

# Bank-Firm Relationships and Accounting Conservatism: Evidence from Japan

Kentaro Koga\*

Linda A. Myers\*\*

Thomas C. Omer\*\*\*

## Abstract

Banks play a central role in corporate governance in many economies around the world. We compare the extent of conditional and unconditional conservatism between firms with and without close working relationships with their banks in order to gain insights into how bank-firm relationships affect the conservatism of financial reports. When bank-firm relationships are strong, we posit that investors will be less concerned about the timely recognition of economic losses (i.e., conditional conservatism should be weaker) because these investors can rely on the banks to monitor management. However, Japanese banks have incentives to direct managers to report lower earnings (i.e., to be unconditionally conservative) so that managers can benefit when negotiating payouts to the other stakeholders. As predicted, empirical analyses reveal that firms with close bank-firm relationships recognize economic losses in a less timely manner, consistent with less conditional conservatism, and that these firms' accruals are more income-decreasing, consistent with greater unconditional conservatism.

**Keywords:** Bank-firm relationships, Conservatism, Earnings management

Received: 2 March 2012 Accepted: 22 March 2012

## 1. Introduction

The accounting literature distinguishes two types of conservatism. Conditional conservatism is an accounting bias toward reporting low book values of equity *conditional on firms experiencing contemporaneous economic losses* (Ball and Shivakumar 2005; Beaver and Ryan 2005).<sup>1</sup> Conditional conservatism implies that economic losses are included in earnings in a timelier manner, relative to gains. In contrast, unconditional conservatism is an accounting bias toward reporting low book values of equity *independent of economic losses* (Ball and Shivakumar 2005; Beaver and Ryan 2005). Unconditional conservatism results in the reporting of low average earnings regardless of economic gains and losses. The accounting literature (Guay and Verrecchia 2006) has explored the factors that affect the extent of conditional and unconditional conservatism in financial reporting. While the US setting allows researchers to investigate factors such as litigation and taxes, which underlie conditional and unconditional conservatism, other factors such as regulation and bank-firm relationships require different research settings that exhibit variation in these factors and allow for access to these data. Determining how international differences in

---

\* Graduate School of International Corporate Strategy, Hitotsubashi University, Tokyo, Japan

\*\* Sam M. Walton College of Business, University of Arkansas, Arkansas, USA

\*\*\* School of Business, University of Nebraska-Lincoln, Nebraska, USA

<sup>1</sup> Accounting studies also refer to conditional conservatism as earnings conservatism or differential timeliness, and unconditional conservatism as balance sheet conservatism (Beaver and Ryan 2005; Callen et al. 2006).

institutional features affect financial reporting is important for understanding the effects of conditional and unconditional accounting conservatism on financial reporting because these international differences affect financial reporting choices (Ball et al. (2000).

Shleifer and Vishny (1997) identify two fundamental institutional features of corporate governance that vary across countries: the extent of legal protection provided to investors and the influence of large capital providers, which includes the strength of bank-firm relationships. We posit that these two institutional differences likely affect whether conditional and unconditional conservatism is observed in reported accounting earnings but we limit our investigation to the effect of the strength of bank-firm relationships and control for variation in legal protection provided to investors by limiting our sample to firms in a single country. Bushman and Piotroski (2006) examine the association between conservatism and a country-level proxy for strong bank-firm relationships but do not find significant results.<sup>2</sup> However, in their setting and design, they are unable to control for within-country variations in the strength of bank-firm relationships, which could limit their ability to find an association between this institutional feature and the propensity for conservative reporting even if one exists. Thus, we suggest that a country-level proxy for the strength of bank-firm relationships may be problematic in situations where extensive within-country variation in these bank-firm relationships exists.

We extend the literature on the effect of this institutional feature on the propensity for conservative reporting by investigating whether conditional and/or unconditional conservatism depends on the strength of a firm's working relationship with its bank in a setting that controls for the potential confounds of cross-country variation in this effect while also controlling for variation in legal protections provided to investors. Specifically, we eliminate cross-country confounds by investigating the effect in a single-country setting (in our case, Japan). Therefore, we provide a stronger test of the effect of the strength of bank-firm relationships on the propensity for conditional and unconditional conservatism while holding legal protection provided to investors constant. As such, this paper enhances our understanding of the association between this institutional feature and conservatism.

Firms in Japan typically raise capital from banks (Ball et al. 2000; Cooke 1996; Rajan and Zingales 1995) but there is extensive variation in the strength of bank-firm relationships largely because of the *keiretsu* system (as described in Section 3).<sup>3</sup> While some Japanese firms have historically preserved close relationships with their banks (Cooke 1996), others maintain looser ties (Hoshi et al. 1991). The variation in the strength of bank-firm relationships in Japan allows us to test whether bank-firm relationships affect the conservatism of financial reports without needing to control for institutional factors (e.g., investor protection) that differ between countries. Limiting our study to Japanese firms also allows us to avoid concerns expressed by Roychowdury and Watts (2007) regarding the usefulness of some conservatism measures when the role of accounting varies across countries.

Focusing on firms in Japan also provides unique insights regarding bank-firm relationships because Japanese generally accepted accounting principles (GAAP) mandate that firms report on their banking relationships in their financial statements. Thus, in addition to *keiretsu* membership (a traditional measure of the strength of the relationship between Japanese firms and their banks), we are able to construct two

---

<sup>2</sup> Specifically, Bushman and Piotroski (2006) find that the effect of their strong bank-firm relationship proxy is similar to that of private debt and diffuse ownership. These variables are associated with an increase in both conditional and unconditional conservatism. However, the coefficients on the variable that measures the extent to which firms rely on bank financing versus equity financing are insignificant (Bushman and Piotroski 2006, 132).

<sup>3</sup> A *keiretsu* is an industrial group where group banks fund group firms.

additional proxies for the closeness of a firm's relationships with its banks: 1) the monetary amount of loans; and 2) the proportion of stock owned by financial institutions.<sup>4</sup>

We contribute to the international accounting literature by documenting that bank-firm relationships are an institutional feature that is associated with the extent of conditional and unconditional conservatism in an economy where banks play a critical role in corporate governance. Specifically, we find that firms with close bank-firm relationships recognize economic losses in a less timely manner, relative to gains. We also find that firms with close bank-firm relationships report accruals that are more conservative (i.e., income-decreasing). Consequently, close bank-firm relationships are associated with low conditional conservatism but high unconditional conservatism, suggesting that bank-firm relationships, at least in Japan, shape managers' incentives for financial reporting (Ball et al. 2003).<sup>5</sup>

We also contribute to the accounting conservatism literature by providing empirical evidence which suggests conditional and unconditional conservatism are distinct constructs in Japan. We find that firms with close bank-firm relationships exhibit high unconditional conservatism but low conditional conservatism. Thus, we demonstrate that for our sample, the two types of conservatism are inversely related (Pae et al. 2005). Our findings also raise the possibility that the unconditional conservatism in code-law countries (such as Japan) documented by Land and Lang (2002) and the lack of conditional conservatism in code-law countries documented by Ball et al. (2000) could result from the strength of bank-firm relationships in these countries. This is because when bank-firm relationships are strong, banks monitor client firms closely through the sharing of privately held information, as well as through the legal protections provided to investors.

The remainder of this paper is organized as follows. The next section reviews the extant literature on bank-firm relationships and accounting conservatism, and develops hypotheses. Section 3 presents the results of tests of unconditional conservatism while Section 4 presents the results of tests of conditional conservatism. Section 5 concludes.

## 2. Literature and Hypothesis

### 2.1 Bank-firm relationships

An extensive body of literature investigates how bank-firm relationships affect corporate governance and investment decisions. Diamond (1984) and Fama (1985) view banks as financial intermediaries that specialize in acquiring client (firm) information which allows them to perform a monitoring role (Diamond 1991).<sup>6</sup> Banks fulfill this role by maintaining close working relationships with firms, which results in low information asymmetry (1991, 1990a; Jacobson and Aaker 1993).

Many of the empirical studies documenting the monitoring role played by banks use Japanese data. Here, membership in a *keiretsu* is often the proxy for whether bank-firm relationships are strong. For example, Kaplan (1994), Kaplan and Minton (1994), and Kang and Shivdasani (1995, 1997) find that Japanese firms with close bank-firm relationships experience higher levels of chief executive officer turnover, director turnover, and asset restructuring during periods of poor performance than do firms without such ties. Thus, it appears that banks provide value by overseeing firm management and operations. Here, we ask whether banks add value by influencing the extent to which financial reporting is conservative.

---

<sup>4</sup> Japanese banks hold firms' equity to commit to long-term bank-firm relationships rather than as short-term investments (Morck and Nakamura 1999).

<sup>5</sup> In contrast, Ball et al. (2005) find that the sum of private and public debt is positively associated with high conditional conservatism. Combining the results in Ball et al. (2003) and our results suggests that private debt (i.e., loans) and public debt (i.e., bonds) may work in the opposite directions; the extent of conditional conservatism is negatively associated with private debt but positively associated with public debt. Accordingly, it may be important to distinguish between private and public debt to understand how debt contracting shapes managers' incentives for financial reporting.

<sup>6</sup> Consistent with this, Koga and Uchino (2006) find that analyst coverage, forecast accuracy, and forecast agreement are all lower for Japanese firms with larger bank loans. They suggest that investors demand less information when bank ties are strong, presumably because investors rely on the banks to monitor management.

## 2.2 Accounting conservatism

The accounting conservatism literature identifies two key types of conservatism in financial reporting: i) an accounting bias toward the reporting of low book values of equity and ii) more timely recognition of economic losses relative to gains. Unconditional conservatism exists when the first characteristic is present, but conditional conservatism requires that both characteristics be present. Thus, a firm can report lower earnings when it experiences economic losses or regardless of economic gains or losses. The former case is conditional conservatism whereas the latter is unconditional conservatism.

Watts (2003a, 2003b) argues that conditional conservatism allows for efficient contracting. Conditional conservatism reduces debt contracting costs because the fixed claims of debtholders are generally more sensitive to economic losses than to gains (Guay and Verrecchia 2006). In the presence of economic losses, conditional conservatism prompts management to incorporate losses into earnings in a more timely manner (Ball and Shivakumar 2005). In addition, conditional conservatism reduces expected litigation costs because firms are more likely to be sued when financial reports fail to incorporate economic losses rather than gains. In fact, US firms that disclose material weaknesses under the Sarbanes-Oxley Act and Chinese firms with extensive state ownership exhibit less conditional conservatism (Goh and Li 2011; Kung et al. 2010).

On the other hand, unconditional conservatism has little effect on contracting efficiency because even without unconditional conservatism, the contracting parties can incorporate the downward bias in the book value of equity into their decision-making processes with little cost (Ball and Shivakumar 2005).

Empirically, Land and Lang (2002) document that earnings-to-price ratios are lower in code-law countries (such as Japan) than in common-law countries, suggesting that earnings in code-law countries are *more* unconditionally conservative. Interestingly, by contrast, firms in code-law countries are less timely in their recognition of economic losses relative to gains (Ball et al. 2000), suggesting that the earnings in code-law countries are *less* conditionally conservative. Ball et al. (2000) maintain that code-law countries exhibit less conditional conservatism because of a lower demand for timely loss recognition. Here, managers resolve information asymmetry with stakeholders not through financial reporting or public disclosures, but by privately sharing information through close and exclusive relationships such as close bank-firm relationships. At the same time, the managers in code-law countries use earnings as a basis for payouts to stakeholders and in many code-law countries, earnings also determine tax payments.<sup>7</sup>

Accounting standards and regulation are not the only institutional features that affect the extent of conditional conservatism. For example, Bushman and Piotroski (2006) document that strong legal protection provided to capital market investors and low state involvement in the economy are associated with conditional conservatism. Furthermore, (Ball et al. 2003) find that earnings in some common-law countries (i.e., Hong Kong, Malaysia, Singapore, and Thailand) are less conditionally conservative than those in code-law countries, likely because social arrangements in these countries do not stimulate demand for timely loss recognition and thus, managers and auditors lack incentives to report conditionally conservative earnings.

In summary, the accounting conservatism literature maintains that the demand for timely loss recognition due to debt contracting and litigation drives conditional conservatism, and empirical results suggest that managers report conditionally conservative earnings because standards and regulation mandate this or because stakeholders require them to do so. However, the literature does not demonstrate the role that the strength of bank-firm relationships plays in conservative reporting.

---

<sup>7</sup> For example, employee wages and the prices that suppliers charge for materials and parts are based on earnings. Furthermore, shareholder dividends are restricted by earnings.

### 2.3 Hypothesis development

Japanese firms can have strong relationships with their banks because of *keiretsu* affiliation. Alternatively, the bank-firm relationship literature often characterizes the strength of bank-firm relationships by the extent of bank monitoring (Kang et al. 2000) and by the extent of bank loans, which can serve as a substitute for capital market financing (Hoshi et al. 1990a, 1991). However, firms with close bank relationships may still raise large amounts of capital from the markets or may value the ability to raise reasonably-priced capital from the markets, should the need for additional capital arise. Moreover, no empirical evidence suggests that the extent of bank-firm relationships is negatively associated with the extent of capital market financing. For firms raising capital from the market, Kang and Stulz (1996) find that the market reaction to the announcement of new securities issuances is more positive for firms with close bank-firm relationships, presumably because investors expect that the financial institutions will monitor managers of these firms. This may encourage firms with close bank-firm relationships to access capital markets despite the availability of loans. We confirm that in our sample, measures of the strength of bank-firm relationships are not negatively associated with the amount of capital raised. Therefore, we motivate our hypotheses based on the monitoring role played by banks, but control for capital market financing in our analyses. While capital market participants demand conservative reporting in general, with close bank-firm relationships, shareholders and bondholders should demand less timely loss recognition because they can rely on the banks to monitor management and because monitoring by banks should reduce litigation risk. These arguments lead us to the first hypothesis, stated in the alternative form:

$H_{\text{Timeliness}}$ : *Firms with close bank-firm relationships will recognize losses in a less timely manner than will firms without close bank-firm relationships, all else equal.*

Regardless of true economic gains and losses, managers have incentives to report lower earnings because payouts to non-bank stakeholders (e.g., employees, suppliers, and shareholders) are based on reported earnings (Ball et al. 2000), and if banks hold large stakes in the firm, we expect them to be less likely to object to management's preference for reporting lower earnings since this could mitigate other stakeholders' claims to firm assets.

Various accruals measures or proxies for accruals have been used in prior literature to represent a firm's conservative reporting. Givoly and Hayn (2000) and Ahmed et al. (2002) use cumulative discretionary accruals and Givoly and Hayn (2000) use the book-to-market ratio to proxy for the cumulative effect of a firm's reporting strategy. Based on the arguments above, we expect the accruals of firms with close bank-firm relationships to be more income-decreasing than the accruals of firms without close bank-firm relationships, leading to the following hypothesis, stated in the alternative form:

$H_{\text{Accruals}}$ : *Firms with close bank-firm relationships will report more income-decreasing accruals than will firms without close bank-firm relationships, all else equal.*

It is important to note that we cannot draw conclusions about unconditional conservatism solely from the tests of  $H_{\text{Accruals}}$  (i.e., by only examining accruals). As such, we must consider results from testing  $H_{\text{Accruals}}$  and  $H_{\text{Timeliness}}$ ; only when accruals are earnings-decreasing and when losses are recognized more slowly than gains (which suggests that conditional conservatism is not present), can we conclude that the earnings are unconditionally conservative.

### 3. Accruals Analyses

#### 3.1 Data

##### Dependent variables

To test for an association between accruals and the strength of bank-firm relationships, we form three measures derived from accruals: signed raw accruals, discretionary accruals, and the book-to-market value of equity.<sup>8</sup> We compute raw accruals (*RAW\_ACCR*) using data from the cash flow statement. We subtract operating cash flows from earnings before extraordinary items and scale by beginning total assets.<sup>9</sup> Discretionary accruals (*DSC\_ACCR*) are the performance-matched discretionary accruals derived from Kothari et al.'s (2005) model applied by 36 two-digit Nikkei industry-code industries. We use book-to-market value of equity (*BTM*) because *BTM* summarizes the cumulative effects of past and current accruals. Specifically, firms with high *BTM* report less income-decreasing accruals (Ahmed et al. 2002). We collect the data required to form these variables from the Nikkei Financial Quest database.

##### Independent variables

In Japan, firms can establish close working relationships with banks by three means. First, firms can enjoy close bank-firm relationships through their affiliation with industrial groups called *keiretsu*. At the center of each *keiretsu* are banks that extend loans to the firms within the group. These banks often own a substantial proportion of the equity of group firms. Second, firms can establish close relationships by borrowing extensively from banks. Third, firms can have close relationships with banks because banks hold a large portion of firm equity but have relatively small bank loans.

With respect to relationships through *keiretsu*, extant literature on Japanese industrial groups classifies each firm as affiliated or not affiliated with one of the six major keiretsu – Daiichi Kangyo, Fuyo, Mitsubishi, Mitsui, Sanwa, and Sumitomo (Hoshi et al. 1991; Gramlich et al. 2004; Kang et al. 2000). We use information from Brown & Company (2001) to distinguish between group and independent firms.<sup>10</sup> Brown & Company classifies firms using both qualitative and quantitative factors, and using a four-star scale, rates the intensity of each firm's affiliation with the major *keiretsu*. The factors considered by Brown & Company include the history of the bank-firm relationship, appointments to the board of directors, and sources and amounts of bank loans and stock ownership. Following Gramlich et al. (2004), we classify firms with three- and four-star ratings as group firms and those with fewer stars as independent firms. We form an indicator variable, *GROUP*, set to one if the firm is affiliated with a *keiretsu*, and zero otherwise.<sup>11</sup>

Not all firms can join a *keiretsu* because *keiretsu* are exclusive groups of firms with long-established relationships. However, independent firms can still have close working relationships with banks when firms borrow substantial amounts or when banks hold a significant proportion of the firms' equity. In the latter case, bank employees often also hold management positions in these firms. These (bank-appointed)

---

<sup>8</sup> Because we have a limited time series of data, we do not use cumulative accruals measures (as in Givoly and Hayn (2000) and Ahmed et al. (2002)). Instead we use year-specific discretionary accruals and control for the correlation across years in our analyses.

<sup>9</sup> The results are qualitatively similar to those presented when we use raw current accruals instead of raw total accruals.

<sup>10</sup> Brown & Company is the successor to Dodwell Marketing Consultants, the publisher of prior editions of this information. Ely and Pownall (2002) and Gramlich et al. (2004) use information from Dodwell Marketing Consultants.

<sup>11</sup> As a robustness test, we performed regression analysis using an alternative *keiretsu* classification scheme, based on whether the firm's president was a member of the presidents' council of a *keiretsu*. The presidents' council, comprised of presidents of the "core" *keiretsu* firms, meets monthly to discuss the *keiretsu* strategy. This is an unambiguous measure of *keiretsu* affiliation because each *keiretsu* explicitly defines core firms and allows only the presidents of those core firms to attend. The results are qualitatively similar when we replace *GROUP* with an indicator variable based on presidents' council membership.

managers facilitate the flow of information between the firms and their banks (Hoshi et al. 1990b). Accordingly, we follow Ely and Pownall (2002) and Kang and Stulz (2000) and form two additional measures meant to capture the strength of a firm's relationship with its banks: the monetary amount of long-term loans scaled by beginning total assets (*LOAN*)<sup>12</sup> and the proportion of equity owned by financial institutions as per the financial statements (*FIN\_OWN*). As the next section explains in detail, we form a control variable for the change in equity owned by financial institutions,  $\Delta FIN\_OWN_{-0}$ . We collect the data necessary to form both variables from the Nikkei Financial Quest database.

#### Control variables

While Japanese financial statements do report on ownership by financial institutions, these institutions include not only those banks with close relationships with the firm, but also other financial institutions, such as insurance companies.<sup>13</sup> These could be transient institutions, which hold shares as short-term investments rather than to build long-term relationships (Bushee 1998). The relation between accruals and ownership by transient institutions should be opposite of that expected between accruals and ownership by dedicated and quasi-indexer institutions, both of which hold shares for longer terms than do transient institutions, because transient institutions require a rich information set to make their investment decisions (Bushee and Noe 2000) but are unlikely to gain this information through proprietary channels. Because of this, we explicitly control for transient institutional ownership in our model.

Sheard (1989) and Morck and Nakamura (1999) argue that Japanese bank-firm relationships are long-term arrangements and banks maintain stable ownership of firms when bank-firm relationships are strong. As such, changes in ownership should, on average, be due to transactions by transient institutions. In order to control for the effects of transient institutional ownership, we decompose financial institution ownership into two parts: financial ownership in the three fiscal years prior (*FIN\_OWN*) and the increase in financial ownership, if any, over the three prior fiscal years ( $\Delta FIN\_OWN_{>0}$ ). We chose three years as our benchmark because interviews with security analysts reveal that transient institutions typically hold a firm's shares for up to three years before revising their investment decision. Therefore, we assume that transactions within three years are due to transient institutions rather than banks with long-term relationships, and we attribute increases in financial institutional ownership ( $\Delta FIN\_OWN_{>0}$ ) to transient institutions.<sup>14, 15</sup>

We follow Myers et al. (2003) and also control for cash flows, industry growth, firm size, and auditor type because these variables have been shown to affect the magnitude of reported accruals. We measure cash flows as cash flows from operations scaled by beginning total assets (*CASH FLOWS*), industry growth as the change in sales for all firms in the industry scaled by prior year sales (*GROWTH*), firm size as total assets at the beginning of the year (*SIZE*), and auditor type using an indicator variable set to one if the firm's auditor is one of the Big Four audit firms (*BIG 4*), and zero otherwise.

We also incorporate additional control variables for other factors that could affect the properties of accruals: new debt and equity issuances, foreign ownership, tax incentives, losses, and negative

---

<sup>12</sup> The results are qualitatively similar to those presented when we include short-term loans in the numerator.

<sup>13</sup> Specifically, the financial ownership reported in Japanese financial statements includes ownership by commercial banks, credit unions, insurance companies, trust companies, and government-owned banks, but excludes ownership by brokerage companies.

<sup>14</sup> If the change in financial ownership is negative, we set this value to zero.

<sup>15</sup> In order to identify transient institutions in the U.S., Bushee (1998) measures the percentage of an institution's total equity invested in those firms that the institution continuously holds for the prior *two* years. We cannot perform similar analyses because these data are not available for Japanese institutions. However, as a robustness test, we measure  $\Delta FIN\_OWN_{>0}$  as the increase in financial institution ownership over the prior *two* fiscal years. The results are qualitatively similar to those reported here.

extraordinary items. We control for new debt and equity issuances by including the amount of capital raised on the Tokyo Stock Exchange during the 36 months centered on the fiscal year-end, scaled by fiscal year beginning total assets (*CAPITAL*). We include the proportion of foreign (non-Japanese) ownership (*FOREIGN*) because Lang et al. (2003) find a stronger information environment (i.e., greater analyst following and more accurate analyst forecasts) for non-US firms that are cross-listed in the US than for non-US firms that are not cross-listed in the US.<sup>16</sup> Similarly, Uchino (2003) documents that Japanese firms with more foreign ownership disclose more. We control for special tax incentives that may affect the accruals of Japanese firms (Gramlich et al. 2004). Specifically, we include measures of loss carryforward (*LOSS\_FRW*) measured as the sum of earnings before tax for the preceding five fiscal years and for the current fiscal year scaled by beginning total assets if the firm enjoys the tax benefit of a loss carryforward, and zero otherwise, and of loss carryback (*LOSS\_BCK*) measured as the sum of earnings before tax for the prior and for the current fiscal year scaled by beginning total assets if the firm enjoys the tax benefit of a loss carryback, and zero otherwise. Loss (*LOSS*) is earnings before tax scaled by beginning total assets if the firm reports negative earnings and does not enjoy the tax benefit of a loss carryback, and zero otherwise. Finally, we measure negative extraordinary items (*NEG\_EI*) as extraordinary items scaled by beginning total assets if the firm reports negative extraordinary items, and zero otherwise. We also add controls for industry based on two-digit Nikkei industry codes and year.

We obtained information to compute the control variables from the Nikkei Financial Quest database, the Tokyo Stock Exchange Monthly Statistics, and the Japan Company Handbook CD-ROM. The financial data come from consolidated financial statements but when a firm does not report consolidated financial statements, we use the parent firm's financial statements and assume that the firm did not have a subsidiary requiring consolidation.<sup>17</sup>

### 3.2 Sample

Our sample selection process is summarized in Table 1, Panel A. To form our sample, we include firm-year observations from the Tokyo Stock Exchange First and Second Sections with fiscal year ends between 2000 and 2004 inclusive. We also require that observations have March 31 fiscal year ends (and choose March 31 because this is the typical fiscal cycle in Japan). We eliminate firm-year observations with mergers and acquisitions because they make the estimation of accruals problematic (Hribar and Collins 2002). We also eliminate financial institutions because they are the capital providers in this study and because their financial statements differ greatly from those of non-financial firms, and we eliminate utilities because of heavy government regulation. Finally, we eliminate firm-years without all of the necessary data.

These criteria leave us with a sample of 6,607 firm-year observations for tests using raw accruals (*RAW\_ACCR*), 6,472 firm-year observations for tests using discretionary accruals (*DSC\_ACCR*), and 6,454 firm-year observations for tests using book-to-market (*BTM*). Table 1, Panel B presents the distribution across years and reveals that the number of firm-year observations gradually increases from 2000 to 2004.

---

<sup>16</sup> Our results are qualitatively similar when we exclude American Depository Receipts from the sample.

<sup>17</sup> Exceptions are financial ownership (*FIN\_OWN*) and foreign ownership (*FOREIGN*). Since the parent firms' financial statements are the only source of this data, we collect it from these statements.

**Table 1-Sample description**

**Panel A-Number of observations in the sample selection process**

Sample selection process	Firm-years
Listed on the Tokyo Stock Exchange First and Second sections between 2000 and 2004	9,753
(Less) Fiscal year does not end on March 31	1,882
(Less) Merger and acquisition	115
(Less) Financial institutions and utilities	147
(Less) Missing value of independent or control variable	1,002
Sample for raw accruals ( <i>RAW_ACCR</i> )	6,607
Sample for discretionary accruals ( <i>DSC_ACCR</i> )	6,472
Sample for book-to-market ( <i>BTM</i> )	6,454

**Panel B-Distribution by year of the sample for raw accruals (*RAW\_ACCR*)**

Year in which fiscal year ends	Firm-years
2000	1,178
2001	1,323
2002	1,348
2003	1,368
2004	1,390
Total	6,607

**Panel C-Descriptive statistics**

Variable	Firm-years	Mean	Standard deviation	First quartile	Median	Third quartile
<b>Dependent variables</b>						
<i>RAW_ACCR</i>	6,607	-0.011	0.046	-0.037	-0.012	0.010
<i>DSC_ACCR</i>	6,472	-0.002	0.059	-0.003	-0.000	0.003
<i>BTM</i>	6,454	1.317	0.911	0.679	1.124	1.720
<b>Independent variables</b>						
<i>GROUP</i>	6,607	0.163	–	–	–	–
<i>LOAN</i>	6,607	0.108	0.128	0.009	0.068	0.159
<i>FIN_OWN</i>	6,607	0.254	0.140	0.148	0.237	0.352
<b>Control variables</b>						
<i>ΔFIN_OWN<sub>t-0</sub></i>	6,607	0.018	0.041	0.000	0.000	0.016
<i>CAPITAL</i>	6,607	0.011	0.043	0.000	0.000	0.000
<i>CASH_FLOWS</i>	6,607	0.055	0.049	0.002	0.005	0.008
<i>GROWTH</i>	6,607	0.014	0.043	-0.012	0.020	0.042
<i>SIZE</i>	6,607	225	776	29	62	160
<i>BIG 4</i>	6,607	0.763	–	–	–	–
<i>LOSS_FRW</i>	6,607	-0.018	0.111	0.000	0.000	0.000
<i>LOSS_BCK</i>	6,607	0.000	0.002	0.000	0.000	0.000
<i>LOSS</i>	6,607	-0.003	0.016	0.000	0.000	0.000
<i>NEG_EI</i>	6,607	-0.011	0.019	-0.014	-0.005	-0.000

**Table 1-Continued**

<i>RAW_ACCR</i> :	Earnings before extraordinary items minus operational cash flows, scaled by fiscal year beginning total assets.
<i>DSC_ACCR</i> :	Performance-matched discretionary accruals derived from Kothari et al.'s (2005) model applied in each industry.
<i>BTM</i> :	Book-to-market ratio of equity at the fiscal year end.
<i>GROUP</i> :	Indicator variable with a value of one if the firm pertains to one of the six major <i>keiretsu</i> ; and zero otherwise.
<i>LOAN</i> :	Amount of long-term loans, scaled by fiscal year beginning total assets.
<i>FIN_OWN</i> :	Proportion of ownership by financial institutions in the three fiscal years prior.
<i>ΔFIN_OWN<sub>-0</sub></i> :	Increase in the proportion of ownership by financial institutions over the prior three fiscal years, if any; and zero otherwise.
<i>CAPITAL</i> :	Total amount of capital (i.e., stocks and bonds) raised from the Tokyo Stock Exchange during the thirty-six months centered around the fiscal year, scaled by fiscal year beginning total assets.
<i>CASH FLOWS</i> :	Operational cash flows, scaled by fiscal year beginning total assets.
<i>GROWTH</i> :	Annual increase in the sum of sales revenue of all firms in the industry, scaled by prior fiscal year sum.
<i>SIZE</i> :	Total assets at the fiscal year beginning in billion yen.
<i>FOREIGN</i> :	Proportion of ownership by foreigners (i.e., non-Japanese).
<i>BIG 4</i> :	Indicator variable with a value of one if the firm's auditor is one of the Big 4; and zero otherwise.
<i>LOSS_FRW</i> :	Sum of the earnings before tax for the preceding five fiscal years and the current fiscal year if the firm enjoys the tax benefit of loss carryforward, scaled by fiscal year beginning total assets; and zero otherwise.
<i>LOSS_BCK</i> :	Sum of the earnings before tax for the prior and current fiscal years if the firm enjoys the tax benefit of loss carryback, scaled by fiscal year beginning total assets; and zero otherwise.
<i>LOSS</i> :	Negative earnings before tax, if any, if the firm does not enjoy the tax benefit of loss carryback, scaled by fiscal year beginning total assets; and zero otherwise.
<i>NEG_EI</i> :	Negative extraordinary items, if any, scaled by fiscal year beginning total assets; and zero otherwise.

Table 1, Panel C reports descriptive statistics. With respect to the accruals based measures, median accruals (*RAW\_ACCR*) are approximately -1 percent of total assets,<sup>18</sup> median discretionary accruals (*DSC\_ACCR*) are approximately 0, and the median book value is approximately 112 percent of the market value of equity (*BTM*). With respect to the strength of bank-firm relationship proxies, approximately 16 percent of the sample belongs to a major *keiretsu* (*GROUP*), long-term debt is on average 11 percent of total assets (*LOAN*), and financial institutions own approximately 25 percent of firm equity in long-term bank-firm relationships (*FIN\_OWN*).<sup>19</sup>

---

<sup>18</sup> Although we use the full sample in reported tests, the results are qualitatively similar to those presented when we truncate these variables at the 1st and 99th percentiles.

<sup>19</sup> These figures are similar to those reported in Ely and Pownall (2002) and Kang and Stulz (2000).

### 3.3 Results

The results for tests on accruals-based measures appear in Table 2. Because we have multiple observations per firm, all analyses use clustered standard errors (Petersen 2006) when assessing statistical significance.<sup>20,21</sup> Recall that we measure the strength of bank-firm relationships in three ways: 1) keiretsu affiliation (*GROUP*), the typical proxy for the strength of bank-firm relationships using data from Japan; 2) by the amount of loans (*LOAN*); and 3) by the extent of firm equity owned by financial institutions in the three fiscal years prior (*FIN\_OWN*). We also form interaction variables between *GROUP* and *LOAN* and between *GROUP* and *FIN\_OWN* so that we can separately identify the effects of loan amounts and equity ownership for independent firms versus *keiretsu* firms. With interactions in the model, the coefficient on *LOAN* allows us to isolate the propensity for conservative reporting by firms with large loan amounts that do not belong to a *keiretsu*. Similarly, the coefficient on *FIN\_OWN* allows us to isolate the propensity for conservative reporting by firms with large financial institution shareholdings that do not belong to a *keiretsu*. If loan amounts and financial institution shareholdings prompt greater monitoring of management regardless of *keiretsu* membership, then the coefficients on these variables will be negative. The coefficient on *GROUP\*LOAN* should also be negative if *keiretsu* firms become even more conservative when they have large loans. Similarly, the coefficient on *GROUP\*FIN\_OWN* should be negative if *keiretsu* firms become even more conservative when financial institutions own more firm stock. The results using our three accruals measures: 1) signed raw accruals (*RAW\_ACCR*); 2) discretionary accruals (*DSC\_ACCR*); and 3) book-to-market (*BTM*) appear in separate columns (labeled Models 1, 2, and 3, respectively). For all accrual measures, we find that the coefficient estimates on *GROUP*, *LOAN*, and *FIN\_OWN* are all negative and statistically significant at  $p < 0.10$ , supporting  $H_{\text{Accruals}}$ . Specifically, we find that accruals are more income-decreasing when firms belong to a *keiretsu*, when firms have higher loan amounts, or when financial institutions hold more firm equity. The interaction terms are insignificant, which suggests that if a firm belongs to a *keiretsu* the effects of *LOAN* and *FIN\_OWN* are not additive and do not result in even more conservative reporting.

## 4. Timely Loss Recognition Analyses

### 4.1 Research Design

The Basu (1997) model as extended by Bushman and Piotroski (2006)

To assess whether losses are recognized in a timely manner relative to gains, much of the extant literature follows Basu (1997) and regresses earnings on returns:

$$EARN = \alpha_0 + \alpha_1 NEG + \alpha_2 RTN + \alpha_3 NEG*RTN + \varepsilon \quad (1)$$

---

<sup>20</sup> Alternatively, we used the Fama and MacBeth (1973) procedure because we have multiple observations from the same firms, and find qualitatively similar results.

<sup>21</sup> We do not use firm-specific time-series regressions because the short length of most firms' time series results in greater instability when estimating conditional conservatism (Givoly et al. 2007).

where EARN is earnings, RTN is stock returns, and NEG is an indicator variable for economic losses set to one if RTN is negative, and zero otherwise. The coefficient  $\alpha_2$  captures earnings' sensitivity to economic gains and  $\alpha_3$  captures earnings' sensitivity to economic losses relative to gains, so the recognition of losses are timelier when compared to the recognition of gains when  $\alpha_3$  is positive.

Bushman and Piotroski (2006) extend the model by interacting the independent and control variables with the earnings' sensitivity to economic losses represented in Equation (1), as follows:

$$EARN = \alpha_0 + \alpha_1 NEG + \alpha_2 RTN + \alpha_3 NEG * RTN + \sum_{i=1,2,\dots} [(\alpha_{4i} + \alpha_{4i+1} NEG + \alpha_{4i+2} RTN + \alpha_{4i+3} NEG * RTN) * x_i] + \epsilon$$

where  $x_i$  are independent and control variables.

The coefficient on the interaction between earnings' sensitivity to economic losses and an independent variable (i.e.,  $\alpha_{4i+3}$ ) captures the association between the independent variable and the timely recognition of economic losses.  $H_{Timeliness}$  predicts that the coefficients on the interactions between earnings' sensitivity to economic losses and proxies for the extent of bank-firm relationships (i.e., *GROUP*, *LOAN*, and *FIN\_OWN*) will be significantly negative (i.e.,  $\alpha_{4i+3} < 0$ ). That is, if the earnings of *keiretsu* firms, of independent firms with large loan amounts, and of independent firms with large financial institution shareholdings recognize economic losses in a less timely way than do the earnings of other firms, these coefficients should be negative. Moreover, interactions between earnings' sensitivity to economic losses and *GROUP\*LOAN* and *GROUP\*FIN\_OWN* should also be significantly negative if the earnings of *keiretsu* firms with larger loan amounts and financial institution stockholdings recognize economic losses in an even less timely way than do the earnings of *keiretsu* firms with fewer loans and less financial institution stockholdings.

We measure earnings (EARN) by earnings before extraordinary items per share, scaled by stock price at the beginning of the fiscal year, and stock returns (RTN) by the 12-month buy-and-hold annual return. The indicator variable for economic losses (NEG) takes a value of one if RTN is negative, and zero otherwise.

The independent variables of interest are our bank-firm relationship measures: group affiliation (*GROUP*), the amount of loans (*LOAN*), and the ownership by financial institutions (*FIN\_OWN*). As in our accruals analyses, we also form interaction variables between *GROUP* and *LOAN* and between *GROUP* and *FIN\_OWN* so that we can separately identify the effects of loans and stock ownership for independent firms versus *keiretsu* firms. Furthermore, because  $H_{Timeliness}$  is related to the monitoring role played by banks, we control for capital market financing (*CAPITAL*) in our regressions.

We follow Basu (1997) and Ball et al. (2000) and truncate the sample described in Table 1 at the 1st and 99th percentiles of earnings and stock returns to eliminate the effects of extreme values.

**Table 2-Primary results on accruals-based measures**

	Expected sign	Model 1 <i>RAW_ACCR</i>	Model 2 <i>DSC_ACCR</i>	Model 3 <i>BTM</i>
Intercept		0.041*** ( $< 0.001$ )	0.021*** ( $< 0.001$ )	1.505*** ( $< 0.001$ )
<i>Independent variables</i>				
<i>GROUP</i>	-	-0.012*** ( $< 0.001$ )	-0.007* (0.071)	-0.194** (0.031)
<i>LOAN</i>	-	-0.064*** ( $< 0.001$ )	-0.020** (0.021)	-1.259*** ( $< 0.001$ )
<i>GROUP * LOAN</i>	-	0.018 (0.955)	0.022 (0.931)	0.050 (0.572)
<i>FIN_OWN</i>	-	-0.034*** ( $< 0.001$ )	-0.015*** (0.005)	-0.454*** (0.001)
<i>GROUP * FIN_OWN</i>	-	0.013 (0.925)	0.001 (0.535)	-0.011 (0.482)
<i>Control variables</i>				
$\Delta$ <i>FIN_OWN</i> <sub>&gt;0</sub>	+	0.213*** ( $< 0.001$ )	0.095*** ( $< 0.001$ )	-4.302 (0.999)
<i>GROUP * ΔFIN_OWN</i> <sub>&gt;0</sub>		-0.145*** ( $< 0.001$ )	-0.114*** (0.010)	1.027* (0.057)
<i>CAPITAL</i>		0.030 (0.115)	0.136*** (0.001)	-0.962*** ( $< 0.001$ )
<i>CASH FLOWS</i>		-0.587*** ( $< 0.001$ )	-0.487*** ( $< 0.001$ )	-1.867*** ( $< 0.001$ )
<i>GROWTH</i>		0.047*** ( $< 0.001$ )	0.035 (0.168)	-0.767*** ( $< 0.001$ )
<i>SIZE</i>		-0.000** (0.030)	-0.000 (0.218)	-0.000*** ( $< 0.001$ )
<i>BIG 4</i>		0.002* (0.082)	0.001 (0.342)	-0.021 (0.644)
<i>FOREIGN</i>		0.114*** ( $< 0.001$ )	0.045*** ( $< 0.001$ )	-1.722*** ( $< 0.001$ )
<i>LOSS_FRW</i>		0.013 (0.112)	0.014* (0.068)	0.437*** (0.006)
<i>LOSS_BCK</i>		-0.390** (0.032)	-0.302 (0.359)	-6.024** (0.016)
<i>LOSS</i>		0.859*** ( $< 0.001$ )	0.642*** ( $< 0.001$ )	-2.573* (0.090)
<i>NEG_EI</i>		-0.626*** ( $< 0.001$ )	-0.265*** ( $< 0.001$ )	3.485*** (0.001)
Industry dummies		Included	Included	Included
Year dummies		Included	Included	Included
R <sup>2</sup>		0.496	0.151	0.290
Firm-years		6,607	6,472	6,454

Cells contain coefficient estimates and *t* statistics calculated using clustered standard errors in parentheses. \*, \*\* and \*\*\* denote significance at the 0.1, 0.05 and 0.01 levels, respectively. One-tailed tests are presented when directional hypotheses exist. See Table 1 Panel C for variable definitions.

Ball and Shivakumar (2005) extend this basic model as follows:

$$RAW\_ACCR = \beta_0 + \beta_1 NEG\_CF + \beta_2 CF + \beta_3 NEG\_CF * CF \\ + \sum_{i=1,2,\dots} [(\beta_{4i} + \beta_{4i+1} NEG\_CF + \beta_{4i+2} CF + \beta_{4i+3} NEG\_CF * CF) * x_i] + \varepsilon$$

where  $x_i$  are independent and control variables.

The coefficient on the interaction between accruals' sensitivity to economic losses and an independent variable (i.e.,  $\beta_{4i+3}$ ) captures the association between the independent variable and the timely recognition of economic losses in accruals.  $H_{Timeliness}$  predicts that the coefficients on the interactions between accruals' sensitivity to economic losses and proxies for the extent of bank-firm relationships (i.e., *GROUP*, *LOAN*, and *FIN\_OWN*) will be significantly negative (i.e.,  $\beta_{4i+3} < 0$ ). That is, if the accruals of *keiretsu* firms, of independent firms with large loan amounts, and of independent firms with large financial institution shareholdings recognize economic losses in a less timely way than do the accruals of other firms, these coefficients should be negative. Moreover, interactions between accruals' sensitivity to economic losses and *GROUP\*LOAN* and *GROUP\*FIN\_OWN* should also be significantly negative if the accruals of *keiretsu* firms with larger loan amounts and financial institution stockholdings recognize economic losses in an even less timely way than do the accruals of *keiretsu* firms with fewer loans and less financial institution stockholdings.

We measure CF as operating cash flows scaled by beginning total assets. However, when we form the loss indicator, we partition CF at the first quartile rather than at zero because cash flows are negative for only 1.9 percent of our sample. Therefore, in place of *NEG\_CF*, we use the first quartile of operating cash flows to partition our sample into good and bad news. Specifically, we form an indicator variable (*LOW\_CF*) set to one if CF is lower than its first quartile, and zero otherwise.<sup>22</sup> Because the distance from our partition represents the magnitude of good or bad news, we also adjust cash flows (CF) by subtracting the first quartile.

#### 4.2 Results

The results for tests on the timely recognition of losses appear in Tables 3 and 4. Again, all analyses uses clustered standard errors (Petersen 2006) when assessing statistical significance. We follow related literature and do not report the intercept and coefficient estimates on fixed effects for parsimony.

Table 3 follows Basu (1997) and Bushman and Piotroski (2006) and presents the analyses related to earnings' timely recognition of losses relative to gains. Recall that our focus is on the incremental earnings "bad news sensitivity." That is, we focus on the associations between interactions of economic losses and proxies for the strength of bank-firm relationships. If demand for conservative reporting of losses exists, the coefficient on *NEG\*RET* will be positive. However, if banks play a monitoring role such that firms with strong bank-firm relationships can recognize losses in a less timely manner, we expect negative coefficient estimates on the interactions of *NEG\*RET* and proxies for strong bank-firm relationships (i.e., *GROUP*, *LOAN*, and *FIN\_OWN*) as well as on interactions between *NEG\*RET* and interactions of *GROUP* with *LOAN* and with *FIN\_OWN*. Finally, we control for transient ownership (*AFIN\_OWN-0*) and capital market

---

<sup>22</sup> Our results are qualitatively similar when we partition economic gains and losses by the first quintile of *CF*.

activities (*CAPITAL*) and expect these interactions with *NEG\*RET* to be positive because they should increase the demand for conservative reporting.<sup>23</sup>

The coefficient on the interaction between the sensitivity to economic losses (*NEG\*RET*) and *keiretsu* affiliation (*GROUP*), (*NEG\*RET\*GROUP*) is negative and significant ( $p = 0.025$ ), indicating that the earnings of *keiretsu* firms recognize economic losses in a less timely manner than do the earnings of independent firms. Similarly, the coefficients on the interactions on *NEG\*RET\*LOAN* and *NEG\*RET\*FIN\_OWN* are also negative and significant ( $p = 0.030$  and  $p = 0.000$ ), indicating that greater loan amounts or greater equity ownership by financial institutions with longer-term relationships are associated with less timely recognition of economic losses for independent firms. These results support  $H_{\text{Timeliness}}$ , which predicts that firms with close bank-firm relationships recognize losses in a less timely manner. This is consistent with financial statement users demanding less conditional conservatism when banks have strong incentives to perform a monitoring role.

It is interesting to note that the coefficients on the interactions between *NEG\*RET\*GROUP* and *LOAN* (*NEG\*RET\*GROUP\*LOAN*) or *FIN\_OWN* (*NEG\*RET\*GROUP\*FIN\_OWN*) are not significant ( $p = 0.816$  and  $p = 0.658$ , respectively). We interpret these results as follows: Once a firm belongs to a *keiretsu*, it does not recognize economic losses in a less timely manner if, in addition to being in the *keiretsu*, it has large loan amounts or if financial institutions with longer-term relationships hold more shares. Thus, membership in a *keiretsu* results in monitoring that substitutes for both the monitoring associated with large loans and bank equity holdings, thus reducing the demand for conditional conservatism in the presence of these other bank-firm ties. Our results are also consistent with loan amounts and financial institution shareholdings acting as substitutes for the effect of *keiretsu* membership on the demand for conditional conservatism. Simply put, banks are believed to perform a monitoring role when firms belong to a *keiretsu*, or when firms have large loan amounts, or when financial institutions with longer-term relationships hold shares, and either arrangement influences the characteristics of financial reporting.

Table 4 presents the regression of accruals on cash flows as developed by Ball and Shivakumar (2005). Here, we find that the coefficient on the interaction between accruals' sensitivity to economic losses (*LOW\_CF\*CF*) and *keiretsu* membership (*GROUP*), (*LOW\_CF\*CF\*GROUP*), is not significant ( $p = 0.900$ ) but the coefficients on the interactions between accruals' sensitivity to economic losses (*LOW\_CF\*CF*) and the magnitude of loans (*LOAN*), (*LOW\_CF\*CF\*LOAN*), and financial ownership (*FIN\_OWN*), (*LOW\_CF\*CF\*FIN\_OWN*), are negative and significant ( $p = 0.016$  and  $p = 0.077$ ), providing mixed support for  $H_{\text{Timeliness}}$ . While we find no evidence that *keiretsu* firms recognize bad news (low cash flows) into accruals less quickly, we do find that independent firms do recognize low cash flows into accruals less quickly when they have strong bank ties through loans or shareholdings. As in the case of Table 3, interactions between accruals' sensitivity to economic losses (*LOW\_CF\*CF*), *keiretsu* membership (*GROUP*), and the amount of loans (*LOAN*), (*LOW\_CF\*CF\*LOAN\*GROUP*), or financial institution shareholdings (*FIN\_OWN*), (*LOW\_CF\*CF\*FIN\_OWN\*GROUP*) are not significant ( $p = 0.679$  and  $p = 0.352$ ), suggesting that these effects are not cumulative.

---

<sup>23</sup> We make no prediction on the sign of *NEG\*RET\*AFIN\_OWN>0\*GROUP* since our predictions for *AFIN\_OWN>0* and *GROUP* are of opposite sign.

**Table 3-Results on earnings' timely recognition of losses by the strength of firm-bank relationships**

	Expected sign	Coefficient estimate	p-value
<i>Earnings' 'good news' sensitivity</i>			
<i>RET</i>	+	0.050***	(<0.001)
<i>RET*GROUP</i>		0.045	(0.141)
<i>RET*LOAN</i>		0.064	(0.113)
<i>RET*LOAN*GROUP</i>		-0.187***	(0.005)
<i>RET*FIN OWN</i>		0.014	(0.730)
<i>RET*FIN OWN*GROUP</i>		0.027	(0.720)
<i>RET*ΔFIN OWN<sub>&gt;0</sub></i>		0.143	(0.155)
<i>RET*ΔFIN OWN<sub>&gt;0</sub>*GROUP</i>		-0.281	(0.145)
<i>RET*CAPITAL</i>		-0.102	(0.112)
<i>Earnings' incremental 'bad news' sensitivity</i>			
<i>NEG*RET</i>	+	0.173***	(<0.001)
<i>NEG*RET*GROUP</i>	-	-0.125**	(0.025)
<i>NEG*RET*LOAN</i>	-	-0.219**	(0.030)
<i>NEG*RET*LOAN*GROUP</i>	-	0.326	(0.816)
<i>NEG*RET*FIN OWN</i>	-	-0.280***	(<0.001)
<i>NEG*RET*FIN OWN*GROUP</i>	-	0.144	(0.658)
<i>NEG*RET*ΔFIN OWN<sub>&gt;0</sub></i>	+	-0.499	(0.996)
<i>NEG*RET*ΔFIN OWN<sub>&gt;0</sub>*GROUP</i>		0.213*	(0.089)
<i>NEG*RET*CAPITAL</i>	+	0.054	(0.736)
Industry dummies	Included		
Year dummies	Included		
R <sup>2</sup>	0.718		
Firm-years	6,135		

Intercepts and coefficients on fixed effects are not presented for parsimony.

Cells contain coefficient estimates and p-values calculated using clustered standard errors.

\*, \*\* and \*\*\* denote significance at the 0.1, 0.05 and 0.01 levels respectively.

Tests are one-tailed when directional hypotheses exist, and two-tailed otherwise.

In summary, *keiretsu* membership, the amount of independent firms' loans, and shareholdings by financial institutions with longer-term relationships are all negatively associated with the timeliness of economic loss recognition, and independent firms' bank loans and shareholdings by banks with longer-term relationships are negatively associated with accruals' timely recognition of low cash flows, consistent with  $H_{\text{Timeliness}}$ . Moreover, accruals are negatively associated with the strength of bank-firm relationships. Combining the results on accruals and timely loss recognition, we conclude that the firms with close bank-firm relationships exhibit high unconditional conservatism but low conditional conservatism.

**Table 4-Results on accruals' timely recognition of bad news by the strength of firm-bank relationships**

	Expected sign	Coefficient estimate	p-value
<i>Accruals' 'good news' sensitivity</i>			
<i>CF</i>		-0.246***	(<0.001)
<i>CF*GROUP</i>		-0.326***	(0.004)
<i>CF*LOAN</i>		-0.950***	(<0.001)
<i>CF*LOAN*GROUP</i>		0.606	(0.133)
<i>CF*FIN OWN</i>		-0.250	(0.130)
<i>CF*FIN OWN*GROUP</i>		0.634	(0.111)
<i>CF*ΔFIN OWN<sub>&gt;0</sub></i>		0.549	(0.429)
<i>CF*ΔFIN OWN<sub>&gt;0</sub>*GROUP</i>		-0.893	(0.403)
<i>CF*CAPITAL</i>		-0.092	(0.840)
<i>Accruals' incremental 'bad news' sensitivity</i>			
<i>LOW CF*CF</i>		0.083	(0.729)
<i>LOW CF*CF*GROUP</i>	-	-0.048	(0.900)
<i>LOW CF*CF*LOAN</i>	-	-1.396**	(0.016)
<i>LOW CF*CF*LOAN*GROUP</i>	-	1.405	(0.679)
<i>LOW CF*CF*FIN OWN</i>	-	-1.077*	(0.077)
<i>LOW CF*CF*FIN OWN*GROUP</i>	-	-0.431	(0.352)
<i>LOW CF*CF*ΔFIN OWN<sub>&gt;0</sub></i>	+	-2.272	(0.480)
<i>LOW CF*CF*ΔFIN OWN<sub>&gt;0</sub>*GROUP</i>		3.264	(0.523)
<i>LOW CF*CF*CAPITAL</i>	+	7.303**	(0.018)
Industry dummies	Included		
Year dummies	Included		
R <sup>2</sup>	0.486		
Firm-years	6,392		

Intercepts and coefficients on fixed effects are not presented for parsimony.

Cells contain coefficient estimates and p-values calculated using clustered standard errors.

\*, \*\* and \*\*\* denote significance at the 0.1, 0.05 and 0.01 levels respectively.

Tests are one-tailed when directional hypotheses exist, and two-tailed otherwise.

#### 4.3 Additional analyses

Less timely recognition of economic losses may result from high unconditional conservatism or from income smoothing.<sup>24</sup> Thus, in additional analyses, we investigate whether close bank-firm relationships are associated with income smoothing. Using the income smoothing measure from Francis et al. (2004), we find no systematic evidence indicating that bank-firm relationships are associated with income smoothing (results are untabulated). In addition, we replicated the regressions with raw and discretionary accruals (*RAW\_ACCR* and *DSC\_ACCR*, respectively) in Table 3 separately for positive and negative accruals and again fail to find evidence consistent with income smoothing (results are untabulated). Thus, we conclude that income smoothing does not drive our results for the timely recognition of losses.

<sup>24</sup> Income smoothing is an important form of earnings management (Leuz et al. (2003).

## 5. Conclusion

This paper compares the extent of conditional and unconditional conservatism between firms with and without close working relationships with their bank. We contribute to the international accounting literature by documenting that bank-firm relationships are an institutional feature that is associated with the extent of conditional and unconditional conservatism in an economy where banks play a critical role in corporate governance. We also contribute to the accounting conservatism literature by empirically demonstrating that conditional and unconditional conservatism are distinct constructs and are negatively associated.

The implications of this paper extend beyond these contributions. First, our findings have implications as to which corporate governance model leads to accounting conservatism. The corporate governance literature has classified the corporate governance models around the world into stakeholder and shareholder governance (e.g., Ball et al. 2000; Ball et al. 2003; Ahmadjian and Robbins 2005). In a cross-country study, Ball et al. (2000) find that the earnings under stakeholder governance in code-law countries are less conditionally conservative than under shareholder governance in common-law countries. However, Holthausen (2003) points out that Basu's (1997) regression of earnings on returns could be problematic in samples of firms across multiple countries because returns could impound economic gains and losses differently across countries for many reasons. Therefore, the accounting conservatism literature has not firmly established an association between corporate governance models and the extent of conditional conservatism.

Bank-firm relationships are a key institutional feature that distinguishes stakeholder and shareholder governance (Rajan and Zingales 1995). Accordingly, close bank-firm relationships can be thought of as a crucial feature of stakeholder governance and the lack of close bank-firm relationships can be thought of as a crucial feature of shareholder governance. Using this interpretation, our findings suggest that the earnings under stakeholder governance are less conditionally conservative than are earnings under shareholder governance, supporting findings in Ball et al. (2000).

Second, this paper has implications for the fundamental problem of the conflict of interest among capital providers (Shleifer and Vishny 1997). Specifically, our findings imply that other capital providers may be at an informational disadvantage relative to banks because firms with close bank-firm relationships exhibit less conditional conservatism in reporting earnings. Thus, earnings for these firms are less informative to bondholders, whose fixed claims are sensitive to economic losses. Likewise, earnings are less useful to shareholders and bondholders in the presence of litigation risk. While shareholders and bondholders are likely relatively unconcerned about this informational disadvantage, if bank monitoring becomes ineffective, then shareholders and bondholders do not have direct access to information that could reduce debt contracting and litigation costs.

Third, this paper has implications for international standard setters. In countries where investors are the primary source of capital, the incentive to overstate earnings with income-increasing accruals is generally viewed as problematic. Our results, by contrast, suggest that in countries where banks play a critical role in providing capital to firms, understating earnings with income-decreasing accruals could also be problematic. Specifically, the empirical evidence imply that close bank-firm relationships lead to income-decreasing accruals, and in the less timely recognition of economic losses relative to gains. Thus, international standard setters should be concerned about income-decreasing accruals (as well as income-increasing accruals).

While the ability to generalize our results to other settings may be questioned because our sample is comprised of only Japanese firms, evidence suggests that bank-firm relationships are relevant in other countries as well. For example, Choi (2004) finds that close bank-firm relationships are associated with low accrual quality for US firms. Furthermore, James (1987) and Lummer and McConnell (1989) find that stock

prices respond positively to the announcements of bank loan agreements in the US. These studies suggest that the strength of bank-firm relationships is relevant even in the US, where banks may not play as important a role. We also acknowledge the potential limitation suggested by Roychowdhury and Watts (2007), who suggest that the potential for greater measurement error exists when using short horizons with market-to-book or book-to-market as measures of conservatism.

### **Acknowledgement**

We thank Anwer Ahmed, Jeff Callen, and James Myers for their helpful comments, and thank Yuji Mitsui and Satomi Uchino for valuable research assistance. We also thank Waseda Accounting Institute for giving us access to the Nikkei Financial Quest database. Linda Myers gratefully acknowledges financial support from the PricewaterhouseCoopers Faculty Fellowship at Texas A&M University, and Thomas Omer gratefully acknowledges the support of Ernst & Young.

### **References**

- Ahmadjian, C. L., and G. Robbins. 2005. A clash of capitalisms: Foreign shareholders and corporate restructuring in 1990s Japan. *American Sociological Review* 70 (3):451-471.
- Ball, R., S. P. Kothari, and A. Robin. 2000. The effect of international institutional factors on properties of accounting earnings. *Journal of Accounting and Economics* 29 (1):1-51.
- Ball, R., A. Robin, and G. Sadka. 2005. Is accounting conservatism due to debt or share markets?: A test of "contracting" versus "value relevance" theories of accounting. University of Chicago, Chicago, IL.
- Ball, R., A. Robin, and J. S. Wu. 2003. Incentives versus standards: Properties of accounting income in four East Asian countries. *Journal of Accounting and Economics* 36 (3):235-270.
- Ball, R., and L. Shivakumar. 2005. Earnings quality in UK private firms: Comparative loss recognition timeliness. *Journal of Accounting and Economics* 39 (1):83-128.
- Basu, S. 1997. The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting and Economics* 24 (1):3-36.
- Beaver, W. H., and S. G. Ryan. 2005. Conditional and unconditional conservatism: Concepts and modeling. *Review of Accounting Studies* 10 (2-3):269-309.
- Brown & Company. 2001. *Industrial Groupings in Japan*. 14th ed. Tokyo, Japan: Brown & Company.
- Bushee, B. J. 1998. The influence of institutional investors on myopic R&D investment behavior. *Accounting Review* 73 (3):305-333.
- Bushee, B. J., and C. F. Noe. 2000. Corporate disclosure practices, institutional investors, and stock return volatility. *Journal of Accounting Research*:171-202.
- Bushman, R. M., and J. D. Piotroski. 2006. Financial reporting incentives for conservative accounting: The influence of legal and political institutions. *Journal of Accounting and Economics* 42 (1-2):107-148.
- Callen, J. L., O.-K. Hope, and D. Segal. 2006. The pricing of conservative accounting and the measurement of conservatism at the firm-year level. Working paper, University of Toronto, Toronto, Canada.
- Choi, W. 2004. Debtor-creditor relationships and accrual quality. Working paper, Michigan State University, East Lansing, MI.
- Cooke, T. E. 1996. The influence of the keiretsu on Japanese corporate disclosure. *Journal of International Financial Management and Accounting* 7 (3):191-214.
- Diamond, D. W. 1984. Financial intermediation and delegated monitoring. *Review of Economic Studies* 51:393-414.

- Ely, K. M., and G. Pownall. 2002. Shareholder- versus stakeholder-focused Japanese companies: Firm characteristics and accounting valuation. *Contemporary Accounting Research* 19 (4):615-636.
- Fama, E. F. 1985. What's different about banks? *Journal of Monetary Economics* 15 (1):29-39.
- Francis, J., R. LaFond, P. M. Olsson, and K. Schipper. 2004. Costs of Equity and Earnings Attributes. *Accounting Review* 79 (4):967-1010.
- Gramlich, J. D., P. Limpaphayom, and S. G. Rhee. 2004. Taxes, keiretsu affiliation, and income shifting. *Journal of Accounting and Economics* 37 (2):203-228.
- Guay, W., and R. Verrecchia. 2006. Discussion of an economic framework for conservative accounting and Bushman and Piotroski (2006). *Journal of Accounting and Economics* 42 (1-2):149-165.
- Hoshi, T., A. Kashyap, and D. Scharfstein. 1990a. Bank monitoring and investment: Evidence from the changing structure of Japanese corporate banking relationships. In *Asymmetric Information, Corporate Finance, and Investment*, edited by R. G. Hubbard. Chicago, IL: University of Chicago, 105-126.
- . 1990b. The role of banks in reducing the costs of financial distress in Japan. *Journal of Financial Economics* 27 (1):67-88.
- . 1991. Corporate structure, liquidity, and investment: Evidence from Japanese industrial groups. *Quarterly Journal of Economics* 106 (1):33-60.
- Hribar, P., and D. W. Collins. 2002. Errors in estimating accruals: Implications for empirical research. *Journal of Accounting Research* 40 (1):105-134.
- Jacobson, R., and D. Aaker. 1993. Myopic management behavior with efficient, but imperfect, financial markets: A comparison of information asymmetries in the U.S. and Japan. *Journal of Accounting and Economics* 16 (4):383-405.
- James, C. 1987. Some evidence on the uniqueness of bank loans. *Journal of Financial Economics* 19 (2):217-235.
- Kang, J. K., and A. Shivdasani. 1995. Firm performance, corporate governance, and top executive turnover in Japan. *Journal of Financial Economics* 38 (1):29-58.
- . 1997. Corporate restructuring during performance declines in Japan. *Journal of Financial Economics* 46 (1):29-65.
- Kang, J. K., A. Shivdasani, and T. Yamada. 2000. The effect of bank relations on investment decisions: An investigation of Japanese takeover bids. *Journal of Finance* 55 (5):2197-2218.
- Kang, J. K., and R. M. Stulz. 1996. How different is Japanese corporate finance?: An investigation of the information content of new security issues. *Review of Financial Studies* 9 (1):109-139.
- . 2000. Do banking shocks affect borrowing firm performance? An analysis of the Japanese experience. *Journal of Business* 73 (1):1-23.
- Kaplan, S. N. 1994. Top executive rewards and firm performance: A comparison of Japan and the United States. *Journal of Political Economy* 102 (3):510-546.
- Kaplan, S. N., and B. A. Minton. 1994. Appointments of outsiders to Japanese boards: Determinants and implications for managers. *Journal of Financial Economics* 36 (2):225-258.
- Koga, K., and S. Uchino. 2006. Bank-firm relationships and security analyst activities among Japanese firms. Working paper, University of Illinois, Champaign, IL.
- Kothari, S. P., A. J. Leone, and C. E. Wasley. 2005. Performance matched discretionary accrual measures. *Journal of Accounting and Economics* 39 (1):163-197.
- Land, J., and M. H. Lang. 2002. Empirical evidence on the evolution of international earnings. *Accounting Review* 77 (Supplement):115-133.

- Lang, M. H., K. V. Lins, and D. P. Miller. 2003. ADRs, analysts, and accuracy: Does cross listing in the United States improve a firm's information environment and increase market value? *Journal of Accounting Research* 41 (2):317-345.
- Leuz, C., D. Nanda, and P. D. Wysocki. 2003. Earnings management and investor protection: An international comparison. *Journal of Financial Economics* 69 (3):505-527.
- Lummer, S. L., and J. J. McConnell. 1989. Further evidence on the bank lending process and the capital-market response to bank loan agreements. *Journal of Financial Economics* 25 (1):99-122.
- Morck, R., and M. Nakamura. 1999. Banks and corporate control in Japan. *Journal of Finance* 54:319-339.
- Myers, J. N., L. A. Myers, and T. C. Omer. 2003. Exploring the term of the auditor-client relationship and the quality of earnings: A case for mandatory auditor rotation? *Accounting Review* 78 (3):779-799.
- Pae, J., D. B. Thornton, and M. Welker. 2005. The link between earnings conservatism and the price-to-book ratio. *Contemporary Accounting Research* 22 (3):693-717.
- Petersen, M. A. 2006. Estimating standard errors in finance panel data sets: Comparing approaches. Working paper, Northwestern University, Evanston, IL.
- Rajan, R. G., and L. Zingales. 1995. What do we know about capital structure? Some evidence from international data. *Journal of Finance* 50 (5):40.
- Sheard, P. 1989. The main bank system and corporate monitoring and control in Japan. *Journal of Economic Behavior and Organization* 11:399-422.
- Shleifer, A., and R. W. Vishny. 1997. A survey of corporate governance. *Journal of Finance* 52 (2):737-783.
- Uchino, S. 2003. Voluntary disclosure, information asymmetry, and the cost of equity capital: An empirical study. Working paper, Waseda University, Tokyo, Japan.
- Watts, R. L. 2003a. Conservatism in accounting part I: Explanations and implications. *Accounting Horizons* 17 (3):207-221.
- . 2003b. Conservatism in accounting part II: Evidence and research opportunities. *Accounting Horizons* 17 (4):287-301.