

Does Control Self-Assessment Influence Financial Reporting Quality?



Hiroshi Uemura

Abstract: The aim of this study is to examine the effect of control self-assessment (CSA) on financial reporting quality by using CSA as a proxy of monitoring quality. CSA has an important feature that allows the employees themselves to become involved in the assessment of internal controls' effectiveness. Moreover, CSA has two important monitoring functions. First, it can add value to internal auditing. Second, because all employees of operational units participate in the assessment of internal controls in CSA, that control environment is expected to be mature. The investigation of this study used data from 3,517 Japanese firms listed on the First Section, Second Section, Mothers, and JASDAQ of the Tokyo Stock Exchange. The result of 2SLS regression shows that CSA adoption has a negative relationship with the number of financial restatements and audit fees, and therefore, I conclude that CSA has positive consequences for financial reporting quality. This result indicates that the internal monitoring mechanism that continuously monitors internal control over financial reporting (ICFR) effectiveness and in which all employees participate has some positive effects on financial reporting quality. There are two reasons for this result. First, employees have easier access to negative information concerning ICFR effectiveness than outsiders and can share that information with the internal personnel in charge of monitoring (e.g., internal auditors). Moreover, CSA is expected raise an entity's awareness of ICFR, that is, the control environment of ICFR components is made into an environment that prevents and detects impropriety in the accounting process.

Keywords: Control self-assessment, Internal Monitoring, Financial restatement, Audit fee

I. INTRODUCTION

The aim of this study is to examine the effect of control self-assessment (CSA) on financial reporting quality using a Japanese firm sample by using control CSA adoption as a proxy of monitoring quality. In Japan, the 2006 Financial Instruments and Exchange Act (J-SOX) requires all listed companies to disclose the results of their assessment of internal controls over financial reporting (ICFR) as well as audit reports confirming the validity their assessment (Business Accounting Council, 2007, Sections 24 and 193) [1]. The J-SOX was enacted to prevent low-quality ICFR, which is thought to be the most significant cause of prior accounting scandals (e.g., the Kanebo scandal).¹ Until their fraud was revealed, Toshiba expressed that ICFR are effective in its internal control report, and its external auditors expressed their own unqualified opinions of these assessments by Toshiba's top managements.

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However, the third-party committee on Toshiba's inappropriate accounting procedures noted that one of the causes of the scandal was the inadequate internal controls for preventing accounting fraud. The amount of Toshiba's inflated profits now exceeds three hundred billion yen, and the last three CEOs of Toshiba took responsibility for the fraud and resigned,² as did a chairperson of the company's accounting firm (Shinnihon Limited Liability Audit Corporation). Eventually, Toshiba had been padding its profits over the past six years by using four modi operandi (underestimation of total cost of construction, carryover of operational expenses, unrecognized valuation losses of inventories, and channel-stuffing) (Third-Party Committee, 2015) [2]. The scandal had an enormous impact on the stock market because a succession of Toshiba's top management figures had been involved in the accounting fraud for many years, and the monitoring function of its corporate governance, which has been highly valued, was actually failing. Arson (2015) argues that the Toshiba case was shocking news for two reasons [3]. First, Toshiba was one of the leading companies in the Japanese electronics industry.³ It created color television in 1960 and developed the world's first notebook PC in 1985. Second, Toshiba was one of the few companies to adopt an "American-style" governance system of board committees with independent directors. Prime Minister Abe has aggressively campaigned for corporate governance reform since 2013, and Toshiba was one of the early adopters of the reforms (Japan-Financial *Times*, 2015) [4].⁴ Nevertheless, the governance members were unable to stop the uncontrollable actions of the top management, and external auditors could not prevent or detect their deception for many years. That is, although Toshiba had phenomenal outside monitoring structures, they failed to work in practice. The most interesting aspect of the Toshiba scandal is that it was revealed by an internal whistleblower (rather than independent directors or external auditors). An employee notified the Securities and Exchange Surveillance Commission of the problem, and the systematic wrongdoing at Toshiba was then at least publicized. Thus, an employee played a material role in monitoring and a key role in the exposure of a serious accounting scandal. Although many prior studies consider the independence of board members to be a proxy for the strength of monitoring (e.g., Hoitash et al., 2009; Krishnan, 2005) [5] [6], few studies focus on employees' motivation to operate and assess internal controls. This study focuses on the self-assessment of the effectiveness of ICFR by employees and examines the relationship between control self-assessment (CSA), which is one of the internal monitoring tools, and financial reporting quality.



CSA was developed in 1987 by Gulf Resources Canada, Ltd., to conduct internal audits. Tritter (2000) suggests that as demands to strengthen internal controls increased due to the financial debacles of the 1980s, CSA became an accepted method for quickly determining the root of internal control weaknesses [7]. The monitoring system has an important feature that allows the employees themselves to become involved in the assessment of internal controls' effectiveness. Because employees actually operate internal controls routinely, they have substantial information about ICFR effectiveness. If the information is systematically gathered through the CSA system, information concerning deficiencies in ICFR may be shared in a timely manner among the persons in charge, which could result in existing deficiencies improving immediately. In fact, Abbott et al. (2019) find an incremental audit fee reduction resulting from the interaction between CSA and Section 404 assistance provided to the external auditor by the internal auditor [8]. Using the information above, this study considers CSA as an internal monitoring system to ensure financial reporting reliability. The empirical results of this study indicate that CSA adoption has a negative relation with the number of financial restatements and audit fees; therefore, I conclude that an internal monitoring system through CSA enhances financial reporting reliability.

II. CONTROL SELF-ASSESMENT

CSA is a methodology used to review the progress of key business objectives, risks, and risk responsiveness, as well as the operational status of internal controls (The Institute of Internal Auditors, 1988) [9]. A significant feature of CSA is the participation of all key business personnel in the assessment of internal controls' effectiveness. In other words, the responsibility for the assessment is shared among all employees in an organization. CSA is conducted within a structured environment and involves thoroughly documenting and repeating the assessment to facilitate continuous improvement. CSA allows the management and/or work teams directly responsible for a business function to

- Participate in the assessment of internal control,
- Evaluate risk,
- Develop action plans to address identified weakness,
- Assess the likelihood of achieving business objectives (IIA, 1988) [9].

CSA has two important monitoring functions. First, it can add value to internal auditing. The IAA's General Standard 300 states the following:

"The scope of internal auditing should encompass the examination and evaluation of the adequacy and effectiveness of the organization's system of internal controls and the quality of performance in carrying out assigned responsibilities." (IIA, 1988) [9]

A self-assessment process will support this standard when internal auditing uses the process to examine and evaluate the adequacy and effectiveness of internal controls.

Second, because all employees of operational units participate in the assessment of internal controls in CSA, that control environment is expected to be mature. In fact, the IAA believes that CSA improves the control environment of an organization by

- Increasing awareness of organizational objectives and the role of internal controls in achieving goals and objectives and
- Motivating personnel to carefully design and implement control processes and continually improve operating control processes (IIA, 1988) [9].

III. LITERATURE REVIEW AND HYPOTHESES

Previous studies related to ICFR suggest that the quality of ICFR influences the reliability of financial reporting. For example, the disclosure of significant deficiencies (SDs) in ICFR damage the corporation's image in equity markets (Beneish et al., 2008; Hammersley et al., 2008) [10] [11] and provoke negative market reactions (de Franco et al., 2005; Hammersley et al., 2008) [12]. Moreover, the disclosure of SDs raises the cost of capital (Ashbaugh-Skaife et al., 2009; Ogneva et al., 2007) [13] [14] and audit fees (Hoitash et al., 2008; Krishnan et al., 2008; Raghunandan and Rama, 2006 [15] [16] [17]). Many prior studies also examine the relationship between corporate governance quality and ICFR quality. Krishnan (2005) and Hoitash et al. (2009) find that audit committee expertise and the quality of monitoring, which is a one of components of ICFR, are significantly negatively correlated with the disclosure of material weaknesses [5] [6]. Additionally, Agrawal and Chadha (2005) find that the probability of restatement is lower in companies in which boards or audit committees have an independent director with financial expertise [18]. However, in Japan, outside directors' monitoring does not function well enough to remediate SDs.5 Many recent studies focus on internal auditing functions after the introduction of the Sarbanes-Oxley Act of 2002 (U.S.-SOX) (see Anderson et al., 2012) [19]. These studies suggest that internal auditors play a role in understanding of enterprise risk (e.g., Beasley et al., 2009) [20]. Carcello et al. (2005) suggest that the trend reveals the emphasis that U.S. firms place on the benefits of internal auditing [21]. The Japanese standards for internal control auditing, which are based on Public Company Accounting Oversight Boards' standards, encourage external auditors to rely on the work of internal auditors (Business Accounting Council, 2007) [1]. Moreover, Burt (2016) examines whether employees share information concerning internal control weaknesses with internal auditors rather than external auditors based on social identity theory [22]. The results indicate that internal auditors play the role of advisers and consultants to improve internal controls and that employees are likely to share more information about weaknesses with internal auditors than external auditors. This implies that if employees perceive negative information that causes SDs, they may be more likely to report it to a related internal person (e.g., internal auditor or their superior) than to external auditors. I expect CSA can accelerate this information flow tendency because employees assess ICFR effectiveness on their own, can gather substantial information related to the effectiveness of ICFR, and then report the results of their assessment to internal auditors or their superiors.





This process will enable the implementation of efficient and effective internal auditing and consequently improve ICFR quality.⁶ Burt (2016) also argues that individuals will share more information with their in-group than with their out-group [22]. Indeed, CSA is a group-oriented monitoring approach. For example, CSA includes the gathering of all stakeholders in a single location to discuss relevant issues (see Tritter, 2000) [7]. We can clearly see the characteristics of group-oriented problem solving as a part of Japanese corporate culture. Beechler and Bird (1994) and Yooyanyong and Muenjohn (2010) suggest that Japanese managers emphasize their relationships with their subordinates [23] [24]. They establish harmony and equality between team members. Additionally, all complements or criticisms are directed to the whole team, and team members are then able to support each other in addressing these criticisms (Yooyanyong and Muenjohn, 2010) [24]. In many Japanese corporations, "Nemawashi" is a process that often occurs among all employees in order to gain consensus concerning how to implement and proceed with business strategies. Although it is an implicit and informal council system, many employees with many different points of view participate in this system. Similarly, group-oriented is a term that reveals another characteristic of Japanese organizations. Employees treat individual information as information of the whole company through an informal system. Japanese corporations also have a formal bottom-up information sharing system. Ohsawa (2010) notes that there are some differences between American and Japanese management styles, particularly because most of Japanese companies adopt a bottom-up problem-solving framework rather than top-down command structure [25]. For example, the "Ringi" system adopted by many Japanese organizations assists in the quick implementation of organizational policies because more members are able to be involved in various decisions. Sagi (2015) suggests that the "Ringi" decision-making process is easy to be implemented using formal approvals because the process occurs with the substantial involvement of employees at all levels. In this system, various operational issues (e.g., sales plans, agreements of sales or purchase contracts, or budget implementation plans) are proposed by employees to their superiors through Ringi reports [26]. The reports are then circulated among the interested persons responsible and are submitted to office managers. If the managers approve the proposals, the reports are submitted to a person of higher rank. Thus, many operational matters occur with the agreement of interested members in the Ringi system. If a problem is encountered concerning a business matter that had been approved in the group-oriented and bottom-up information sharing system, all interested persons address a solution to the problem. This is typical of problem solving in Japanese organizations. Considering these organizational traits. CSA is an effective monitoring system for Japanese corporations that have a traditional management culture. Information related to ICFR effectiveness in the field is shared among interested persons, and the issues and solutions are then reported to superiors or internal auditors. Consequently, various solutions for the problems in ICFR are considered at the organization level. If this occurs, CSA adoption has a positive relation with financial reporting quality. This argument leads to the following hypotheses.

• Hypothesis 1. CSA is negatively associated with financial restatements.

Retrieval Number:100.1/ijmh.D1199125420 DOI:10.35940/ijmh.D1199.125420 Journal Website: <u>www.ijmh.org</u> • Hypothesis 2. CSA is positively associated with accrual quality.

Moreover, if ICFR quality is enhanced by CSA, the control risk that external auditors assess becomes smaller, and audit fees may then decrease. Hoitash *et al.* (2009) suggest that corporate governance quality affects control risk assessment by external auditors; therefore, if external auditors perceive a high-quality monitoring system of their client, control risk becomes smaller, and then audit fees decrease. [5] This leads the following hypothesis.

• Hypothesis 3. CSA is negatively associated with audit fees.

IV. SAMPLE SELECTION AND RESEARCH MODELS

Table 1 summarizes the study's sample selection procedure. My investigation used data from 3,517 Japanese firms listed on the First Section, Second Section, Mothers, and JASDAQ of the TSE. The TSE developed a new corporate governance code in June 2015 that required listed companies to disclose corporate governance reports and then disclose how to implement an ICFR assessment in their reports. Of the 3517 firms, 2,771 had filed the reports as of March 31, 2016. After excluding 132 firms in the banking, insurance, and financial services because their financial statements differ markedly from most other companies and 5 firms that were missing data concerning finances or shareholders, the final sample contains 2,634 firms. This study identifies companies that disclose CSA adoption for ICFR assessment or internal auditing as CSA adopters. Of all the filed corporations, 67 firms have disclosed CSA adoption in their corporate governance reports. Data related to the adoption of CSA are taken from the corporate governance report, while financial data are taken from NEEDS Financial QUEST. Data that provide valuable information on the topic of this study are obtained from NEEDS-Cges. Table 1 (Panel A) lists the market on which companies that reported CSA adoption are listed and reports their TSE industry classification codes (Panel B).

TABLE:1 Sample Selection

Panel A Sample Selection											
Market	Tokyo 1 st	Toky o 2 nd	JASD AQ	MATHE RS	Total						
Full sample	2,002	531	756	228	3,517						
CG report disclosure	1,656	406	570	139	2,771						
Financial Services Firms	(110)	(3)	(15)	(4)	(132)						
Missing Data Firms	(2)		(2)	(1)	(5)						
Final Sample	1,544	403	553	134	2,634						
CSA adopter	59	1	4	4	68						
Panel B Number of companies of CSA sample by industry											
Industry Type	Food	Fiber	Chemi cal	Oil	Steel	Mach ine	Electr onics	Auto Equip ment	Other Manuf acture		
CSA adopter	3	1	1	1	1	11	13	2	4		
(%)	3.22	2.27	0.63	14.2	2.08	20.3	6.77	2.43	5.00		
Industry Type	Constru ction	Gener al Tradi ng	Retail	Transpor tation	Wareh ouse	Electr ic & Gas	Servic e	Total			
CSA adopter	3	6	2	2	1	4	13	68			
(%)	2.11	2.52	0.67	4.08	3.22	21.05	4.71				



The following model for testing Hypothesis 1 is based on the works of Abbott *et al.* (2004) and Agrawal and Chadha (2005) [27] [18].

$RESTATE_{it} = a_0 + \beta_1 CSA_{it} + \beta_2 ROA_{it} + \beta_3 CFA_{it} + \beta_4 LOSS_{it} + \beta_5 GC_{it} + \beta_6 M \&A_{it} + \beta_7 DIR_{it} + \beta_8 OUTRTO_{it}$

+ β_0 INDRTO_{it}+ β_{10} CPA_{it} + β_{11} BIG4_{it} + β_{12} INAUD_{it} + ε . (1)

The independent variable (RESTATE) is the total number of financial restatements over the past two years; the indicator variable is equal to 1 if a company adopts CSA and 0 otherwise. CSA is expected to be negatively correlated with the number of financial restatements reported in year t (RESTATE) after controlling for other variables concerning profitability, corporate governance, and external auditor size. Prior research has mainly focused on the association between internal control quality and reported earnings (e.g., Ashbaugh-Skaife *et al.*, 2009; Bedard, 2006) [14] [28]. The following model for testing Hypothesis 2 is based on the work of Ashbaugh-Skaife *et al.* (2009) [14].

 $(TA, DA)_{it} = \alpha_0 + \beta_1 CSA_{it} + \beta_2 ROA_{it} + \beta_3 CFA_{it} + \beta_4 LOSS_{it} + \beta_5 GC_{it} + \beta_6 M \&A_{it} + \beta_7 OUTRTO_{it} + \beta_8 INDRTO_{it}$

 $+\beta_{0}CPA_{it} + \beta_{10}BIGA_{it} + \beta_{11}INAUD_{it} + \beta_{12}LNSEG_{it} + \beta_{13}GROWTH_{it} + \beta_{14}FOREIGNSALE_{it} + \varepsilon. (2)$ The dependent variables are the absolute values of total accruals (TA) and discretionary accruals (DA). This study uses the modified Jones model to estimate DA (see Dechow *et al.*, 1995) [29]. The independent variable in model (2) is CSA, which is expected to be negatively correlated with TA and DA. The model also includes various control variables related to firm size, complexity, profitability, ownership structure, and corporate governance.

Finally, model (3), which is for testing Hypothesis 3 and is based on the works of Hay *et al.* (2005), Hammersley *et al.* (2012), and Feldmann *et al.* (2009), is as follows [30] [31] [32].

$LNFEE_{it} = \alpha_0 + \beta_1 CSA_{it} + \beta_2 ROA_{it} + \beta_3 CFA_{it} + \beta_4 LOSS_{it} + \beta_5 GC_{it} + \beta_6 M \&A_{it} + \beta_7 OUTRTO_{it}$
+ $\beta_8 INDRTO_{it}$ + $\beta_9 CPA_{it}$ + $\beta_{10} BIG4_{it}$ + $\beta_{11} INAUD_{it}$ + $\beta_{12} LNSEG_{it}$ + $\beta_{13} GROWTH_{it}$
+ $\beta_{14}FOREIGNSALE_{it} + \beta_{15}LNSIZE_{it} + \beta_{16}LNNAS_{it} + \beta_{13}IFRS_{it}\varepsilon$. (3)

The dependent variable is the natural log of audit fees (LNFEE), and the independent variable in model (3) is CSA, which is expected to be negatively correlated with LNFEE. The model includes various control variables related to firm size, complexity, profitability, and corporate governance. Table 2 presents the definitions of all variables used in this study.

Table:2 Variable Definitions

	Table.2 Variable Definitions
Variable	Definition
CSAit	an indicator variable equal to 1 if i adopts CSA in year t, and 0 otherwise.
RESTATEit	the number of financial restatement reported by i in year t
TAit	the absolute value of total accruals in year t.
DAit	the absolute value of discretionary accruals in year t.
LNFEEit	the natural logarithms of audit fees in year t.
ROAit	the return on assets in year t.
CFAt	the operating cash flow deflated by total assets in year t.
LOSSit	an indicator variable equal to 1 if i calculates the net loss for past two consecutive years (t and t-1), 0 otherwise
GCit	an indicator variable equal to 1 if i reportes the explanatory notes regarding the going concern assumption in year t, and 0 otherwise.
M&Ait	an indicator variable equal to 1 if i is involved in a merger or acquisition in year t, and 0 otherwise.
OUTRTOit	the proportion of outside directors on all directors in year t.
INDRTOit	the proportion of independent directors on all directors in year t.
CPAit	the proportion of the sum of directors who are public accountants or tax professions on board in year t.
BIG4it	an indicator variable equal to 1 if i is audited by a Big4 audit firm in year t, 0 otherwise.
INAUDit	the proportion of internal auditors on board members in year t.
LNSEGit	the natural logarithms of (1+seguments) in year t.
GROWTHit	the average of sales growth in the past 3years (t, t-1, and t-2).
FOREIGNSALEit	the proportion of foreign sales on total sales in year t.
LNSIZEit	the natural logarithms of total assets in year t.
LNNASit	the natural log of (1+non audit service fees) in year t.
IFRSit	an indicator variable equal to 1 if i adopts the IFRS or the U.S. SEC standards.
FOREIGNit	the shareholding ratio of foreign investors in year t.
EMPOit	the shareholding ratio of employees in year t.
TOBINQi	the average of Tobin's q ratio in the past 3years (t, t-1, and t-2).

V. RESULTS

Table 3 presents the descriptive statistics for the group of companies that reported the adoption of CSA (CSA group) and for the group that did not (control group). Firms in the CSA group are less likely to have financial restatements than those in the control group (RESTATE, t = -2.95, p = 0.004). The audit fees of firms in the CSA group are less than those of the control group (, t = LNFEE, t = -7.01, p < 0.001). These results support Hypotheses 1 and 3. However, the absolute values of the TA and DA do not differ between the CSA group and control group. The CSA group also has a higher proportion of independent directors to all directors and internal auditors to board members (INDRTO, t = 4.36, p <0.001, INAUD, t = 5.56, p < 0.001). The CSA group also has higher proportion of foreign sales to total sales and total assets (FOREIGNSALE, t = 4.97, p < 0.001, LNSIZE, t = 8.65, p < 0.001). Additionally, the control group faced greater financial risks than the CSA group (CFA, t = 3.58, p < 0.001, LOSS, $\chi^2 = -2.04$, p = 0.029). Moreover, two variables concerning firm accounting varies among CSA group and control group (BIG4, $\chi^2 = 6.32$, p < 0.001, LNNAS, t = 5.91, p < 0.001).

		CSA group (N = 68)			Control Group (N = 2.566)	,	Differences
Variable	Mean	Median	Std.dev.	Mean	Median	Std.div.	t or χ^2
RESTATEit	0.62	0.00	1.35	1.56	0.00	2.25	-2.95**
TAit	0.031	0.020	0.03	0.075	0.029	0.34	-1.13
DAit	0.002	0.003	0.003	0.002	0.002	0.04	1.02
LNFEEit	3.51	2.87	0.85	4.45	3.09	0.73	-7.01***
ROAit	7.46	6.58	9.84	5.71	5.56	6.51	1.30
CFAt	7.75	6.69	5.89	0.32	4.10	8.32	3.58***
LOSSit	3.03	0.00	0.00	4.81	0.00	0.02	-2.04**
GCit	1.51	0.00	0.00	2.46	0.00	0.01	-1.31
M&Ait	40.90	0.00	0.49	22.89	0.00	0.41	2.56**
OUTRTOit	42.09	26.19	17.09	46.34	22.48	17.54	-1.47
INDRTOit	22.94	12.22	13.93	14.24	18.67	13.93	4.36***
CPAit	7.85	4.22	8.21	13.81	8.11	11.04	-0.06
BIG4it	91.02	1.00	0.29	60.20	1.00	0.49	4.55***
INAUDit	45.72	36.82	8.92	35.46	30.28	2.46	5.65***
LNSEGit	1.27	1.42	0.48	1.23	1.27	0.45	0.49
GROWTHit	102.32	97.99	3.27	99.58	99.26	0.72	1.02
FOREIGNS ALEit	20.77	10.29	27.42	11.62	7.92	9.76	4.97***
LNSIZEit	12.76	9.95	1.79	10.21	1.76	12.09	8.65***
LNNASit	1.45	1.09	1.43	0.26	0.00	0.08	5.91***
IEDSA	8.09	0.00	0.03	1.20	0.00	0.00	2.55**

Asterisks*, **, ***, indicate two-tailed significance at the 0.10,0.05,0.01 levels, respectively.

Table:4 Correlation Matrix ((Spearman Pearson)
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		ı													
-		-0.245**	0.025	0.121	-0.511**	0.064	0.312++	-0.092	0.308++	0.039	0.508**	0.061	0.062	0.405++	0.592++
	-0.240**		0.001	-0.066	-0.054	0.065	-0.028	0.034	-0.114	-0.044	-0.165*	0.059	0.021	-0.027	-0.101
	-0.94	0.085		0.599*	-0.009	0.177*	0.005	0.022	-0.043	0.003	-0.031	-0.074	0.035	0.119	-0.064
	0.055	-0.038	0.478**		0.475	-0.207*	0.031	0.125	0.057	0.056	-0.016	0.071	0.049	0.091	0.092
	-0.511**	-0.067	0.155	0.168*		0.045	0.234**	-0.185*	0.412**	-0.101	0.502**	0.171	0.063	0.445**	0.899**
	0.108	0.011	-0.038	0.034	-0.011		0.442**	-0.141	0.004	-0.001	0.189*	-0.257**	-0.188*	0.063	0.077
	0.275**	-0.143	-0.019	0.034	0.199*	0.485**		-0.012	0.004	0.102	0.269**	-0.143	-0.248**	0.201*	0.271**
	-0.122	0.03	0.004	-0.086	-0.154	-0.125	-0.056		0.123	0.187*	-0.192*	-0.063	0.065	-0.123	-0.201*
	0.343**	-0.117	-0.005	-0.082	0.372**	-0.035	0.216**	-0.048		0.032	0.241**	0.177*	0.056	0.203*	0.359**
	-0.005	-0.117	-0.023	0.112	-0.175	0.054	0.133	0.194	0.014		0.007	-0.012	0.022	-0.122	-0.128
	0.521**	0.145	-0.023	-0.025	0.544**	0.007	0.171*	-0.180*	0.245**	-0.048		0.005	0.018	0.312**	0.572**
	0.042	0.091	-0.034	0.041	0.147	-0.255**	-0.145	-0.131	0.172*	-0.004	-0.004		-0.009	0.222**	0.146
	0.079	0.019	0.033	0.045	0.055	-0.021*	-0.258**	0.066	0.049	0.022	0.025	-0.004		-0.029	-0.048
	0.404**	-0.048	0.049	0.026	0.447**	0.034	0.127	-0.12	0.220**	-0.077	0.328**	0.196*	-0.014		0.458**
	0.554**	-0.091	0.016	0.185*	0.834**	0.05	0.266**	-0.173*	0.334**	-0.295*	0.605**	0.134	-0.054	0.435**	
	0.460**	-0.07	-0.025	0.118	0.661**	-0.016	0.175*	0.06	0.339**	-0.09	0.493**	0.085	-0.054	0.293**	0.607**

The correlation matrix in Table 4 reveals that CSA is negatively correlated with RESTATE and LNFEE but is not significantly correlated with TA and DA. The results support Hypotheses 1 and 3.





To cope with endogeneity bias, this analysis uses instrumental variables regression with two-stage least squares as an estimator. CSA is an endogenous variable, and the three variables concerning shareholder composition and Tobin's q ratio are instrumental variables. Specifically, the shareholding ratio of foreign investors (FOREIGN), the shareholding ratio of employee ownership (EMPO), and the three-year average of Tobin's q ratio (TOBINQ) are used as instrumental variables. I expect that foreign investors require a firm emphasizing corporate governance independence (international perspective for corporate governance), while EMPO implies employees' sense of belonging to a corporation. Therefore, although FOREIGN is negatively correlated with CSA, EMPO is positively correlated with CSA. Moreover, TOBINQ might have a positive correlation with CSA because a corporation that has a high ratio of Tobin's q is more likely to solve problems internally.⁸

Table 5 shows the first stage results of instrumental variables regression, and the results indicate a statistically significant negative correlation between CSA and FOREIGN (t = -4.03, p < 0.001, t = -4.95, p < 0.001, and t = -4.20, p < 0.001). However, CSA has a positive correlation with EMPO (t = 2.11, p = 0.037, t = 2.03, p = 0.042, and t = 2.03, p = 0.042) and TOBINQ (t = 3.92, p < 0.001, t = 4.41, p < 0.001, and t = 4.16, p < 0.001).

Table:5 Instrumental Variables Regression

Endogenous variable: CSA, instrumental variables: FOREIGN, EMPO, TOBINQ											
		Pa	anel A: Mod	lel 1	Pa	nel B: Mode	12	Pa	Panel C: Model 3		
	Predicted	Coeff.	Std.Err	t-value	Coeff.	Std.Err	t-value	Coeff.	Std.Err	t-value	
First-stage regression	sign										
CONSTANT		-0.070	0.215	-2.33**	-0.469	0.324	-2.45**	-0.457	0.336	-2.42**	
FOREIGNit	-	-0.013	0.003	-4.03***	-0.018	0.003	-4.95***	-0.018	0.004	-4.20***	
EMPOit	+	0.031	0.014	2.11**	0.029	0.014	2.03**	0.030	0.014	2.03**	
TOBINQi	+	0.464	0.118	3.92***	0.521	0.118	4.41***	0.501	0.120	4.16***	
ROAit		0.025	0.007	1.24**	0.028	0.007	3.69***	0.028	0.007	-3.54***	
CFAt		0.013	0.005	2.17**	0.012	0.006	2.11**	0.012	0.006	2.07**	
LOSSit		-0.029	0.438	-0.67	-0.244	0.428	-0.57	-0.240	0.430	-0.56	
GCit		-0.638	0.060	-1.06	-0.680	0.593	-1.15	-0.648	0.597	-1.09	
M&Ait		0.060	0.080	0.76	0.090	0.079	1.14	0.085	0.079	1.07	
OUTRTOit		-0.002	0.002	-1.08	-0.002	0.002	-1.10	-0.002	0.002	-1.10	
INDRTOit		0.005	0.003	1.39	0.003	0.003	0.99	0.004	0.039	1.04	
CPAit		0.006	0.004	1.28	0.006	0.004	1.29	0.006	0.004	1.28	
BIG4it		0.262	0.111	2.36**	0.251	0.108	2.31**	0.252	0.109	2.30**	
INAUDit		0.018	0.005	2.83**	0.012	0.006	1.81*	0.012	0.006	1.79*	
LNSEGit					0.029	0.014	2.03**	-0.065	0.076	-0.86	
GROWTHit					0.082	0.007	0.82	0.079	0.006	0.91	
FOREIGNSALEit					0.045	0.002	2.04**	0.004	0.002	1.82*	
LNSIZEit								0.048	0.027	1.74*	
LNNASit								-0.010	0.042	-0.24	
IFRSit								0.319	0.262	-0.24	
N=2,634											
CSA N=68											
Adjusted-R ²			0.284			0.317			0.310		
F-value			14.55 < 0.001			14.69 < 0.001			14.22 < 0.001		

Table 6 shows the 2SLS regression results, and the results indicate that CSA is negatively correlated with RESTATE (β = -1.402, z = -2.59, p = 0.010), supporting Hypothesis1. In addition, profitability (ROA and LOSS) is positively correlated with RESTATE (ROA, β = 0.070, z = 2.84, p = 0.005, LOSS, β = 5.025, z = 3.19, p < 0.01). Interestingly, however, bankruptcy risk (GC) has a negative correlation with RESTATE (β = -4.914, z = 2.41, p = 0.016).

Although CSA is negatively correlated with TA ($\beta = -0.325$, z = -3.14, p < 0.001), it is not correlated with DA (panel B and C in Table 6). Therefore, it is not clear whether CSA influences accrual quality. However, CSA is significantly negatively correlated with LNFEE (panel D in Table 6) ($\beta = -0.284$, z = -2.41, p = 0.016) (panel D in Table 5), which means that external auditors perceive that CSA influences monitoring quality.

This study performs two additional analyses to ensure the

robustness of the regression results. First, to analyze the correlation between CSA and any dependent variable, two step generalized method of moments (GMM) is used (Table 7).⁹ Second, I calculated the propensity score and then analyzed the correlation between CSA and any dependent variable by using inverse numbers of the scores as weights in an ordinary liner model (Table 8).¹⁰ The results of the GMM regression indicate that CSA has a negative correlation with RESTATE, TA, and LNFEE ($\beta = -1.762$, z = -3.18, p = 0.001, $\beta = -0.285$, z = -2.01, p = 0.046, $\beta = -0.122$, z = -1.85, p = 0.065) but not DA. Furthermore, the results of OLS with inverse probability treatment weighting indicate that CSA is negatively correlated with RESTATE and LNFEE ($\beta = -1.446$, t = -2.45, p = 0.015, $\beta = -1.097$, t = -3.61, p < 0.001).

Table:6 2SLS Regression

		Panel A:DV=RESTATEit			Pa	nel B:DV=	TAit	Pa	Panel C:DV=DAit D:DV=LNFE			anel LNFEEi t			
SLS regression	Predicted sign	Coeff.	Std.Err.	z-value	Coeff.	Std.Err.	z-value	Coeff.	Std.Err.	z-value	Coeff.	Std.Err.	z-value		
ONSTANT		-4.196	0.405	-1.39	0.876	0.225	3.88***	-0.035	0.015	-2.32**	1.358	0.319	4.25**		
SAit	-	-1.402	0.541	-2.59**	-0.325	0.103	-3.14**	0.006	0.006	0.92	-0.284	0.153	-2.41**		
10Ait	?	-0.070	0.024	-2.84**	-0.007	0.005	-1.48	0.001	0.003	0.54	-0.015	0.069	-2.19**		
'FAt	?	0.013	0.006	2.17**	0.005	0.004	1.24	-0.002	0.003	-0.43	0.061	0.064	0.97		
OSSit	?	5.025	0.857	3.19**	-0.198	0.325	-0.61	0.007	0.021	0.45	0.037	0.431	0.19		
iCit	?	-4.914	2.035	-2.41**	-0.202	0.223	-0.48	0.005	0.026	0.28	0.278	0.561	0.49		
A&Ait	?	0.524	0.286	1.83*	0.144	0.059	2.43**	0.007	0.038	0.42	0.094	0.079	1.18		
DUTRTOit	?	0.006	0.009	0.65	0.008	0.002	0.43	0.017	0.019	0.60	-0.001	0.002	-0.54		
NDRTOit	?	0.009	0.012	0.74	0.002	0.002	0.99	-0.002	0.003	-0.30	0.040	0.038	1.05		
PAit	?	-0.025	0.015	-1.84*	-0.001	0.003	-0.53	0.015	0.022	0.47	0.007	0.004	0.17		
NG4it	?	0.590	0.381	1.55	0.172	0.080	2.130**	-0.076	0.054	-1.81*	0.314	0.110	2.85**		
NAUDit	?	0.032	0.021	1.50	0.007	0.005	1.44	-0.039	0.035	-1.90 [*]	0.048	0.007	0.66		
NSEGit	?				0.063	0.054	1.16	0.035	0.012	2.86**	0.085	0.073	0.12		
GROWTHit	-				-0.004	0.002	-0.79	-0.003	0.007	-0.62	0.014	0.026	0.89		
OREIGNSALEit	+				0.003	0.001	2.13**	-0.006	0.001	-1.81*	0.041	0.021	1.90**		
NSIZEit	+										0.197	0.026	7.36**		
NNASit	+										0.196	0.040	4.89**		
FRSit	+										0.189	0.369	0.51		
i=2.634															
SA N=68															
Vald chi²		84.47	p<0.001		42.38	p<0.001		29.22	p = 0.001		610.78	p<0.001			
2		0.398			0.147			0.075				0.172			

Table:7 GMM Regression

Two stage GMM regression		Panel A:DV=RESTATEit			F	anel B:DV	=TAit	Panel C:DV=DAit			Panel D:DV=LNFEEit		
-	Predicted sign	Coeff.	Std.Err.	z-value	Coeff.	Std.Err.	z-value	Coeff.	Std.Err.	z-value	Coeff.	Std.Err.	z-value
CONSTANT		-0.296	0.543	-0.55	0.117	0.085	1.37	-0.469	0.333	-1.41	1.358	0.319	4.25***
CSAit	-	-1.762	0.553	-3.18***	-0.285	0.129	-2.01**	0.013	0.009	1.43	-0.112	0.114	-1.85*
ROAit	?	-0.509	0.164	-3.59***	-0.028	0.086	-3.34**	-0.012	0.086	-1.23	-0.007	0.039	-1.93*
CFAt	?	0.020	0.023	0.85	0.015	0.042	0.28	0.012	0.064	1.42	0.006	0.040	0.17
LOSSit	?	4.545	0.871	1.09	0.016	0.042	0.39	0.014	0.001	0.75	0.205	0.147	1.39
GCit	?	-4.463	0.830	-1.04	-0.047	0.686	-0.69	0.001	0.018	0.63	-0.201	0.259	-0.78
M&Ait	?	0.579	0.282	-2.05**	-0.025	0.043	-0.60	-0.089	0.018	-0.53	-0.031	0.096	-0.32
OUTRTOit	?	0.056	0.072	0.77	-0.016	0.001	-0.16	0.011	0.021	0.27	-0.001	0.001	-0.93
INDRTOit	?	0.078	0.010	0.76	0.082	0.061	0.87	0.069	0.029	-0.58	0.041	0.029	1.42
CPAit	?	-0.009	0.014	-0.61	-0.012	0.016	-0.73	-0.029	0.030	-0.41	-0.007	0.033	-0.21
BIG4it	?	0.663	0.327	2.02**	0.013	0.236	1.90*	-0.016	0.013	-1.75*	0.213	0.084	2.52**
INAUDit	?	0.033	0.023	1.44	0.028	0.061	0.76	-0.095	0.067	-1.76*	0.028	0.067	0.37
LNSEGit	?				0.094	0.155	0.60	-0.069	0.067	-1.69*	0.095	0.060	1.38
GROWTHit	-				-0.001	0.001	0.31	-0.001	0.001	-0.31	0.012	0.013	0.71
FOREIGNSALEit	+				0.012	0.005	2.11**	-0.002	0.015	-1.76*	0.016	0.002	0.72
LNSIZEit	+										0.290	0.041	7.06***
LNNASit	+										0.124	0.056	2.22**
IFRSit	+										0.112	0.233	
N=2.634													
CSA N=68													
Wald chi ²		73.22	p<0.001		45.03	p<0.001		27.37	p <0.001		837.72	p<0.001	
R^2		0.377				0.152		0.052				0.782	



Table:8 OLS with Inverse Probability Treatment

	weighting	5						
DV=RESTATEit	Coeff.	Std.Err	t-value					
CSAit	-1.446	0.587	-2.45**					
CONSTANT	1.964	0.567	3.45**					
	F -value = 8.02, $p < 0.001$, $R^2 = 0.134$							
DV=TAit	Coeff.	Std.Err	t-value					
CSAit	-0.109	0.070	-1.57					
CONSTANT	0.080	0.070	1.14					
	F-v	alue = 7.89, $p < 0.001$, $R^2 = 0$.134					
DV=DAit	Coeff.	Std.Err	t-value					
CSAit	0.033	0.002	1.29					
CONSTANT	-0.036	0.024	-0.27					
	F-v	alue = 6.02, p = 0.015, R ² = 0	.137					
DV=LNFEEit	Coeff.	Std.Err	t-value					
CSAit	-1.097	0.162	-3.61***					
CONSTANT	4.221	0.103	3.45**					
	F-v	value = 9.85, $p < 0.001$, $R^2 = 0$.112					

VI. CONCLUSION

This study examines the relationship between CSA and financial reporting quality and finds that CSA has a negative relationship with the number of financial restatements and with audit fees. This finding indicates that CSA has positive consequences for financial reporting quality. After some serious accounting scandals (e.g., Olympus scandal), Japanese regulators and standards-setters have made efforts to improve corporate governance in terms of independence. However, the subsequent Toshiba scandal demonstrates that independent corporate governance does not function well under the existing laws and provisions related to corporate governance. By contrast, the internal monitoring mechanism that continuously monitors ICFR effectiveness and in which all employees participate has some positive effects on financial reporting quality. There are two reasons for this result. First, employees have easier access to negative information concerning ICFR effectiveness than outsiders and can share that information with the internal personnel in charge of monitoring (e.g., internal auditors). Moreover, CSA is expected raise an entity's awareness of ICFR, that is, the control environment of ICFR components is made into an environment that prevents and detects impropriety in the accounting process.

This study has some limitations. First, the corporations used as samples in this paper are limited Japanese corporations. As stated above, Japanese corporations have a unique organizational culture in which CSA functions well. Therefore, in future research, CSA should be examined with international comparisons. Second, the effect of a new institution related to corporate governance has not been considered in this study. After the Toshiba scandal was revealed, the Tokyo Stock Exchange and the Financial Services Agency jointly developed a new corporate governance code that required listed companies to disclose corporate governance reports. "A clear principle in the code" to indicate that the sentence still refers to the code may have a greater impact on board function.¹¹ The effects of this institutional reform on the quality of corporate governance and ICFR should be examined in future research. Additionally, the sample period is limited to 2015 because most firms disclose whether CSA is adopted only in corporate governance reports beginning in 2015. Therefore, the effects of CSA on financial report quality must be analyzed continuously in the future research.

1. In 2005, Kanebo was revealed to have been engaging in fraudulent accounting over the previous 5 years (more than 200 billion yen).

2. An administrative civil monetary penalty (7.3 billion yen) against Toshiba was recommended by Japanese Financial Services Agency in February 2016. 3. Toshiba organized in 1904 and listed with Tokyo Stock Exchange in 1949. A former chairman of Toshiba (Toshio Doko) has been a chairman of the Federation of Economic Organizations of Japan (the primary business lobby in Japan).

4. This article was retrieved on June 5, 2017, from https://www.ft.com/content/b209abac-2bc0-11e5-acfb-cbd2e1c81cca

5. By contrast, in Japan, internal directors with accounting expertise have a positive relationship with the quality of ICFR.

6. Corporations that introduce CSA take some measures to ensure the credibility of internal control assessments by internal personnel. In Panasonic Corp., for example, the persons responsible for auditing the result of CSA in each division, department, and company are arranged. The results of audits are used in internal audits. Panasonic simultaneously achieves the effectives and efficiency of internal auditing through this scheme.

7. The estimation of TA is calculated by industry.

8. For example, firms with a higher Tobin's q tend to choose more foreign direct investment and less foreign outsourcing of production (see Jinji *et al.*, 2011). [33]

9. In first-stage regression, F-value and R-squared are F = 8.89, p < 0.001, $R^2 = 0.284$ (for model 1), F = 9.74, p < 0.001, $R^2 = 0.317$ (for model 2), and F = 11.15, p < 0.001, $R^2 = 0.310$ (for model 3).

10. An exposure is CSA, and potential confounders (covariates) are control variables in each model (model 1, 2, and 3) in the regression model for calculating the propensity score. Inverse numbers of the propensity scores are then used as weights.

11. See Arson, 2015.

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ENDNOTES

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