in MBT monitoring model

| *Variables* | *Coefficient* | *St. Dev.* | *t-value* | *p-value* | |
|---|---|---|---|---|---|
| *Intercept* | 0.031 | 0.002 | 14.300 | 0.000 | *** |
| *BANKBC* | 0.005 | 0.012 | 0.450 | 0.651 | |
| *BANKBT* | -0.032 | 0.038 | -0.840 | 0.400 | |
| *BANKBG* | 0.136 | 0.071 | 1.920 | 0.055 | * |
| *BANKOC* | 0.000 | 0.000 | -0.040 | 0.970 | |
| *BANKOT* | 0.002 | 0.001 | 1.680 | 0.094 | * |
| *BANKOG* | 0.002 | 0.002 | 0.860 | 0.390 | |
| *CEO* | -0.029 | 0.013 | -2.220 | 0.026 | ** |
| *INTER* | 0.000 | 0.000 | -0.160 | 0.875 | |
| *CPA* | -0.004 | 0.002 | -1.800 | 0.072 | * |
| *COMP* | -0.008 | 0.014 | -0.580 | 0.565 | |
| Adjusted *R*-square | 0.007 | | | | |
| N | 1,900 | | | | |

*Note:* p-values are one-tailed; ***, **, * denote p<0.01, <0.05, <0.10, respectively.

## 5. SENSITIVITY ANALYSES

To test the robustness of our results, we performed the following analysis[11]. First, we examined the model of endogeneity. The definition of MB is different depending on the researcher. Sheard (1989) does not include governmental banks in MB. We removedthe variables of governmental banks,the percentage of OBMs from governmental banks (*BANKBG*),and the percentage of stock ownership by governmental banks (*BANKOG*) in our sample. *BANKB CT* is the variablethat combined *BANKBC* and *BANKBT*, and *BANKO CT* is also a combination variablethat consisted of *BANKOC* and *BANKOT*. We perform multiple regression analysis by using model (2) and (3). The result of panel A in Table 5 is consistent with the main results. However, *BANKOT* has no effect on earnings management in panel B of Table 5. In addition, we have analyzed the governmental variables. The results show that we find the same result as the main findings with regard to*BANKBG* in Panel C of Table 5.In these analyses, we did not get the same result with*BANKOT*.Therefore, we performed additional tests to examine whether *BANKOT* affects earnings management. There are differences in firm characteristics between client firms that have close relationships with each bank in MBT. For example, it might be the case that client firm size is not the same. We divided the sample firms by the stock exchanges (the first section in the Tokyo Stock Exchange and other Japanese stock exchanges), and then we perform the statistical analysis by using model (2) and (3). In Table 6 of panel B,the coefficient of the *BANKOT* variable is positive and statistically significant at the 0.1 level, suggesting that trust banks exert a positive impact on earnings management.These results are consistent with the stockholding data from the Tokyo Stock Exchange from 1986 to 2011 (see Figure 1). In addition, we found that the percentage of stock ownership by governmental banks (*BANKOG*) affects earnings management in large Japanese firms. Due to the financial crisis in 2008, the ownership by governmental banks in MBT might have effectedon large firms managers' opportunistic accounting choices.

**Table 5**
**Results of multiple regression models of MBT monitoring model, MBs in MBT monitoring model and MBs in MBT monitoring model**

| Sample: Commercial bank and trust bank in MBT | | | | | |
|---|---|---|---|---|---|
| Panel A: MBT monitoring model | | | | | |
| *Variables* | *Coefficient* | *St. Dev.* | *t-value* | *p-value* | |
| *Intercept* | 0.032 | 0.002 | 14.68 | 0.000 | *** |
| *BANKB CT* | 0.003 | 0.012 | 0.23 | 0.816 | |
| *BANKO CT* | 0.000 | 0.000 | 0.58 | 0.562 | |
| *CEO* | -0.031 | 0.013 | -2.37 | 0.018 | ** |
| *INTER* | 0.000 | 0.000 | -0.35 | 0.728 | |
| *CPA* | -0.004 | 0.002 | -1.87 | 0.062 | * |
| *COMP* | -0.008 | 0.014 | -0.55 | 0.581 | |
| Adjusted *R*-square | 0.003 | | | | |
| N | 1,900 | | | | |

Sample: Commercial bank and trust bank in MBT

Panel B: MBs in MBT monitoring model

| *Variables* | | *Coefficient* | *St. Dev.* | *t-value* | *p-value* | |
|---|---|---|---|---|---|---|
| *Intercept* | | 0.032 | 0.002 | 14.66 | 0.000 | *** |
| *BANKBC* | | 0.006 | 0.012 | 0.480 | 0.634 | |
| *BANKBT* | | -0.031 | 0.038 | -0.800 | 0.424 | |
| *BANKOC* | | 0.000 | 0.000 | -0.030 | 0.973 | |
| *BANKOT* | | 0.001 | 0.001 | 1.600 | 0.110 | |
| *CEO* | | -0.03 | 0.013 | -2.340 | 0.019 | * |
| *INTER* | | 0.000 | 0.000 | -0.350 | 0.728 | |
| *CPA* | | -0.004 | 0.002 | -1.820 | 0.069 | |
| *COMP* | | -0.008 | 0.014 | -0.560 | 0.578 | |
| Adjusted *R*-square | 0.003 | | | | | |
| N | 1,900 | | | | | |

Sample: Governmental bank in MBT

Panel C: MBs in MBT monitoring model

| *Variables* | | *Coefficient* | *St. Dev.* | *t-value* | *p-value* | |
|---|---|---|---|---|---|---|
| *Intercept* | | 0.032 | 0.002 | 18.16 | 0.000 | *** |
| *BANKBG* | | 0.135 | 0.071 | 1.910 | 0.056 | * |
| *BANKOG* | | 0.002 | 0.002 | 0.840 | 0.403 | |
| *CEO* | | -0.030 | 0.013 | -2.39 | 0.017 | ** |
| *INTER* | | 0.000 | 0.000 | -0.26 | 0.795 | |
| *CPA* | | -0.004 | 0.002 | -1.910 | 0.056 | * |
| *COMP* | | -0.008 | 0.014 | -0.600 | 0.547 | |
| Adjusted *R*-square | 0.008 | | | | | |
| N | 1,900 | | | | | |

*Note:* p-values are one-tailed; ***, **, * denote p<0.01, <0.05, <0.10, respectively.

**Table 6**
**Results of multiple regression models of MBT monitoring model, MBs in MBT monitoring model, MBT monitoring model and MBs in MBT monitoring model**

Sample: Listed firms in 1st section in Tokyo Stock Exchange

Panel A: MBT monitoring model

| *Variables* | | *Coefficient* | *St. Dev.* | *t-value* | *p-value* | |
|---|---|---|---|---|---|---|
| *Intercept* | | 0.030 | 0.003 | 10.430 | 0.000 | *** |
| *BANKB* | | 0.000 | 0.015 | -0.030 | 0.976 | |
| *BANKO* | | 0.000 | 0.000 | 1.130 | 0.259 | |
| *CEO* | | -0.049 | 0.027 | -1.810 | 0.070 | ** |
| *INTER* | | 0.000 | 0.000 | -1.490 | 0.136 | |
| *CPA* | | -0.002 | 0.003 | -0.650 | 0.517 | |
| *COMP* | | 0.002 | 0.020 | 0.120 | 0.904 | |
| Adjusted *R*-square | 0.003 | | | | | |
| N | 1,058 | | | | | |

Panel B: MBs in MBT monitoring model

| *Variables* | *Coefficient* | *St. Dev.* | *t-value* | *p-value* | |
|---|---|---|---|---|---|
| *Intercept* | 0.031 | 0.003 | 10.570 | 0.000 | *** |
| *BANKBC* | -0.007 | 0.017 | -0.390 | 0.693 | |
| *BANKBT* | -0.062 | 0.046 | -1.330 | 0.183 | |
| *BANKBG* | 0.104 | 0.083 | 1.250 | 0.212 | |
| *BANKOC* | 0.000 | 0.000 | -0.140 | 0.890 | |
| *BANKOT* | 0.002 | 0.001 | 1.950 | 0.051 | * |
| *BANKOG* | 0.004 | 0.002 | 2.020 | 0.043 | * |
| *CEO* | -0.046 | 0.027 | -1.730 | 0.084 | * |
| *INTER* | 0.000 | 0.000 | -1.250 | 0.211 | |
| *CPA* | -0.002 | 0.003 | -0.690 | 0.491 | |
| *COMP* | 0.003 | 0.020 | 0.140 | 0.891 | |
| Adjusted *R*-square | 0.014 | | | | |
| N | 1,058 | | | | |

*Note:* p-values are one-tailed; ***, **, * denote p<0.01,<0.05,<0.10, respectively.

Sample:Except for listed firms in 1st section in Tokyo Stock Exchange

Panel C: MBT monitoring model

| *Variables* | *Coefficient* | *St. Dev.* | *t-value* | *p-value* | |
|---|---|---|---|---|---|
| *Intercept* | 0.032 | 0.003 | 9.680 | 0.000 | *** |
| *BANKB* | 0.017 | 0.017 | 0.990 | 0.324 | |
| *BANKO* | 0.000 | 0.000 | -0.010 | 0.995 | |
| *CEO* | -0.023 | 0.016 | -1.470 | 0.141 | |
| *INTER* | 0.000 | 0.000 | 1.290 | 0.198 | |
| *CPA* | -0.006 | 0.003 | -1.900 | 0.057 | * |
| *COMP* | -0.018 | 0.021 | -0.870 | 0.385 | |
| Adjusted *R*-square | 0.005 | | | | |
| N | 842 | | | | |

Panel D: MBs in MBT monitoring model

| *Variables* | *Coefficient* | *St. Dev.* | *t-value* | *p-value* | |
|---|---|---|---|---|---|
| *Intercept* | 0.032 | 0.003 | 9.660 | 0.000 | *** |
| *BANKBC* | 0.014 | 0.017 | 0.830 | 0.409 | |
| *BANKBT* | 0.016 | 0.066 | 0.240 | 0.814 | |
| *BANKBG* | 0.207 | 0.127 | 1.630 | 0.103 | |
| *BANKOC* | 0.000 | 0.000 | -0.020 | 0.987 | |
| *BANKOT* | 0.001 | 0.001 | 0.400 | 0.690 | |
| *BANKOG* | -0.004 | 0.003 | -1.200 | 0.231 | |
| *CEO* | -0.022 | 0.016 | -1.410 | 0.160 | |
| *INTER* | 0.000 | 0.000 | 1.270 | 0.203 | |
| *CPA* | -0.007 | 0.003 | -1.930 | 0.054 | * |
| *COMP* | -0.018 | 0.021 | -0.890 | 0.375 | |
| Adjusted *R*-square | 0.004 | | | | |
| N | 842 | | | | |

*Note:* p-values are one-tailed; ***, **, * denote p<0.01,<0.05,<0.10, respectively.

## 6. CONCLUSION

This paper researched whether OBMs designed by MBTsinfluence the quality of financial reporting. The result shows that OBMs from MBT(*BANKB*) and the percentage of stock ownership by MBT (*BANKO*) have no impact on earnings management.We find that the involvement of commercial banksthat have OBMs in the client firms, as well as owning stock in them, is not related to earnings management. The results also show that stock ownership by trust banks is positively related to earnings management. These findings may be consistent with the stockholding data from the Tokyo Stock Exchange from the year 1986 to 2011, which shows a high percentage of stock ownership by trust banks and a low percentage by commercial banks after the year 2000.

The empirical results indicate that earnings management was positively related to *BANKBG* and *BANKOT*, but negatively relate to *CEO* and *CPA*. These findings suggest that external factors (i.e., the percentage of OBMs of governmental banks and the percentage of stock ownership of trust banks) have positive effects on earnings management. In contrast, internal factors (i.e., CEO stock ownership and CPA licenses held by board members) may have negative effects on earnings management. In other words, our study analyzed the relationships between firms and MBTs in Japan in 2010, which is significant for investors and researchers, especially after the global financial crisis in 2008 and the changes to Japanese fire wall regulations in 2009.

Our empirical results are not consistent with those obtained from previous studiesabout OBMs(Iwasaki, 2009; Yazawa, 2004). We found a positive relationship between the percentage of OBMs from governmental banks (*BANKBG*) and earnings management. The OBMs from governmental banks are supported by the current firmsdue to an imperfect labor market. These board membersmight not be against managers' opportunistic accounting behaviors.In addition, their role is not to monitor management and mitigate agency costs for governmental banks, but to help current firms get working funds from their original banks. Therefore, their appointments provide poorfinancial reporting quality. Next, the percentage of stock ownership of trust banks (*BANKOT)* is positively related to the absolute value of discretionary accruals. This result is not consistent with Midorikawa (2008) and Suzuki (2005) and implies that they might not monitor managers' opportunistic earnings management as stable stockholders. These banks have purchasedstock in the market after the drastic collapse of a bubble economy. Trust banks in MBTs might turn to mere investors to gain the profits obtained through investing funds. This makes managers motivate earnings management. Therefore, the percentage of stock ownership of trust banks (*BANKOT)* decreases financial reporting quality. Third, high levels of CEO ownershipcan mitigate earnings management. Although, in US-based research, higher holdings by the CEO may improve incentives for value maximizing behavior, as well raise the motivation to manipulate earnings to improve the apparent performance of the firm in periods surrounding stock sales (Cornett *et al.* 2008), higher stockholdings

by CEOs in Japan might encourage managers not to manipulate earnings so that they can achievethe firm's long term goals andprotect their positions. Finally, having a board member with a CPA license can increase financial reporting quality. The appointment of CPAsto executive positions can raise the ability of a firm to carry out better internal controls. With regard to the duties of CPAs, managers require the monitoring of accounting transactions and the ability to change practices to meet accounting standards.

As we conclude from the previous section, the percentage of OBMs from MBT (*BANKB*), OBMs from commercial banks (*BANKBC*), or trust banks (*BANKBT*), and the percentage of stock ownership byMBT (*BANKO*), commercial banks (*BANKOC*), governmental banks (*BANKOG*), or international institutions (*INTER*), and the percentage of compensation of all OBMs (*COMP*) are not related to earnings management. Also, the percentage of OBMs from governmental banks (*BANKBG*) and the percentage of stock ownership of trust banks (*BANKOT)* are positively related to the absolute value of discretionary accruals, whereas the percentage of CEO stock ownership (*CEO*) and a CPA board member (*CPA*) are negatively related to the absolute value of discretionary accruals. How do these results or observations relate to the global financial crisis in 2008 and the 2009 revisions of Japanese fire wall regulations? Do the 2008 crisis and the 2009 changes make Japanese firms or banks more competitive than ever? This paper provides only the initial step in answering these questions. More research needs to be conducted in this area. It is hoped that this study and subsequent research could examine the 2008 crisis or validate the effectiveness of the 2009 changes in Japanese fire wall regulations, which make Japanese banks and firms more competitive and thus provide higher quality service to customers.

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***Notes***

1. Although the first ranked bank is called a main bank in main bank team, all banks are also called main banks in main bank team. In this study we mean banks when we refer to main banks in main bank team. We note that the first ranked bank has a competitive advantage in relation to the non-first ranked banks. For instance, this bank has priority when dealing with the borrowers, leading to longer loan term contracts, and also assists in issuing bonds and providing services to employees, such as mortgage loans and bank accounts. However, in general, researchers cannot distinguish which bank is the real first ranked bank in main bank team from the database. Therefore, our paper treats group banking as main banks.
2. Scher (1997) called these MBs MBT. Therefore, we follow Scher (1997). In addition, although governmental bank is not considered to be the MB (Sheard, 1989), the bank is considered consisting of MBT.

3. Recently, some institutional stockholders, including insurance companies, have established their own trust bank, the Trust & Custody Services Bank, in which they deposit the shares they possess. This may have increased the amount of shares held by trust banks.
4. We recognize that some researchers' (Hoshi *et al.* (1990) and Morck, Namakmura and Shivdasani (2000)) definitions of MB include the largest lender in MBT. But the lending data is disclosed in the additional information of individual financial statements, not that of consolidated financial statements. Our research uses consolidated financial statements.The reason is why most of international scholars use the consolidated financial statements for accounting research. Therefore, we follow the summary of Midorikawa (2008).
5. The sample of financial institutions might include an insurance company in Shuto (2010).
6. A syndicated loan is one that provided by MBT is arranged by the first ranked commercial or trust bank in MBT. It allows these banks in MBT to diversity, expanding their lending to broader geographic areas and industries, and then distribute risk-sharing among MBT.
7. They have huge knowledge of finance or accounting through wealth of experiences in banks.
8. Due to imperfect job markets in Japan, these banks find new jobs for the employees of distinguished services after their retirement, at least until they are 60 ( Scher., 1997).
9. The stock exchanges in Japan are Tokyo, Osaka, Nagoya, Sapporo, Niigata, Kyoto, Hiroshima, and Fukuoka, as well as in Jasdaq, Centrex, Q-Board, and Ambitious.
10. EOL is a brand-nameof database in East Asia.
11. We then test the relation between the existence of net loss and subsequent accounting reporting. In specific, we expect that firms with net loss in 2009 have larger incentive to manipulate accruals in 2010. While we partition sample by whether firms experienced negative income in 2009 and run regression (2) and (3) with these subsamples, results are still qualitatively similar.

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