

Counting Or Growing the Beans: The presence and strategic impact of Chief Financial Officers (CFOs) in Japanese firms

Key words: Chief Finance Officer (CFO), Japan, corporate governance, institutional logics, stakeholder-oriented, performance

This work was supported by JSPS KAKENHI Grant Number JP21K01649.

INTRODUCTION

Generally, Chief financial officers (CFOs) are considered the financial stewards of their companies and arguably second in importance only to the Chief Executive Officer (CEO) in corporate hierarchies (Hoitashi, Hoitash and Kurt, 2016). Indeed, following the Enron crisis, the importance of the role a CFO plays is now fully recognized by regulators. For example, the Sarbanes-Oxley Act of 2002 requires both the CEO and CFO of a publicly traded U.S. firm to personally certify the material accuracy and completeness of the financial information and disclosures released to the public (Liu, Wei and Xie 2016). Thus, in the U.S., the CFO is legislatively elevated to the same level of the CEO in terms of financial reporting and oversight (Geiger and North 2006).

CFOs, particularly in a US corporation, oversee the implementation of accounting principles and procedures and the preparation of financial reports (Mian, 2001). They are also responsible for establishing and maintaining internal controls and reporting any deficiencies to the audit committee and the external auditors (Agrawal and Cooper, 2016). As a result, CFOs must work closely with internal auditors in order to identify any potential internal control weaknesses.

CFOs can potentially influence the quality of financial reporting by monitoring the expertise of accounting personnel, by their attitude toward internal controls, and through their role as conduits of information to directors, other managers, and auditors. Because they link with other functional directors, the CEO and auditors, their role in the firm is more strategic than operational. As such CFOs have also become key players in strategic planning, mergers and acquisitions, implementing information technology initiatives and managing associations with venture capitalists and the investing public (Aier, Comprix, Gunlock and Lee, 2005).

Five decades ago, the role of CFOs was never this complicated nor seen as this strategic, at a time when corporate finance was a back-office function performed by treasurers or

controllers, whose duties were confined to tasks like bookkeeping, preparing tax statements, monitoring debt and capital structures (Zorn, 2004). Decision-making was the prerogative of operational managers from manufacturing to sales and marketing, while the corporate treasurer was mainly involved with creating the budget, usually after production decisions had been made (Gerstner and Anderson, 1976; Whitley, 1986).

Extant literature offers two reasons behind the rise of the finance manager from the traditional role of bookkeeping to the level of chief. The first argument is predicated on the firms' dependency on capital, particularly during times of financial crises or following the passing of unfavourable legislation that impacted on earnings statements. The salience of external financing suggested that management had to restructure the locus and nature of financial expertise within firms in order to meet firms' funding needs (Prechel, 2000). The uncertainty associated with external financing due to fluctuations in stock markets and interests (Hoitash, 2016) made the presence of a financial expert in the boardroom even more exigent.

The second reason was borne out of the central theme of the shareholder system that the firm should be taken as a vehicle for investment, involving assessment of risk and investing in less risky but potentially value-enhancing projects (Faleye, Kovac, and Venkateswaran, 2014). Consequently, this had the effect of casting managers with a background in finance as best equipped to run corporations (Fligstein, 1990), leading to the transfer of control from production to finance. Consequently, companies "started looking for financial officers who could do more than cut costs...so CFOs tossed aside their green eyeshades and turned to more creative pursuits" (Kahn, 2002: 199). A similar sentiment was expressed by Roberto Goizueta, the late chairman and CEO of Coca-Cola between 1981-1997 when he said that today's CFOs are being asked to grow new beans in addition to counting the company's existing beans (Favaro, 2001). It can be argued, therefore, that changes to the role of CFOs came as a result of the need for firms to pay attention to the whims of financial markets, a development that

saw the finance manager move from the tail-end of corporate decision-making to its strategic apex as part and parcel of the shareholder movement.

Despite the importance of the CFO position, at least in U.S. firms, very little attention in academia has been paid to the role a CFO plays in corporate finance, especially in other countries. Of the few studies that exist, mainly on U.S. firms, Zorn (2004) provides an account of the historical rise of the CFO. Mian (2001) examines why firms replace their CFOs and finds that CFO turnovers are largely disciplinary. Geiger and North (2006) study earnings management surrounding CFO turnovers and find that discretionary accruals decreased significantly following the appointment of a new CFO. Jiang, Petroni and Wang (2010) compare CFOs and CEOs in relation to earnings management and find that CFOs have more influence than CEOs in earnings management decisions. Hoitash et al (2016) find that in high-growth industries, firms with accountant CFOs invest less in research and development and capital expenditures and are less likely to engage in external financing.

Beyond the U.S., studies on the role of CFOs are scarcer but encouragingly rising (Liu, Tong and Zhang, 2022). As a result, we know little about whether our current understanding of the role of the CFO holds in a non-U.S. context. In Japan, a country with a different corporate governance model from that of the U.S., arguably noted for relatively weak market-based governance, the appointment or the use of the title CFO is a recent thing, with most firms still without the role.

Owing to the contrasting corporate governance logics, we have reason to anticipate that the role and importance of the CFO may take a different meaning in Japan. Nevertheless, some Japanese firms have appointed executives with the title CFO, however, we know very little, if anything, about the nature of firms that tolerate the presence of the CFO role and whether the appointed officers have the same effect on firm performance with those found in the context of the U.S. (Hoitash et al, 2016).

Drawing on the theoretical lens of institutional logics, this paper seeks to remedy this omission by examining the characteristics of firms that welcome the appointment of the CFO and their impact in Japanese firms, hoping to establish whether CFOs in Japan assume the traditional accounting role of ‘counting the beans’ or embrace the strategic role of ‘growing new beans’ manifest in the creation of firm value. Put differently, is the role of the CFO in Japan perceived in the same way as it is in the U.S.? Specifically, when it comes to accounting performance and firm value-creation do the institutional logics embedded in Japanese corporate governance prescribe the behaviour of the CFO differently with consequent divergent outcomes from that of the U.S.?

Japan provides an interesting and suitable context to understand divergent perceptions and impacts of the CFO role owing to her contrasting nature of corporate governance logics from that of the shareholder-oriented models (Aguilera and Jackson, 2003). First, Japanese firms have a notable history of rejecting foreign management or governance practices (Ahmadjian and Robbins, 2005; Chizema and Shinozawa, 2012; Yoshikawa, Phan and David, 2005). The fact that some companies have adopted the CFO role while others seemingly reject it, is certainly an intriguing prospect. This situation is similar to many of the management and governance initiatives that have been imported in the past, only to face minimum acceptance (Chizema and Shinozawa, 2012). Indeed, the CFO as a strategic managerial concept and title derives from the US and is consistent with the shareholder-oriented form of corporate governance. Like other corporate governance practices deriving from the Anglo-American model in the past, the question is whether the management practice of the CFO is likely to face the same fate, if not in form, then in substance (Gilson and Milhaupt, 2005). Indeed, even in circumstances where management practices have been adopted, there is evidence that they have been translated to suit the Japanese-style of management. For example, Chizema and

Shinozawa (2012) found that the so-called independent directors in Japanese firms are recruited from their affiliates or are previous employees of the firm.

Second, Japanese management and business literature suggests that there is a general trend of conservatism in viewing accounting and finance functions within the corporate structure (Shuto and Takada, 2010). While a lot of effort and attention is given to issues around the operating or manufacturing efficiencies and technology, concerns of the accounting and finance functions have hardly changed, continually focused on the functional roles of earnings management (Teshima and Shuto, 2008) and reporting. It is plausible, therefore, that the CFO in Japan may operate differently from the one in a US firm that has, on average, been dramatically transformed from a bean counter to a corporate spin doctor (Zorn, 2004).

Our study makes several contributions. First, we add to the scant literature on the role of CFOs by examining their effect on performance in a context that is traditionally not associated with this managerial office. Second, we apply the theoretical lens of institutional logics to understanding the role of CFOs in Japan and consequently add to the body of literature particularly by providing evidence on the course of action, or lack of it, by an actor when faced with competing institutional logics. Third, we add voice to the call made by practice and professions (e.g., Deloitte Touche Tohmatsu, 2018; Ikegawa and Michels-Kim, 2018) to take the role of CFOs seriously in Japan by providing empirical evidence of the economic impact of the office.

The rest of the paper is organised as follows. The next main section discusses theory, literature and develops hypotheses in the process. This is then followed by a discussion of the methodology section, that provides an explanation of the study sample, variables and the econometric techniques used to analyse the data. This is then followed by a discussion of the results and the last section provides a general discussion and a conclusion.

THEORY AND HYPOTHESES

Institutional logics

There is no consensus among organizational scholars about how to define institutional logics, or even the location and scope of logics, however, they are generally understood as macro-level belief systems that shape cognitions and influence decision-making processes in organizational fields (Ocasio, 1997; Thornton, 2004). For those organizations within a field, these logics act as “taken-for-granted social prescriptions” (Battiliana and Dorado, 2010: 1420) that define goals and expectations, legitimate activity (Thornton and Ocasio, 1999; Thornton, 2002, 2004), and often become embodied in organizational structures and practices (Thornton, 2004; Dunn and Jones, 2010).

Institutional logics can also be considered as “socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules” that create norms around “the way a particular social world works” (Thornton and Ocasio, 1999: 804). As such, logics provide guiding principles for selecting and applying appropriate types or forms of practices to specific problems, justifying the approaches to be used, to be changed or to be rejected by organizations (Lawrence and Suddaby, 2006).

An organization may operate in accordance with a market-oriented institutional logic, wherein shareholder returns are of utmost importance, or a professional-oriented institutional logic, wherein the organization is expected to function largely through peer-to-peer relationships instead of hierarchy (Thornton, 2002). In both instances, such expectations or actions “provide both a logic of action and reinforce a set of cultural and material values” for the organization (Ocasio, 1997: 196).

Institutional logics are often viewed as originating from a ‘supra-organizational’ source, hence the macro-level view, such as from within institutional sectors that span societies (Thornton and Ocasio, 2008: 101). However, an organization's dominant logic may be most

tangibly reflected in various organization-level factors, such as organizational missions (Thornton, 2002; Thornton and Ocasio, 2008) and the way its functions are organised. Indeed, logics are not pure abstractions—they concretely affect day-to-day affairs of an organization, manifest in the structure and routines of the organisation.

A particular logic determines not only the meaning and legitimacy (Thornton, 2002) of the organization's attributes, but also it focuses the attention of organizational actors on a limited set of issues and solutions that are consistent with it (Thornton, 2002), thereby placing bounds on the latitude of decision-makers. Thus, to the extent that ownership and governance affect the impact of managerial decisions, the underlying force of this effect may derive, in part, from the associated institutional logic, specifically the normative expectations it creates regarding how the organization should conduct its affairs and the objectives toward which it should strive. These expectations have far-reaching implications and may even influence power dynamics in and around organizations, such as the direct constraints that owners and other stakeholders may place on organizations. As Thornton and Ocasio (1999) have noted, the source of “power, its meaning and its consequences are contingent on [the relevant] higher-order institutional logics” (Thornton and Ocasio, 1999, pg. 802).

Nevertheless, because normative expectations are indirect, values-based beliefs regarding how people and organizations should behave, institutional logics may affect the opportunity for management or its constituent actors to impact performance, independent of owner-board-CEO power dynamics. In other words, working through socio-cognitive channels (rather than lending meaning and force to a direct demonstration of power), institutional logics can constrain management's perceived range of action by simply solidifying in the minds of organizational members the norms and values the organization should be upholding, which necessarily restricts the management's decisions to only those considered acceptable.

Corporate governance logics: Japan versus the U.S.

Corporate governance is an institutional element of a nation's business system that reflects economic, social structures and norms of key stakeholders in a society (Ahmadjian and Robbins, 2005; Fiss and Zajac, 2004). Corporate governance models or systems can be viewed as institutional logics. They are distinct and institutionalised at the national level as a result of their historically path-dependent development in the unique cultural and political configurations of their national contexts (Whitley, 1999; Guillen, 2001). Viewing corporate governance systems as institutional logics matter not only because they affect the approach to board monitoring (Desender et al, 2016), but also because they shape beliefs about legitimate and efficient corporate structures and strategies. For that reason, organisations, through embedded agency, may be inclined to rely on institutional logics, that are embodied in national governance models, in their operations and decision-making (Hall and Soskice, 2001).

One of the clearest distinctions among corporate governance systems is between the stakeholder-oriented economies exemplified by Germany and Japan (Gilson and Milhaupt, 2005; Hall and Soskice, 2001; Yoshikawa, Phan and David, 2005) and the shareholder-oriented economies of the Anglo-American countries (Aguilera and Jackson, 2003), led by the U.S. and the UK. The stakeholder-oriented or network-oriented corporate governance system of Japan is characterized by long-term relationships between different stakeholders who have a substantial influence on strategic decision-making (Lincoln and Gerlach, 2004). Japanese firms tend to more actively manage the interests of their stakeholders. The resulting stakeholder management is highly institutionalized and anchored in laws, social rules and norms.

Thus, Japanese firms usually exhibit a very active stakeholder management. Earlier work described the Japanese firm as a coalition of employees and a coalition of shareholders, which is integrated and mediated by management to strike a balance between the interests of the two parties (Aoki and Patrick, 1994). Here, core workers are entitled to life-long employment and domestic investors hold shares for the implicit purpose of business goodwill,

information exchange, and mutual monitoring. These corporate shareholders, like bank shareholders, hold shares not necessarily to earn investment returns but to stabilize trading relationships and long-term alliances (Gilson and Milhaupt, 2005). The main bank owns a large portion of the network's equity and serves as a lead lender to the keiretsu firms. As a large debt holder, the main bank often acts as an advisor and agent to the firm's cash management and financial planning activities (Sheard, 1989). In addition to the banks, many non-financial firms also hold stocks of other firms, often on a reciprocal basis. For that reason, Japanese investors typically fall under Aguilera and Jackson's (2003) category of investors with strategic interests as opposed to financial interests.

The logics of Japanese firms, therefore, rooted in stakeholder or relationship-oriented system of corporate governance are, in the main, centered on maximizing the well-being of relevant stakeholder groups, including employees. Here, the governance system has been institutionalized to empower some organizational actors such as domestic institutional owners and employees, while constraining others such as arm's length investors (Geng, Yoshikawa and Colpan, 2016). Such empowered stakeholders are concerned about long-term relationships, in an environment where firms develop and implement strategies based on long-term goals (Desender et al., 2016). Indeed, domestic institutional investors, also referred to as relational owners, tend to value long-term growth and maximize mostly market share, objectives that provide greater benefits to key stakeholders. This is in stark contrast to the U.S. corporate governance logic that emphasizes short-term profitability or higher share price to provide benefits to return-oriented investors.

Indeed, the corporate governance model of the U.S. is categorically about shareholder supremacy (Fama and Jensen, 1983), a governance logic of that is ideologically rooted in agency theory (Jensen and Meckling, 1976).

While the governance structures and ownership of firms in the Anglo-American model of corporate governance may typically permit internal determination of structures, processes and strategic direction (Cuervo and Villalonga, 2000), however, these firms are subject to the boundaries of an underlying market-oriented logic, tied to the central purpose of the firm's existence. While details may be idiosyncratic to each firm, however, corporate governance mechanisms, such as CEO incentives and pay packages, and governance structures, such as the use of the committee system, are largely organized so as to achieve the overriding goal. Similarly, organizational norms and values as well as external formal institutions, such as capital markets and regulatory bodies, will often develop in ways that reinforce this core objective of shareholder-value maximization. Here, the CFO and other executives are a collective agency whose behavior and decisions should always be about optimizing shareholder value (Jensen and Meckling, 1976)

In the context of this study, dominant logics from both the shareholder-value, residing in the original conception and source of the CFO role, and from the stakeholder-oriented approach, residing in the institutional context to which the CFO idea is transplanted, are bound to clash (Ahmadjian and Robbins, 2005; Desender et al, 2016). Drawing on extant literature on institutional logics and their effect on corporate decisions, one of the two central arguments in this study is that CFOs are more likely to implement their duties in a manner that is congruent with the true nature of the role when the aims and assumptions of the role are congruent with the institutional logic of the organizational field. Moreover, their presence in the firm is likely to be determined by whether the firm, as an organization, has the characteristics that are accepting of an alternative governance logic.

In the following sections, in the context of Japanese firms, we discuss the conditions under which CFO presence in Japanese firms is possible and their subsequent effects on both accounting-based and market-based performance.

Explaining the Presence of the CFO in Japanese Firms

The role of ownership structure

We argue that the coexistence and contestation of alternative institutional logics in corporate governance is well demonstrated in the context of Japanese firms through ownership structure (Yoshikawa et al, 2005), board governance (xxx) and global pressures (xxx). As discussed above, for example, the majority of domestic institutional owners, including and mainly banks, follow the stakeholder logic that protects the interests of stakeholders (e.g., employees and business partners), whereas foreign institutional investors are proponents of the shareholder logic that prioritizes the interest of shareholders (Ahmadjian and Robbins, 2005).

We provide argumentation on the effects of corporate ownership, board governance and global pressures on the presence of CFOs, developing our hypotheses in the process.

Ownership Structure

Foreign ownership

Scholars believe that in today's globalized world, foreign capital has had some influence even in some governance systems that are famous for resisting alternative models (Ahmadjian and Robbins, 2005). Indeed, with their growing investments abroad, foreign institutional investors, mostly from the US and the UK (Geng et al, 2016), have become important actors in stakeholder systems. For example, Ahmadjian and Robbins (2001) found that foreign ownership led to downsizing in Japanese firms, a decision at tangent with traditional Japanese custom of life-time employment for core employees. Chizema and Shinozawa (2012) found that firms with higher proportions of foreign ownership are more likely to adopt U.S.-style board committees. In spite of clashing governance logics in Japan, we argue that foreign ownership will be in favor of promoting an environment that is consistent with global management practices thus preferring the appointment of CFOs in Japanese firms. We, therefore, hypothesize that:

Hypothesis 1: Foreign ownership will be positively associated with the presence of the CFO.

Crossholdings

As pointed out earlier, the concept of the CFO is new in Japan and certainly not a characteristic of the *keiretsu* networks in Japan, where companies are connected through crossholdings, inter-trading, and interlocking directorships (Lincoln and Gerlach, 2004). In the past, cross-held firms have been observed to resist the adoption of shareholder-oriented practices. Against this background, a natural expectation is that cross-held firms would resist the idea of the CFO, an institution deeply seated in the shareholder-value model of corporate governance. We, therefore, conclude that:

Hypothesis 2: Cross-held firms will be negatively associated with the presence of the CFO.

Bank ownership

Japanese firms have traditionally relied heavily on bank financing, through both bank loans and shareholdings. This bank-centered nature of horizontal *keiretsu* makes such banking ties especially important, as ties through equity holdings are reinforced by other forms of ties, including lending ties, personnel exchange, and board memberships (Morck & Nakamura, 1999; Aoki, Jackson, and Miyajima, 2007; Gedajlovic and Shapiro, 2002). This means that main banks' influence on Japanese firms can be significant in more than one way. As argued earlier, these banks are at the core of the Japanese variety of corporate governance logic.

Previous studies have provided evidence for the corporate governance role of main banks in terms of personnel-related matters particularly on executive turnover as well as replacement of outside directors following significant performance decline (Kang & Shivdasani, 1997). This suggests that banks would have an interest in matters related to the presence of the CFO in Japanese firms. Given, therefore, their power and influence over companies and indeed an institutional environment that share their logic, they are likely to prefer a situation where very minimum of the foreign environment influence is tolerated. We

argue, therefore, that bank ownership will be less in favor of the appointment of CFOs in companies.

Hypothesis 3: Bank ownership will be negatively associated with the appointment of the CFO.

Controlling shareholders

Principal-principal agent theory suggest that larger shareholders exploit smaller shareholders (Chizema and Kim, 2010; Young et al., 2008). Because majority shareholders are in control, extracting rents from the current system, they would be less willing to accept a change in the status quo. They are, therefore, more likely to reject the idea of having CFOs, who might promote higher levels of transparency and financial disclosure. Indeed, fair representation and consideration of all shareholders' interests is likely to be achieved with the CFO in office, whose institutional logic is more consistent with the maximization of shareholder value and fair treatment of shareholders. Thus, minority and not majority shareholders are more likely to encourage the presence of CFOs.

Hypothesis 4: Controlling shareholders will be negatively associated with the presence of the CFO, while the opposite is expected from minority ownership.

Board governance

Independent directors

The idea of outside directors, particularly where they are independent, is consistent with the shareholder-oriented logic. In principle, independent directors promote the interests of shareholders, thus a higher proportion of independent directors would support changes that ensure the presence of CFO in firms.

Hypothesis 5: The proportion of independent directors will be positively associated with the presence of the CFO.

Average age of board directors

Older directors would prefer the status quo and are more embedded in the traditional Japanese corporate governance logic of stakeholder value, and thus would prefer that firms do not appoint US-style CFOs. On the other hand, younger directors with less emotional and experiential investment in the past successes of the Japanese model of corporate governance are more likely to be receptive to alternative forms of governance.

Hypothesis 6: The average age of board directors will be negatively associated with the presence of the CFO.

Globalization pressure

The rise of globalization and trading on international markets means that Japanese firms are internationally exposed such that they face pressures to comply with the demands of other stakeholders beyond Japan. From an institutional theory perspective, internationally exposed firms are guided by both coercive and mimetic pressures (DiMaggio and Powell, 1991) to comply with regulations from other jurisdictions, meeting foreign customers' expectations and imitating management practices from their competitors. For instance, some Japanese firms provide disclosure materials in English. Moreover, some firms that have higher proportions of foreign sales are more likely to go beyond the minimum standards of operation, embracing new practices that are likely to be seen favourably by their global customers. We argue, therefore, that firms that are already accustomed to dealing with global pressures are more likely to welcome the presence of the CFO.

Hypothesis 7(a): Firms that provide their disclosure materials in English are more likely to have the presence of the CFO.

Hypothesis 7(b): Firms with larger proportions of foreign sales are more likely to have the presence of the CFO

The Impact of the CFO on Firm Performance

Institutional logics and CFO discretion

In order to make an impact on firm outcomes, executives must have strategic leeway (Child, 1972) or discretion (Hambrick and Finkelstein, 1987). While managerial discretion has been identified at various levels (individual, organization, industry), our interest, in this study, lies in managerial discretion that exist within the framework of the dominant logic that emanates from a national corporate governance system, i.e., national level (Hall and Soskice, 2001).

Regardless of the level at which it is observed, managerial discretion is a function of two broad factors (Crossland and Hambrick, 2011). First, to have discretion, the executive must have (and be aware of) an array of alternatives that key stakeholders would view as relatively unobjectionable. If potential actions by the executive are considered to be excessively risky or radical or are a basic violation of stakeholder expectations, then managerial discretion is reduced. Second, discretion exists to the extent that stakeholders lack the power to block or nullify objectionable actions, and/or lack the power to sanction the executive for taking such actions.

We argue that this conceptualization and qualification of managerial discretion is consistent with the theorization of institutional logics and applies one of the key insights from institutional theory, that agency is institutionally embedded, to the idea of CFO discretion (Friedland and Alford 1991; Thornton and Ocasio 2008). Here, the extent to which CFOs achieve their goals is dependent on the leeway granted them by the dominant logic that exists both within and without the firm. We argue further that, taking Japan as the national context and indeed as the organizational field, the dominant logic shared by relevant actors will only sanction the CFO's action to the extent that it balances the interests of multiple stakeholders without prioritizing those of shareholders.

We admit that the argument we make here depicts CFOs not as agents with objective interests and preferences, but rather as institutionally constructed actors whose values, interests,

and practices are to a large extent determined by the institutional logics that structure the organizational fields in which they operate. But this observation is not far-fetched for an institutional environment that is highly homogeneous and that has consistently upheld its societal values for a long time.

CFO's discretion and firm performance

The second reason why the fundamental redistribution of managerial roles from which the CFO's position became only second to the CEO can be linked to the shareholder-value orientation, a view that Fligstein (1990) alludes to in his seminal study. According to Fligstein (1990), finance managers, at a time when changing antitrust legislation was limiting firms from creating value, succeeded in convincing corporate boards and investors that their management specialty held the key to corporate efficacy. Put differently, finance managers, who then rose to CFOs, sold an institutional logic of value creation to relevant stakeholders, that they would make corporations prosperous if managerial discretion was granted to them. In the U.S. the institutional logic of shareholder-value creation remains, and investors, boards, regulators and CFOs alike work on this assumption. Moreover, both formal and informal institutions are complementary in this variety of capitalism (Aguilera and Jackson, 2006).

However, in Japan the situation is different. As discussed above the institutional logic of the purpose of the firm is not to maximize shareholder value, but instead to satisfy a host of stakeholders. Thus, while CFOs may have been appointed in some Japanese firms, their emphasis on the strategic role that consequently drives firm performance might not be the same as that by their counterparts in the U.S. For instance, given that financial interests such as short-term profitability are commonly associated with shareholder-oriented logics, and not with relationship-oriented logics, CFOs in Japan are unlikely to emphasize this concern over and

above other stakeholders' concerns. There are good reasons for this. First, although Japanese firms have introduced shareholder-oriented practices, they are still embedded in an institutional setting characterized by strong stakeholder rights, cooperation between constituencies and a coordinated market economy (Capron and Guillen, 2009; Hall and Soskice, 2001). While pursuing short term profits in the U.S. is an acceptable thing to do, in the institutional setting of Japan, the same practice may be seen as illegitimate. Indeed, a practice can be viewed as illegitimate when it contradicts the dominant logic (Chung and Luo, 2008). For example, because it is typically accompanied by downsizing, divestiture has long been considered illegitimate in Japan, where an institutional logic of balancing the needs of multiple stakeholders, including providing lifetime employment for core workers, prevails (Ahmadjian and Robbins, 2005).

Second, internal stakeholders such as employees, the board and even the CEO may oppose any action by the CFO that points at the achievement of shareholder value. The dominant logic manifest in societal expectations and in the broader formal and informal institutions, rooted in the history of the national environment, is restrictive such that the CFO's discretion may be limited, with no impact on firm financial performance. This is particularly the case in the case of Japan, a context characterized with low levels of individualism (Hofstede, 2001) and managerial discretion (Crossland and Hambrick, 2011).

We therefore hypothesize that:

Hypothesis 8: The presence of the CFO will be negatively related to firm performance.

METHODOLOGY

Sample and Data

Our primary data source of individual CFOs is collected from the Nikkei NEEDS Board Member Data. As for financial data, we use the Nikkei NEEDS Corporate Governance Data

Financial and Quick Astra Manager. Our sample firms are limited to non-financial firms that were listed on the Tokyo Stock exchange from 2017 to 2021. Firms with missing variables are excluded from our sample data. Following this selection criteria, 1740 firms enter our sample, yielding 8900 firm-year observations.

Dependent variables

For the first hypothesis, on the determinants of having a CFO in the firm, we use one dependent variable, *cfodummy*, which is 1 when the company has CFO presence and 0 otherwise. For the hypotheses on the effects of the CFO on market value performance, we use two dependent variables: Tobin's Q and annualized value of daily returns. The proxy for Tobin's *q* is the ratio of the firm's market value to its book value. The firm's market value is calculated as the book value of assets minus the book value of equity plus the market value of equity. We derive annual returns by converting daily returns using the formula:

$$\text{Annual return} = [(\text{Daily return} + 1)^{365} - 1] \times 100. \quad (\text{Eq. 1})$$

We also use two measures for firm's accounting performance: return on assets (ROA) and return on equity (ROE). ROA is the net profit ratio before extraordinary items and discontinued operations to its book value of assets and ROE is the net profit ratio attributable to parent firms' owners to shareholders' equity.

Explanatory variables

For the hypotheses on CFO determinants, we use several independent variables: foreign ownership, controlling shareholder ownership, minority ownership, cross-ownership, bank ownership, proportion of independent directors, board average age, number of subsidiaries, foreign sales, and disclosure materials in English. Foreign ownership is the percentage of shareholding by foreigners. Controlling shareholder ownership is the percentage of the total shareholding by the block shareholders with more than 15% of the outstanding share in a firm.

Minority ownership in our analysis refers to the shareholding by those who own less than the number of tradable share numbers. Cross ownership is the shareholdings by other firms in the same business group to which the firm in question belongs. Bank ownership is the percentage of shareholding by a Japanese main bank in the same business group to which the firm in question belongs. Board independence is the fraction of independent directors on the board expressed as a proportion of the total board size. Board average age and number of subsidiaries are self-explanatory. Foreign sales is the percentage of overseas sales over the total sales of a firm. Disclosure material in English is a dummy variable of 1 for a firm providing disclosure materials in English to overseas investors and 0 otherwise.

Control variables

For the hypothesis on the effects of the CFO, we control for several corporate governance attributes, ownership, as well as other firm characteristics, namely, female board member ratio, firm sales size, and firm experience. Female board member ratio is the fraction of independent directors on the board expressed as a proportion of the total board size. Firm size is measured as the natural logarithm of the firm's total sales. Firm experience and year from listing are the number of years since the firm was established and years since the firm was listed on the Japan stock exchange respectively. Moreover, two financial variables, debt and cash flow management, measuring key tasks for CFOs are included as control variables for analysis (Bragg, 2010). As for debt management, leverage is defined as the proportion of total debt to total assets, whilst cash flow is the ratio of free cash flow to the total asset of a firm. To control for the outlier effects, higher/lower than the top/bottom 1% of the variables for each year are winsorized to the values corresponding to the top/bottom 1% and 99% of the variables.

Estimation Strategies

Logit regression

To study the determinants of CFO presence in firms (hypotheses 1-7), we used logistic regression analysis. In a logistic regression a binary variable indicating whether a firm has a CFO or not is regressed on several explanatory variables expected to influence the presence of the CFO. Specifically, we estimate the following logistic regression model:

$$Y_i = \beta_1 + \beta_2 X_i + \beta_3 X_i + \dots \beta_n X_n + \mu_i \quad (\text{Eq. 2})$$

where Y_i , CFO presence is an indicator variable taking the value 1 if the firm employs a CFO and 0 otherwise. For logit regression, the dummy variable is the logarithm of the odd that a firm has a CFO or not. X_i are the explanatory and control variables in the preceding section. As our data contains firms with clustering on 29 industry categories, our logit regression models use cluster-robust standard errors for controlling the industry sector effect.

System GMM

We then test hypothesis 8 using system GMM. Our empirical specification is follows:

$$y_{i,t} = \alpha y_{i,t-1} + \beta x'_{i,t} + \mu_i + \varepsilon_{i,t} \quad (\text{Eq. 3})$$

In this expression, $y_{i,t}$ is firm performance for firm i in period t , $x'_{i,t}$ represents a vector of variables influencing firm performance, μ_i represents the unobservable firm-specific effect, and $\varepsilon_{i,t}$ is the error term. Based on this econometric model, we test our hypotheses employing system GMM, a tool that mitigates the endogeneity problem with explanatory variables (Arellano & Bond, 1991). System GMM is also able to correct unobserved country heterogeneous problems, omitted variable bias and measurement error.

RESULTS

Table 1 provides descriptive statistics for the independent variable (CFO dummy), independent and control variables. Table 1 also splits the sample into two distinctive statuses, firms with CFO and firms without CFO. Table 2 shows the distribution of presence of CFO

among the sample firms by each sample year together with means of each performance variable.

Table 2 also contains subsections for with and without CFOs in similar fashion to Table 1.

Table 1 about here

A quick inspection on Table 2 reveals two noteworthy features. First, the presence of CFOs is not common to firms in Japan, accounting for only 1 out of 10 firms even in recent years. Second, firms with CFOs appear to perform better than firms without CFOs across the performance measures, except for annual total share return. The volatility of the share return of firms with CFOs is much higher than those of firms without CFOs. The observation indicates that the nature of business that firms with CFOs engage in may be riskier than that of firms without CFOs. Hence, the presence of CFOs can be attributable to the nature of risk that the firm faces in that CFOs are expected to manage the firm risk.

Tables 2 and 3 about here

Table 3 presents the t-test results for comparing four performance variables between the firms with and without CFOs. The results indicate that on average, firms with CFOs outperform those without CFOs. Table 4 provides the correlation matrix, showing all of the variables are not highly correlated.

Table 4 about here

Table 5 presents the results of the logit regression analysis. The first five models are annual cross-sectional logit regression for each sample year from 2017 to 2021. The last model is the five-year pooled logit model with the four-year dummy variables. Each regression result in Table 5 contains three columns for the variable outcomes: coefficient, odd ratio and margins. Our main interpretation for the results is centered on the third column of margins to understand

the magnitude of change. Note that the range of change for the variables remains almost constant for firm i over the five years, the results of the annual cross-sectional logit models are consistent with those of the pooled logit model. The common findings across the models are that foreign ownership is not statistically significant to the presence of CFOs.

The result fails to support the first hypothesis. The second hypothesis is supported in that cross-holding ownership is negatively and significantly related to the presence of CFOs in year regressions as well as in the pooled model. The five-year pooled model shows the margin effect of the crossholding on the presence of CFOs is -0.003, suggesting that with an increase of one per cent in the cross-shareholding of a firm, the probability of having a CFO decreases 0.3 percentage points. The third hypothesis that predicts the negative effect of main bank shareholding on the presence of the CFO is supported. Across the models, the coefficient and odd ratio are negative and statistically significant at the 1, 5 and 10% levels. The interpretation is that with an increase of one per cent of a main bank's shareholding, the probability of the firm having a CFO decreases 1.2 percentage points.

Table 5 about here

The fourth hypothesis on controlling and minority shareholders is not supported, given the statistically insignificant coefficients across the models. The coefficient for the independent director ratio is positive and statistically significant, showing in the pooled model, for example, ($\beta=0.023$, $p<0.01$). The margin result from the pooled model indicates that with an increase of one per cent in the independent director ratio of a firm, the probability of having a CFO increases by 0.2 percentage points.

Our results also show that the age of board directors matters for the presence of CFOs as the coefficient of the variable is negatively related to the dependent variable at the statistically significant level of 5%. The interpretation from the pooled model is that with an

increase of one year of the board average age of a firm, the probability of having a CFO decreases by 0.5 percentage points.

Both hypothesis 7a and 7b are supported as the coefficient of the dummy variable on the availability of disclosure materials in English and that of foreign sales are both positive and statistically significant at the 1% level. The margin of the former exceeds 0.05 across the model. This means that with disclosure materials in English that a firm provides, the probability of having a CFO increases by at least 5 percentage points.

Table 6 about here

As for the eighth hypothesis on performance, the GMM results in Table 6 show that the presence of the CFOs has a positive impact on Tobin's Q and annual share return but no effect on ROA and ROE. Given the fact that the two performance variables, Tobin's Q and annual share return, are market-based measures whilst the other two performance variables, ROA and ROE, are based on accounting financial ratios, we can argue that the presence of CFOs are highly perceived by market participants. On the other hand, however, the presence of CFOs hardly contributes to improve the state of the firm's business.

DISCUSSION

This study sought to understand the effect of the CFO in Japanese firms. As pointed out earlier, the concept of the CFO started in the U.S. and its entry in Japan is a recent phenomenon that has been adopted by some firms. While in the U.S. the dominant logic is that of shareholder-value maximization, in Japan the focus is on the balancing of the interests of multiple stakeholders. Understanding the role of the CFO in the contexts of the U.S. and Japan is, therefore, based on different assumptions about how organizations and individuals behave. For the U.S. a natural theoretical lens to understand the behaviour of individuals and firms is agency

theory that emphasizes intrinsic interests and agency costs as the driving forces behind strategic decision making (Jensen and Meckling 1976). In Japan, a stakeholder approach is necessary to understand the attitude of individuals and organisations as they make decisions that affect multiple stakeholders.

In this study, because of the two contrasting governance logics, brought about by the introduction of a shareholder-oriented practice in stakeholder-oriented space, we employed a neo-institutional approach that holds that both the goal and the means to achieve the goal are shaped by the dominant institutional logics in society (Thornton and Ocasio, 2008), seen as collectively constructed assumptions, values, beliefs, formal and informal rules, and practices.

Thus, drawing on the perspective of institutional logics, we set to test several hypotheses in order to establish the characteristics of firms that have CFOs. We went further to test whether the presence of the CFO in Japanese companies translates to better firm performance. Consistent with the institutional logic of Japanese corporate governance, our results on the factors that explain the presence of the CFO confirm most of our hypotheses. Specifically, our findings reveal that a firm that has more independent and younger directors on the board, that discloses its materials in English and sells more abroad and relies less on cross-shareholding and main bank shareholding tends to have CFO presence.

Our findings on the effect of the CFO on firm performance show no impact on accounting-based performance but a positive impact on market-based performance. This means that CFOs in Japanese firms may not be necessarily effective, but the market views them favorably.

For instance, the negative and significant coefficients on the impact of cross shareholdings and bank ownership on firm performance underscores the fact that, despite the so-called reforms, continuity of the old institutional logic and not change is the current state of

Japanese corporate governance. Furthermore, our study extends the institutional logics argument by investigating organizational responses to conflicting institutional logics.

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Table 1: Descriptive Statistics

Variables	All Sample	Mean	SD	Max	Min	Without CFO	Mean	SD	With CFO	Mean	SD
CFO Presence (Dummy)	8900	0.106	0.308	1	0	7957	0	0	943	1	0
Foreign Shareholders (%)	8900	0.066	0.643	16.9	0	7957	0.063	0.656	943	0.093	0.523
Cross Shareholding (%)	8900	8.369	9.614	60.4	0	7957	8.843	9.779	943	4.367	6.897
Main Bank Shareholding (%)	8900	1.589	1.736	13.1	0	7957	1.676	1.760	943	0.852	1.297
Controlling/Block Shareholders (%)	8900	11.337	17.441	89.4	0	7957	11.290	17.221	943	11.736	19.209
Minority Shareholdings (%)	8900	13.509	10.267	89	0	7957	13.826	10.396	943	10.837	8.659
Independent Director Ratio (%)	8900	30.333	11.702	88.9	0	7957	29.623	11.270	943	36.330	13.443
Female Director Ratio (%)	8900	5.788	7.009	60	0	7957	5.491	6.803	943	8.290	8.134
Average Board Members Age	8900	60.995	4.563	80	0	7957	61.113	4.408	943	60.001	5.613
Presentation in English	8900	0.220	0.415	1	0	7957	0.184	0.388	943	0.524	0.500
Foreign Sales (%)	8900	19.172	26.031	100	0	7957	17.807	25.172	943	30.692	30.021
Years from listing	8900	37.034	22.478	72	0	7957	37.372	22.196	943	34.185	24.553
Total Sales (Yen million)	8900	375,594	1,252,333	30,000,000	587	7957	309,362	1,108,977	943	934,460	2,019,720
Market Capitalization (Yen Million)	8900	298,488	998,603	28,000,000	2056	7957	249,937	905,812	943	708,158	1,517,510
Firm Age for Experience	8900	59.835	27.622	140	1	7957	60.720	27.108	943	52.369	30.637
Number of Subsidiaries	8900	34.174	86.028	1556	0	7957	27.838	60.354	943	87.643	189.605
Leverage (%)	8900	45.271	18.376	89.5	8.7	7957	44.503	18.316	943	51.754	17.595
Cash Flow (%)	8900	-0.133	6.022	21.2031	- 26.356	7957	-0.214	5.879	943	0.544	7.082

Table2 Distribution of CFOs (Panel A) and means of performance variables for each sample year (Panel B).

Panel A

Year	2017	2018	2019	2020	2021	Total
Total Sample	1,780	1,780	1,780	1,780	1,780	8,900
Without CFO	1,604	1,596	1,610	1,585	1,562	7,957
With CFO	176	184	170	195	218	943

Panel B

ROE (total sample)	9.458	10.046	8.828	6.482	4.907	7.944
Without CFO	9.405	9.762	8.623	6.509	4.888	7.855
With CFO	9.946	12.504	10.774	6.268	5.047	8.701
ROA (total sample)	7.535	7.809	7.419	6.185	5.390	6.868
Without CFO	7.466	7.695	7.295	6.185	5.350	6.807
With CFO	8.167	8.802	8.586	6.186	5.675	7.381
Tobin's Q (total sample)	1.392	1.531	1.381	1.287	1.433	1.405
Without CFO	1.352	1.476	1.338	1.252	1.378	1.359
With CFO	1.755	2.007	1.787	1.573	1.821	1.788
Annual Share Return (total sample)	36.335	47.041	-12.660	-4.058	50.035	23.339
Without CFO	36.647	45.412	-13.147	-3.636	48.322	22.597
With CFO	33.500	61.179	-8.048	-7.486	62.313	29.596

Table 3.Comparison of performance variables between firms with and without CFOs.

5 year-Performance	Without CFO	With CFO	T statics Difference
Average ROE(%)	7.855	8.701	-2.372
Average ROA (%)	6.807	7.381	-2.66
Average Tobin's Q	1.359	1.788	-11.439
Average Share Return(%)	22.60	29.60	-3.193

Table 4: Correlations (**bold** indicates the 5% statistically significant level)

		1	2	3	4	5	6	7	8	9	10	11
1	CFO Presence (Dummy)	1										
2	ROE	0.025	1									
3	ROA	0.028	0.783	1								
4	Tobin's Q	0.12	0.355	0.606	1							
5	Annual Total Share Return (%)	0.034	0.249	0.228	0.281	1						
6	Foreign Shareholders (%)	0.014	-0.002	0.008	0.036	0	1					
7	Cross Shareholding (%)	-0.143	-0.123	-0.203	-0.277	-0.039	-0.058	1				
8	Main Bank Shareholding (%)	-0.146	-0.102	-0.173	-0.245	-0.008	-0.059	0.505	1			
9	Controlling/Block Shareholders (%)	0.008	0.04	0.062	0.043	0.018	-0.019	-0.271	-0.239	1		
10	Minority Shareholdings (%)	-0.09	-0.196	-0.231	-0.109	-0.064	0.001	-0.024	0.082	-0.096	1	
11	Independent Director Ratio (%)	0.176	-0.027	0.004	0.1	0.03	0.02	-0.122	-0.103	-0.132	-0.065	1
12	Female Director Ratio (%)	0.123	-0.002	0.031	0.115	0.003	0.002	-0.13	-0.132	-0.019	-0.066	0.276
13	Average Board Members Age	-0.075	-0.135	-0.233	-0.323	-0.066	-0.036	0.28	0.237	-0.134	-0.092	0.048
14	Presentation in English	0.252	0.079	0.05	0.094	0.02	0.044	-0.126	-0.166	-0.073	-0.215	0.211
15	Foreign Sales (%)	0.152	-0.046	-0.039	-0.065	0.046	0.04	0.076	0.077	-0.126	-0.169	0.168
16	Years from listing	-0.044	-0.149	-0.278	-0.32	-0.06	-0.067	0.482	0.301	-0.174	0.013	-0.005
17	Total Sales (Yen million)	0.154	0.029	-0.059	-0.061	-0.014	-0.019	-0.019	-0.081	-0.086	-0.138	0.123
18	Market Capitalization (Yen Million)	0.141	0.096	0.073	0.115	0.055	-0.013	-0.041	-0.102	-0.075	-0.19	0.128
19	Firm Age for Experience	-0.093	-0.159	-0.272	-0.339	-0.059	-0.068	0.475	0.314	-0.169	0.004	-0.023
20	Number of Subsidiaries	0.214	0.023	-0.068	-0.056	0.009	-0.019	-0.019	-0.081	-0.109	-0.153	0.16
21	Leverage (%)	0.121	-0.104	-0.355	-0.194	-0.019	0.011	-0.013	-0.027	-0.013	0.162	-0.014
22	Cash Flow (%)	0.039	0.481	0.577	0.333	0.176	-0.022	-0.081	-0.073	0.041	-0.183	0.037

Table 3 (cont): Correlations (**Bold** indicates the 5% statistically significant level)

		12	13	14	15	16	17	18	19	20	21	22
12	Female Director Ratio (%)	1										
13	Average Board Members Age	-0.096	1									
14	Presentation in English	0.204	0.058	1								
15	Foreign Sales (%)	-0.009	0.226	0.241	1							
16	Years from listing	-0.077	0.414	0.047	0.264	1						
17	Total Sales (Yen million)	0.143	0.141	0.324	0.172	0.16	1					
18	Market Capitalization (Yen Million)	0.143	0.117	0.324	0.222	0.122	0.751	1				
19	Firm Age for Experience	-0.063	0.413	-0.034	0.253	0.813	0.085	0.06	1			
20	Number of Subsidiaries	0.148	0.148	0.356	0.228	0.2	0.679	0.607	0.146	1		
21	Leverage (%)	0.016	0.033	0.108	-0.065	0.115	0.186	0.031	0.036	0.195	1	
22	Cash Flow (%)	0.043	-0.069	0.07	0.077	-0.077	0.008	0.08	-0.073	-0.001	-0.174	1

Table 4: Logistic Regression

Variables	Year 2017			Year 2018			Year 2019		
	Coefficient	Odd Ratio	Margins	Coefficient	Odd Ratio	Margins	Coefficient	Odd Ratio	Margins
Foreign Shareholders (%)	-0.055	0.947	-0.004	0.03	1.031	0.002	-0.083	0.92	-0.006
	(-0.051)	(-0.048)	(-0.004)	(-0.069)	(-0.071)	(-0.005)	(-0.952)	(-0.081)	(-0.006)
Cross Shareholding (%)	-0.026***	0.975***	-0.002***	-0.032**	0.969**	-0.002**	-0.045***	0.956***	-0.003***
	(-0.010)	(-0.010)	(-0.001)	(-0.013)	(-0.013)	(-0.001)	(-3.267)	(-0.013)	(-0.001)
Main Bank Shareholding (%)	-0.196***	0.822***	-0.014***	-0.185***	0.831***	-0.014***	-0.131**	0.877**	-0.010**
	(-0.058)	(-0.048)	(-0.004)	(-0.058)	(-0.048)	(-0.005)	(-2.056)	(-0.056)	(-0.005)
Controlling/Block Shareholders (%)	0.004	1.004	0	0.001	1.001	0	0.001	1.001	0
	(-0.004)	(-0.004)	(0.000)	(-0.005)	(-0.005)	(0.000)	(-0.144)	(-0.004)	(0.000)
Minority Shareholdings (%)	-0.013	0.987	-0.001	-0.018	0.983	-0.001	-0.017*	0.983*	-0.001*
	(-0.010)	(-0.010)	(-0.001)	(-0.012)	(-0.012)	(-0.001)	(-1.765)	(-0.009)	(-0.001)
Independent Director Ratio (%)	0.028***	1.028***	0.002***	0.023***	1.023***	0.002***	0.019**	1.020**	0.001**
	(-0.009)	(-0.009)	(-0.001)	(-0.008)	(-0.008)	(-0.001)	(-2.257)	(-0.009)	(-0.001)
Female Director Ratio (%)	0.016**	1.017**	0.001**	0.023**	1.023**	0.002**	0.025*	1.025*	0.002*
	(-0.008)	(-0.008)	(-0.001)	(-0.011)	(-0.011)	(-0.001)	(-1.823)	(-0.014)	(-0.001)
Average Board Members Age	-0.046**	0.955**	-0.003**	-0.043**	0.958**	-0.003**	-0.050**	0.951**	-0.004**
	(-0.020)	(-0.019)	(-0.001)	(-0.018)	(-0.017)	(-0.001)	(-2.537)	(-0.019)	(-0.001)
Presentation in English	0.783***	2.187***	0.058***	0.708***	2.031***	0.055***	0.759***	2.137***	0.055***
	(-0.190)	(-0.417)	(-0.016)	(-0.191)	(-0.389)	(-0.016)	(-4.067)	(-0.399)	(-0.016)
Foreign Sales (%)	0.015***	1.015***	0.001***	0.016***	1.016***	0.001***	0.016***	1.016***	0.001***
	(-0.004)	(-0.004)	(0.000)	(-0.004)	(-0.004)	(0.000)	(-4.062)	(-0.004)	(0.000)
Total Sales (Yen million)	-0.199**	0.820**	-0.015*	-0.160**	0.852**	-0.012**	-0.071	0.932	-0.005
	(-0.098)	(-0.080)	(-0.008)	(-0.070)	(-0.060)	(-0.006)	(-0.745)	(-0.088)	(-0.007)
Number of Subsidiaries	0.422***	1.525***	0.031***	0.335***	1.399***	0.026***	0.203**	1.224**	0.015**
	(-0.104)	(-0.159)	(-0.008)	(-0.130)	(-0.182)	(-0.010)	(-2.123)	(-0.117)	(-0.007)
Firm Age for Experience	-0.275**	0.760**	-0.020**	-0.418***	0.658***	-0.032**	-0.467**	0.627**	-0.034**
	(-0.123)	(-0.093)	(-0.009)	(-0.160)	(-0.105)	(-0.014)	(-2.094)	(-0.140)	(-0.017)
Years from listing	0.004	1.004	0	0.005	1.005	0	0.008	1.008	0.001
	(-0.005)	(-0.005)	(0.000)	(-0.005)	(-0.005)	(0.000)	(-1.154)	(-0.007)	(0.000)
Leverage (%)	0.024***	1.024***	0.002***	0.023***	1.024***	0.002***	0.024***	1.024***	0.002***
	(-0.006)	(-0.006)	(0.000)	(-0.006)	(-0.006)	(0.000)	(-3.636)	(-0.007)	(0.000)
Cash Flow (%)	0.024**	1.024**	0.002**	0.025*	1.025*	0.002	0.035***	1.036***	0.003***
	(-0.012)	(-0.012)	(-0.001)	(-0.015)	(-0.015)	(-0.001)	(-2.827)	(-0.013)	(-0.001)
	3.205	24.657		3.027*	20.637*		1.548	4.704	
	(-2.049)	(-0.531)		(-1.713)	(-5.353)		(-0.605)	(-2.041)	
Observations	1,780			1780			1,780		
Pseudo R2	0.203			0.197			0.19		
Prob > chi2	0.000			0.000			0.000		

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 4 (cont): Logistic Regression

Variables	Year 2020			Year 2021			5 Year-Pooled		
	Coefficient	Odd Ratio	Margins	Coefficient	Odd Ratio	Margins	Coefficient	Odd Ratio	Margins
Foreign Shareholders (%)	-0.115 (-1.036)	0.892 (-0.099)	-0.009 (-0.009)	-0.11 (-1.121)	0.896 (-0.088)	-0.01 (-0.008)	-0.06 (-0.915)	0.942 (-0.062)	-0.005 (-0.005)
Cross Shareholding (%)	-0.028** (-2.327)	0.973** (-0.012)	-0.002** (-0.001)	-0.035*** (-3.004)	0.965*** (-0.011)	-0.003*** (-0.001)	-0.033*** (-3.568)	0.968*** (-0.009)	-0.003*** (-0.001)
Main Bank Shareholding (%)	-0.119** (-2.192)	0.888** (-0.048)	-0.010** (-0.005)	-0.098* (-1.934)	0.907* (-0.046)	-0.009* (-0.005)	-0.145*** (-3.282)	0.865*** (-0.038)	-0.012*** (-0.004)
Controlling Shareholders (%)	0.003 (-0.777)	1.003 (-0.004)	0 (0.000)	0.002 (-0.537)	1.002 (-0.004)	0 (0.000)	0.002 (-0.629)	1.002 (-0.004)	0 (0.000)
Minority Shareholdings (%)	-0.016 (-1.400)	0.984 (-0.011)	-0.001 (-0.001)	-0.01 (-0.908)	0.99 (-0.011)	-0.001 (-0.001)	-0.014 (-1.466)	0.986 (-0.010)	-0.001 (-0.001)
Independent Director Ratio (%)	0.025*** (-3.658)	1.025*** (-0.007)	0.002*** (-0.001)	0.018** (-2.217)	1.019** (-0.008)	0.002** (-0.001)	0.023*** (-3.404)	1.023*** (-0.007)	0.002*** (-0.001)
Female Director Ratio (%)	0.014 (-1.584)	1.014 (-0.009)	0.001* (-0.001)	0.008 (-0.596)	1.008 (-0.013)	0.001 (-0.001)	0.016* (-1.795)	1.016* (-0.009)	0.001* (-0.001)
Average Board Members Age	-0.069** (-2.431)	0.933** (-0.026)	-0.006*** (-0.002)	-0.079*** (-2.618)	0.924*** (-0.028)	-0.007*** (-0.002)	-0.057*** (-2.792)	0.945*** (-0.019)	-0.005*** (-0.001)
Presentation in English	0.815*** (-4.726)	2.258*** (-0.389)	0.067*** (-0.015)	0.776*** (-5.325)	2.173*** (-0.317)	0.070*** (-0.015)	0.771*** (-5.274)	2.162*** (-0.316)	0.061*** (-0.013)
Foreign Sales (%)	0.016*** (-4.506)	1.016*** (-0.004)	0.001*** (0.000)	0.014*** (-3.887)	1.014*** (-0.004)	0.001*** (0.000)	0.015*** (-4.431)	1.015*** (-0.003)	0.001*** (0.000)
Total Sales (Yen million)	-0.005 (-0.101)	0.995 (-0.053)	0 (-0.004)	0.079 (-1.130)	1.082 (-0.075)	0.007 (-0.006)	-0.062 (-1.007)	0.94 (-0.058)	-0.005 (-0.005)
Number of Subsidiaries	0.159* (-1.762)	1.172* (-0.106)	0.013* (-0.007)	0.144 (-1.435)	1.154 (-0.116)	0.013 (-0.009)	0.240*** (-2.577)	1.271*** (-0.118)	0.019*** (-0.007)
Firm Age for Experience	-0.404** (-2.103)	0.667** (-0.128)	-0.033* (-0.017)	-0.445** (-2.550)	0.641** (-0.112)	-0.040** (-0.017)	-0.379** (-2.572)	0.684** (-0.101)	-0.030** (-0.013)
Years from listing	0.002 (-0.232)	1.002 (-0.007)	0 (-0.001)	0.004 (-0.610)	1.004 (-0.007)	0 (-0.001)	0.004 (-0.741)	1.004 (-0.005)	0 (0.000)
Leverage (%)	0.017*** (-2.611)	1.017*** (-0.007)	0.001*** (0.000)	0.017*** (-2.898)	1.017*** (-0.006)	0.002*** (0.000)	0.021*** (-3.597)	1.021*** (-0.006)	0.002*** (0.000)
Cash Flow (%)	-0.017 (-1.577)	0.983 (-0.011)	-0.001* (-0.001)	-0.003 (-0.382)	0.997 (-0.009)	0 (-0.001)	0.009 (-1.315)	1.009 (-0.007)	0.001 (-0.001)
	1.312 (-0.758)	3.715 (-6.433)		0.251 (-0.125)	1.285 (-2.591)		1.656 (-1.009)	5.237 (-8.595)	
Observations	1780			1,780			8,900		
Pseudo R2	0.186			0.178			0.187		
Prob > chi2	0.000			0.000			0.000		

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 6: System GMM results of CFO's impact on firm performance

Dependent Variable (DV)	Accounting performance		Market performance	
	ROE	ROA	Tobin's Q	Annual returns
DV (t-1)	0.459*** (0.088)	0.809*** (0.069)	0.343*** (0.058)	0.059*** (0.020)
CFO presence	-1.359 (1.454)	0.369 (0.635)	0.169** (0.088)	16.048* (8.933)
Foreign ownership	0.117 (0.339)	0.147 (0.129)	-0.005 (0.019)	-0.088 (3.133)
Crossholdings	0.076 (0.091)	-0.045 (0.032)	0.004 (0.004)	1.122* (0.592)
Bank ownership	-0.023 (0.130)	0.078 (0.053)	0.018*** (0.007)	9.705*** (1.135)
Dominant shareholder	0.036 (0.049)	0.02 (0.022)	-0.001 (0.003)	0.227 (0.341)
Independent directors	0.013 (0.027)	0.017 (0.013)	0.001 (0.002)	0.281 (0.206)
Female directors	-0.028 (0.049)	0.024 (0.022)	0.004 (0.003)	-0.262 (0.363)
Board age	0.054 (0.126)	-0.017 (0.040)	-0.002 (0.005)	-0.523 (0.652)
AGM in English	-0.746 (1.893)	0.206 (0.864)	0.039 (0.133)	5.487 (15.700)
Years since listed	-1.315* (0.768)	-0.467*** (0.082)	-0.009 (0.012)	6.898*** (1.056)
Foreign sales	-0.052 (0.074)	0.032 (0.029)	-0.006* (0.003)	-0.04 (0.254)
Logfirmage	-6.814 (4.349)	-3.083 (1.940)	-0.537** (0.239)	-107.845*** (31.182)
Logtotalsales	21.165 (2.152)	8.592*** (1.020)	-0.285** (0.128)	-37.782*** (7.847)
Logsubsidiaries	-4.947*** (1.454)	-1.693*** (0.620)	-0.173** (0.080)	-3.822 (8.634)
Minority ownership	0.018 (0.040)	-0.041** (0.019)	-0.006*** (0.002)	-1.396*** (0.327)
Year dummies	Yes	Yes	Yes	Yes
Constant	-445.369*** (54.072)	-181.848 (24.746)	11.234*** (3.309)	1164.109*** (221.982)
Wald chi2(16) =	575.07***	585.32***	111.400***	184.04***
N	1780	1780	1780	1780
Observations	7120	7120	7120	7120