WINPEC Working Paper Series No.E2218
March 2023

COVID-19: Firm Value and Pre-Existing Corporate Governance Regulations

Masanori Orihara

Waseda INstitute of Political EConomy
Waseda University
Tokyo, Japan

COVID-19: Firm Value and Pre-Existing Corporate Governance Regulations

Masanori Orihara*

March, 2023

Abstract

We find that compliance to corporate governance regulations shields firm value in the COVID-19 era. We consider the Japanese corporate governance code introduced just four years before its outbreak as a suitable setting. The code recommends, not mandates, that firms appoint at least two outside directors. Stock markets appreciated immediate minimal compliers, firms that had minimally met the recommendation right after its introduction and maintained minimal compliance afterwards, relative to others from December 2019 to November 2020. Over-compliers did not differ from others, which implies that strong governance as such does not contribute to firm value in crises. The positive valuation was clustered among domestic non-manufacturers: a sector directly damaged by the reduced mobility due to COVID-19. The findings are consistent with reputational bonding and governance theories that predict bonding to better governance has more weight in crises than in normal times.

Keywords: Outside Director, Firm Value, Bonding Hypothesis, COVID-19, Regulation, Japan
JEL classification: G31, G32, G38

* I am grateful to Dhammika Dharmapala, Masazumi Hattori, Masaru Konishi, Masao Kumamoto, Jiri Novak, Yoshiaki Ogura, Takeshi Osada, Amedeo Pugliese, Noriyoshi Yanase, Yukihiro Yasuda, Antonio De Vito, and the seminar participants at Hitotsubashi University and the 4th Bolzano-Padova Accounting Summer Camp for valuable comments. I gratefully acknowledge the financial support from the Japan Society for the Promotion of Science (KAKENHI-18K12819; 22K13426).

"*Interestingly, although reputation building is an obvious way to establish investor protection, this type of strategy has been somewhat under-emphasized in the corporate governance literature.*" – Marco Becht, Patrick Bolton, and Alisa Röell (2003)

1. Introduction

Compliance to voluntary corporate governance regulations can function as reputational bonding: i.e., commitments to better governance to establish and maintain reputation (Siegel 2005). A drawback compared to legal bonding via compliance to mandatory ones (Coffee 1999; Stulz 1999) is that firms can change their mind at any time without legal penalties. Even worse, markets may anticipate a deviation when governance is crucial, in crises such as a financial meltdown or the COVID-19 pandemic. These crises could aggravate managerial inclinations to seek private benefits due to higher information asymmetries between shareholders and managers, as well as fewer investment opportunities (Johnson et al. 2000; Mitton 2002). The research to date, however, has paid little attention to reputation building in governance.

COVID-19 provides Japan with an unprecedented opportunity. Reputation building is likely to be a Japanese firm's motive in governance choices, as Chattopadhyay et al. (2020) find that they are partly governed "through shame and aspiration". Moreover, former prime minister Shinzo Abe took the lead to introduce a governance mechanism which is functional as reputational bonding, the corporate governance code, whose compliance is voluntary. Japanese firms therefore entered the COVID-19 era only four years after its introduction. Four years should be sufficient to determine whether, when, and how firms responded to the code, as no new governance regulations or economic shocks occurred during this time. Furthermore, Abe unexpectedly resigned due to a health problem in September 2020, a few months before the outbreak of COVID-19. His departure could have caused market concerns regarding a reversal of improved governance practices induced by the code.

Reputational bonding is challenging to study since the motives are unobservable directly. We infer such motives based on observable attributes via the meticulous definition of compliance. The code recommends firms listed in the first and second sections of the Tokyo Stock Exchange (hereafter, T12), which make up 73.9% of Japanese listed firms in our sample, to appoint at least two outside directors. It applies a comply-or-explain framework; firms must comply to the recommendations or explain their non-compliance. A straightforward definition of compliance is having two or more outside directors. Some of these compliers, however, might have appointed them with or without the code. Having three or more outside directors is excessive compared to merely bonding with the code.

We introduce the notion of immediate minimal compliers to capture bonding motives. They are defined as firms that i) had not had two outside directors prior to the code, ii) had two outside directors in immediate response to the code, and iii) did not change the number up to

the outbreak of COVID-19. We argue that they are likely to have altered and maintained their board structures based on the code. 13.4% of our sample firms satisfy this definition.

We hypothesize that immediate minimal compilers lost less firm value from COVID-19 than others due to reputational bonding. Markets would value their adherence to the code, both in terms of immediateness and steadfastness, as a sign of firms' willingness to maintain their governance practices when they are crucial, e.g., in crises with the historic uncertainties of COVID-19 (Altig et al. 2020). Our argument is in line with Siegel (2005), who finds that reputational, not legal, bonding is valuable in economic downturns. Moreover, past crises witnessed the role of reputation (Campello et al. 2010) and trust as social capital (Lins et al. 2017). This evidence supports our hypothesis that reputational bonding should be critical, especially in crises.

Our bonding hypothesis, however, could be disputed. Immediate minimal compliance may be a manifestation of symbolic compliance; i.e., a compromise both to meet the policy's goal and to minimize diversions from managers' preferred board structures. In fact, Luo and Salterio (2014) find that non-compliance to the Canadian governance code increased firm value, since investors value firms' tailoring themselves to their own situation. Moreover, governance regulations are not straightforward to justify. As a legal principle, shareholders are supposed to appoint directors to maximize firm value. From this theory, regulations mandating or recommending the involvement of outside directors can divert firms from their own equilibrium board structures and hurt firm value. The corporate finance and governance literature has long pointed out that CEOs influence the selection process to choose management-friendly directors (e.g., Hermalin and Weisbach 1988). This view, in contrast, implies that regulations to increase board independence enhance firm value. Whether compliance to governance regulations serves as reputational bonding is an empirical issue.

We use a difference-in-differences framework. Outcome variables are yearly changes in monthly firm value from pre- to in-COVID-19 times. Given the first COVID-19 case was found in December 2019, these changes of our investigation are from December 2018 to 2019, January 2019 to 2020, February 2019 to 2020, …, and November 2019 to 2020. Stock prices are evaluated at the end of each month. Monthly level variables can test whether changes in firm value lasted for many months or reversed after only a few months. The treatment and control groups respectively consist of immediate minimal compliers and others in the base estimation.

We find that immediate minimal compliers lost less firm value than others during COVID-19. This finding goes against the criticism that adhering to regulations is a mastication of symbolic compliance; rather, it demonstrates that policy followers are valuable in the COVID-19 era. We observe positive effects in all months only among T12 firms. This finding also supports the bonding hypothesis because bonding can function only among the targets of the recommendation. None of the control variables from the governance literature with

international data (Fauver et al. 2017 and Ding et al. 2021) exhibit such persistent effects on firm value. This finding demonstrates a distinctive role for minimal compliance.

We separately test the "immediate", "minimal", and "during COVID-19" parts. Replacing the immediate minimal compliance dummy with a minimal compliance one yields insignificant estimates. By including both, the estimates are positive and significant only on the former. Moreover, non-minimal compliers, such as over-compliers with over two outside directors or gradual minimal compliers with two outside directors prior to the outbreak, but not immediately, did not differ in firm value relative to others. Furthermore, placebo tests show that immediate minimal compliers did not drive a change in firm value.

Additional tests strengthen our assertion that compliance to the code, not other factors, determine the findings. First, board independence did not affect firm value. It implies that the value of outside directors' dual roles of monitoring and advising (Adams et al. 2010; Adams 2017) does not change in crises. This finding is not consistent with governance theories which claim the value of outside directors increases in crises and is consistent with the empirical findings of Ding et al. (2021) during COVID-19. Second, director characteristics, such as being a CEO, female, or a banker, did not affect firm value either. This finding rules out the possibility that immediate compliers could appoint directors with better skills, such as CEOs, to enhance firm value.

A further investigation based on an industry-level variation connects our study more directly to COVID-19. The positive valuation of immediate minimal compliers is clustered among non-manufacturers. In particular, it is clearer and stronger among domestic non-manufacturers. The stock market therefore witnesses that the bonding mechanism shielded firm value among those most affected by the reduced mobility due to COVID-19, such as retail firms.

Our study contributes to several strands of the literature and policy discussions. Reputation building in governance is understudied despite its importance, as stated in the quotation at the beginning. The bonding literature is an exception. Although cross-listing is the most common topic (Doidge 2004; Gozzi, Levine, and Schmukler 2008; King and Segal 2009; Lel and Miller 2008; Siegel 2005), it has a wide range of applications.[2] Our paper broadens the scope to voluntary governance regulations, implemented in many countries (Cuomo et al. 2016 for a survey). Our findings have broad implications outside Japan.

[2] Applications include cross-border acquisitions (Bris and Cabolis 2008; Chari et al. 2010; Karolyi and Taboada 2015; Rossi and Volpin 2004), executive compensation (Eaton and Rosen 1983; Géczy et al. 2007), underwriting (Booth and Smith II 1986; Benveniste et al. 1996), capital structure (Li and Li 1996), equity ownership (Fee et al. 2006), venture capital (Megginson and Weiss 1991), bank-firm relationships (Datta et al. 1999), cryptocurrencies (Howell et al. 2020), and security analysts (Altınkılıç et al. 2019).

Most studies on governance regulations have examined only their short-term consequences, such as a change in firm value around their introduction.[3] Long-run consequences warrant investigation since governance regulations are irreversible in general. As many as 91 countries issued national corporate governance codes, whose common recommendation was board independence (Zattoni and Cuomo 2010), between 1992 and 2014, with as many as 254 amendments (Cuomo et al. 2016). Their discontinuance, in contrast, is seldom, if ever, reported. The permanent nature of regulations is also consistent with the objective of corporate governance as stated in the preface of the G20/OECD Principles of Corporate Governance of 2015: "fostering long-term investment, financial stability and business integrity".

Our long-term horizon can provide a more direct policy evaluation relative to the literature. We rely on ex-post code-introduction variations in board structures, which reflect firms' actual decisions. This is distinctive relative to common quasi-experimental frameworks where pre-regulation firm attributes divide firms into treatment and control groups. For example, Black and Kim (2012) exploit a governance reform in Korea that mandated a majority of outside directors for large firms only. Their treatment group consists of large firms. Although this framework is suitable to identify short-term effects of the regulation on firm value, it cannot examine whether the change in the board structures of treated firms induced by the regulation affects firm value in the long-run against a sudden shock.

Some studies have a long-term horizon like ours, with several key differences. Their main focus is on board structures of financial institutions, not industrial firms, in financial crises to examine whether governance of financial institutions triggered the crisis (Adams 2012; Beltratti and Stulz 2012; Beuselinck et al. 2017; van Essen et al. 2013; Erkens et al. 2012; Gupta et al. 2013; Minton et al. 2014; Vallascas et al. 2017).[4] Moreover, COVID-19 provides a clearer setting than financial crises. It is a purely exogenous shock for governance; managerial responses to pre-existing regulations could not reflect the possibility of its outbreak. The origin of financial crises, in contrast, are often attributable to failures in governance: i.e., COVID-19 is exogenous to governance, while financial crises are endogenous (Ramelli and Wagner 2020; Zattoni and Pugliese 2021). We do not expect a corrective governance regulation to emerge

[3] Regulations include the Sarbanes-Oxley Act in the US (Balsmeier et al. 2017; Banerjee et al. 2015; Chhaochharia and Grinstein 2007; Linck et al. 2009), the corporate governance code in the UK (Dahya et al. 2002; Dahya and McConnell 2007), and codes in various countries or those issued by international organizations (Cuomo et al. 2016 for a survey). A governance reform database constructed by Kim and Lu (2013) documents both voluntary and mandatory regulations in 26 countries.

[4] A notable exception that addresses long-term consequences of regulations is Aggarwal et al. (2019). They find that firms affected by regulations decrease a value gap with control firms, while regulations did not eliminate this gap. They, however, do not make a distinction between crisis and non-crisis periods. Francis et al. (2012) address non-financial firms' board structures in the global financial crisis. They do not find that board independence affected firm value, while they find that strong independence, which consists of outside directors who were not elected by the current CEO and were thus more likely to be highly independent, increased stock prices.

and can focus on pre-pandemic governance regulations. It thus provides a suitable setting to evaluate pre-existing regulations.

Other than the papers cited in the previous paragraph, the literature mostly focuses on non-crisis, normal periods. These data are desirable to isolate the effect of regulations from macro-economic factors. They cannot, however, test theories that are more relevant to crisis periods (e.g., Williamson 2008). In particular, theories suggest that governance should be more important in crises due to severer agency conflicts. Our finding from board independence implies these theories do not hold during COVID-19, while reputational bonding is a key mechanism.

Our measure of immediate minimal compliance is novel in the literature, which mostly uses board independence. Some studies focus on a comparison between compliers and non-compliers (Dahya, McConnell, and Travlos 2002), and between over-compliers and others (Chhaochharia and Laeven 2009). We demonstrate the roles of timing (i.e., immediateness) and steadfastness in compliance. Governance regulations are permanent and inevitably involve a minimal target figure, such as requiring a certain percentage or number of outside directors. Our approach should help evaluate governance regulations outside Japan.

Our findings highlight a novel policy implication for governance regulations. Various papers criticize one-size-fits-all regulations (e.g., Boivie 2016). Theoretical foundations can be questioned, considering the legal principle. Nonetheless, we demonstrate that they are effective in crises. This implication is in line with bonding theories that commitments to better governance are crucial in crises. Given that crises are unpredictable, one-size-fits-all regulations can be a necessary evil. In fact, Orihara and Eshraghi (2022) find that compliance to the Japanese corporate governance code reduced their firm value, using data prior to the COVID-19 era. The comparison between their paper and ours also indicates that short-term and long-term effects of governance regulations can differ even in the same country and suggests similar investigations in other countries as well.

Our paper also connects governance with COVID-19. A growing number of papers study various pre-pandemic firm characteristics, notably liquidity because of the drastic decline in cash flows (Acharya and Steffen 2020; Fahlenbrach et al. 2021; Ramelli and Wagner 2020). Ding et al. (2021) examine pre-pandemic governance structures. Alone among the commonly used governance attributes, such as anti-takeover provisions and ownership structures, they report that board structure did not affect stock prices in the COVID-19 era. This is not consistent with their hypothesis and governance theories. We highlight the key role of reputational bonding via immediate minimal compliance, not board independence.

The rest of this paper is organized as follows. We describe the COVID-19 shock for Japanese firms and the recent development of the governance regulation in Section 2. Section 3 develops our hypotheses. We describe our shock-based identification strategy in Section 4.

Section 5 describes data and explains characteristics of Japanese data. We present our results in Section 6. Section 7 is the conclusion.

2. Background

2.1 COVID-19 Shock to Stock Markets

COVID-19 was discovered in early December 2019. It rapidly spread all over the world. On March 11, 2020, the Director-General of the World Health Organization declared, "We have therefore made the assessment that COVID-19 can be characterized as a pandemic." The rapid deterioration caused by COVID-19 led to a historic drop in stock prices, as well as a hike in volatility and uncertainty in the stock markets (Altig et al. 2020; Baker et al. 2020a, 2020b; Zhang, Hu, and Ji 2020).

The first case in Japan was reported on January 15. The number of cases was not as large as those of many other counties, and the government did not impose a nationwide lockdown initially. The Nikkei Index still dropped by about 30% in only one month: from 23,387 on February 21, 2020, to 16,553 on March 19. On April 7, the Japanese government declared a state of emergency in metropolitan areas to restrict people's movements, when the number of new infections rapidly increased. The stock markets had responded positively to news articles published a few days before the official announcement. This market reaction suggests that reduced mobility increased firm value.

Central banks introduced emergency liquidity provision programs as early as March to handle the liquidity shortage due to a sharp decline in corporate profitability. The Bank of Japan launched an emergency measure for corporate financing on March 16: Special Funds-Supplying Operations. It reduced the discount window rate to zero for loans to depository institutions. The bank also increased its purchases of commercial paper, bonds, and exchange-tradable funds from 2.2 to 3.2, from 3.2 to 4.2, and from 6 to 12 trillion yen, respectively. The Federal Reserve Board cut the policy rate by 50 basis points on March 3 and by 100 to 0-0.25% on March 15. The Fed reinforced its liquidity provision by a massive securities purchase program, including asset-backed securities and corporate bonds, on March 23. The European Central Bank announced the Pandemic Emergency Purchase Programme of 750 billion euros to provide liquidity through the purchase of government securities and commercial paper of non-financial institutions on March 18. These prompt liquidity provisions reduced the uncertainty and revived the stock markets worldwide, including in Japan (Rebucci, Hartley, and Jiménez, 2022).

2.2 Regulations on Outside Directors in Japan

Back in 2012, Shinzo Abe, then the prime minister, started far-reaching policies in monetary, fiscal, and economic growth areas. The set of policies is often called *Abenomics*. He was in office for eight years, from December 2012 to September 2020. His resignation due to the

exacerbation of a chronic illness was unexpected. It came just three months before the outbreak of COVID-19. Japanese firms therefore entered the COVID-19 era with substantial exposure due to *Abenomics*.

Abe aimed to change the non-Anglo-Saxon, bank-centered governance systems that had lasted until the end of the twentieth century, as documented in numerous studies (e.g., Dore 2005; Morck and Nakamura 1999; Morck et al.2000; Yafeh 2000), amid the global current for convergence in governance systems (Cuervo 2002; Jackson and Moerke 2005; Jacoby2007; Mallin 2002). He expressed his determined stance in New York in 2015: "the reform of corporate governance is at the top of my agenda".

His target was insider-dominated boards of directors. Over half of them had had no outside directors up to 2011. The bursting of the Japanese asset price bubble in early 1990s reduced shareholdings by financial institutions such as banks and increased those by foreign investors. Although these investors were familiar with and could have preferred highly independent boards, we did not observe a change in board structures. The absence of outsiders on boards was thus interpreted as an equilibrium phenomenon that lasted for decades in Japan.

Following Abe's lead, the Financial Services Agency and the Tokyo Stock Exchange introduced the corporate governance code in March 2015 and implemented it in June. The code requires all listed firms on the Tokyo Stock Exchange to comply with five general principles, and those listed in the first and second sections of the Tokyo Stock Exchange (T12) to comply with them and 68 other principles. Five new principles were added in 2018. Firms did not have to comply with the code, but were required to explain their reasons for noncompliance.

The most controversial requirement is Principle 4-8, which asks T12 firms to appoint at least two outside directors. Dating back to before *Abenomics*, the government had announced that they would not mandate the appointment of outside directors in July 2012, due to fierce opposition from the business community. In May 2014, the government presented a proposal on economic policies: the Japan Revival Vision. It laid out a plan for introducing regulations requiring the appointment of multiple outside directors on a comply-or-explain, not a mandatory, basis. A panel of experts assigned to prepare a corporate governance code decided to introduce the provision, Principle 4-8, on November 25, 2014, according to a newspaper article.

There are concerns about whether any of the other principles affected our study. The overall code compliance rates are high. For example, the TSE reported that 85.3% of firms in the first section of the TSE complied with at least 70 of the principles in 2018. None of the principles had a compliance rate below 50%. They suggest that a majority of the principles do not explain cross-sectional differences in firm-level characteristics. The least-complied-with principle is 4-10-1, with a compliance rate of 51.1%. It requires firms to establish an advisory committee for the nomination and compensation of executives and directors. Our data do not report firm-level data on compliance to this principle. Unsystematic observations from some firms' reports seem

to indicate that most firms without such a committee explained that outside directors had already taken on the responsibility for nomination and compensation. We thus infer that non-compliance with this provision does not substantially affect our findings. In our estimation, we control for compliance to various principles as long as it is observable.

After Abe's resignation in September 2020, Yoshihide Suga took his place and changed the focus of the economic policy. On his first speech as prime minister, on September 16, he stated that he would put administrative reforms of government at the center of his policy. Moreover, he had stated that the number of regional banks was excessive a few weeks before. The finance minister and the governor of the Bank of Japan agreed with his stance and suggested the possibility of bank reorganizations. Suga stated he would retain *Abenomics*, but did not mention corporate governance. These changes could create market concerns about a reversal of improved governance practices led by Abe.

3. Hypothesis

3.1 Corporate Governance Regulations and Firm Value

Whether corporate governance regulations increase or decrease firm value is ambiguous theoretically. Conventional theories predict that one-size-fits-all regulations that encourage high board independence increase firm value (Fama 1980; Fama and Jensen 1983). They focus on outside directors being more likely to monitor managers than insiders. In contrast, theories developed since Fama (1980) and Fama and Jensen (1983) pose questions about their limited focus. They derive the endogenous costs of high board independence theoretically and provide grounds for highly independent boards possibly hurting firm value (Adams and Ferreira 2007; Harris and Raviv 2008; Kumar and Sivaramakrishnan 2008; Raheja 2005). [5] These unconventional theories predict that one-size-fits-all regulations to encourage high board independence are not necessarily justifiable.

Empirical evidence is mixed. Larcker et al. (2011) find negative evidence. They study 18 events related to governance regulations from 2007 to 2009 in the US and find that firms paying

[5] Adams and Ferreira (2007) provide key insights on the tradeoff pertaining to board independence in a communication game between a CEO and the directors. The benefit of independence is intense board monitoring of the CEO to prevent his/her expropriation of corporate resources in line with conventional theories. The cost is a disincentive for the CEO to share private information with directors, putting them at an information disadvantage. This cost occurs because information sharing by the CEO can give directors a clue to his/her misbehavior. Communication therefore intensifies board monitoring and reduces the CEO's expected private benefits. On the other hand, communication is essential for outside directors to advise the CEO because of the complementarity of information known by the CEO and the directors. Shareholders should thus optimally choose management-friendly boards as a commitment to weak board monitoring to enhance CEO-board communication. Harris and Raviv (2008) and Raheja (2005) provide other models. Both also emphasize that friendly boards enhance communication between a CEO and the directors. Kumar and Sivaramakrishnan (2008) present a model that less independent boards can monitor CEOs and increase firm value relative to independent ones through the wealth effect of the directors' equity ownership.

higher CEO compensation, which are likely to be affected by regulations, experienced a greater reduction in firm value. Chhaochharia and Grinstein (2007) report that the mandatory regulation of the Sarbanes-Oxley Act increased firm value on average, but reduced it for small firms. Positive effects of mandatory regulations on firm value are documented in Korea (Choi et al. 2007; Black et al. 2006; Black and Kim 2012) and India (Dharmapala and Khanna 2013).

The relationship between voluntary governance regulations, like the Japanese corporate governance code, and firm value is not necessarily straightforward either. One could argue that flexibility provides firms options to comply with them only when compliance increases firm value. Ample studies support this prediction: Dahya and McConnell (2007) in the UK; Fernández-Rodríguez et al. (2004) in Spain; Goncharov et al. (2006) in Germany; Luo and Salterio (2014) in Canada; Bruno and Claessens (2010), and Fauver et al. (2017) with international data. In contrast, He and Li (2018) find that a comply-or-explain rule on dividend payments in China led to overcompliance and reduced firm value. They find that political pressure through state ownership induced firms to comply, at the expense of shareholder welfare. Price et al. (2011) study a comply-or-explain governance code in Mexico and find that compliance to it did not affect firm value. They attribute the insignificant effect to other factors unique to Mexico, such as family ownership and weak investor protection. Orihara and Eshraghi (2022) report that compliance to the Japanese corporate governance code reduced firm value prior to the pandemic period due to inefficient herding.

3.2 Outside Directors in Crises

Ding et al. (2021) present apparently puzzling evidence on the value of outside directors during COVID-19. They report that boards of directors did not provide "immunity" to the pandemic: pre-COVID-19 board structures did not affect stock prices from January to May 2020, based on international data. Their insignificant evidence can be explained theoretically. On one hand, the great uncertainties created by COVID-19 (Altig et al. 2020; Baker et al. 2020a, 2020b; Zhang et al. 2020) and the resulting information asymmetries between managers and shareholders increase managers' inclinations to seek private benefits and thus arouse shareholder demands for monitoring (Johnson et al. 2000; Mitton 2002). Managerial expectations of radical changes in economic environments create an urgent need for advice from outside directors with a wealth of experience (Dass et al. 2014; Denis et al. 2015; Drobetz et al. 2018; Ellis et al. 2018; Kang et al. 2018; von Meyerinck et al. 2016). Skepticism can, however, appear since no directors had experienced COVID-19 or a global pandemic. Moreover, decisive decision-making is more important than intensive monitoring in times of crisis (van Essen et al. 2013; Williamson 2008). Overall, it is uncertain how boards affect firm value in crisis situations.

We take a different angle. Apart from outside directors' roles in governance, we focus on their potential role as reputation building through compliance to voluntary governance

regulations. Reputational bonding provides a theoretical foundation. The underlying idea of bonding is that firms commit themselves to better governance via various mechanisms, such as cross-listing in the US with strict governance requirements. The discretion of voluntary governance regulations enables a bonding function.

Siegel (2005) argues that managerial inclinations to seek private benefits are widespread, especially in economic downturns, and reputational bonding is more valuable in such times. This argument is in line with the governance literature (Baek et al. 2004; Lemmon and Lins 2003; Lins et al. 2013; Johnson et al. 2000; Mitton 2002). Crises should also enhance the value of bonding through an increased concern about reputation (Campello et al. 2010) and trust as social capital (Lins et al. 2017). The additional value of bonding in our Japanese context comes from the political regime change from Abe to Suga and the resulting uncertainties about corporate governance policies, which could boost the possibility of a deviation from good governance practices without bonding.

It is challenging to ascertain which compliers have bonding motives. Minimal compliers with exactly two outside directors are likely to have appointed outside directors to adhere to the code, rather than by their own choice, at least relative to over- or non-compilers. Minimal compliance, however, may lead to becoming over-compliant. It may also happen to be the firms' most preferred board structure. We therefore impose immediateness, which refers to complying to the code just after its introduction. These two conditions identify firms that altered their board structures to barely comply the code without changing afterwards.

We hypothesize that immediate minimal compilers lost less firm value from COVID-19 than others due to reputational bonding. We argue that immediate minimal compilers' adhering attitude toward the code is likely to be a reflection of a bonding motive. Markets would value their adherence to the code as a sign of their willingness to maintain their governance practices even during the historic uncertainties of COVID-19 (Altig et al. 2020).

Our bonding hypothesis, however, is immune to various criticisms. Voluntary regulations cannot penalize a deviation from compliance. This unenforceability should be especially problematic in crises, which can create such an incentive through fewer outside investment opportunities and higher information asymmetries. The literature also points out that regulations often lose their substance and generate only symbolic responses. For example, non-compliers of voluntary, comply-or-explain regulations frequently use the same justifications without due consideration of their own circumstances (Akkermans et al. 2007; Arcot et al. 2010). Some firms even exploit loopholes (Andres and Theissen 2008). Overall, whether bonding functions during COVID-19 is an empirical issue.

4. Identification

COVID-19 and the code can enable the evaluation of governance regulations from a distinctive perspective relative to the literature. The order of the events is: i) the introduction

of the code, ii) decisions to comply or not, and iii) the outbreak of COVID-19. We can treat the variation in actual managerial responses to the code as given relative to COVID-19 and examine whether they affect firm value in response to the unexpected shock. This approach is different from those in the literature that assess regulations based on ex-ante variations of firm attributes prior to the introduction of the regulations. We can study policies in a longer-term framework compared to the literature.

Despite its importance, however, long-term, deferred policy evaluation is difficult. Economies generally experience other shocks after the introduction of the regulation of interest. Our Japanese setting can circumvent this problem. The time between the introduction of the Japanese corporate governance code in 2015 and the outbreak of COVID-19 is relatively short. The Japanese economy did not experience a large shock in the interim. Furthermore, the introduction of the code was a primary policy by Abe, the prime minister between December 2012 and September 2020. Investors and managers could believe that governance policies would be stable up to his resignation.

Our identification relies on the pre-COVID-19 variation in board structures. Due to the unexpected nature of COVID-19, firms could not change them pre-pandemic. They thus serve as an exogeneous variation relative to the pandemic. The main regressor is the interaction of the dummy for immediate minimal compliance with that for being in the T12, not the immediate minimal compliance dummy itself, because only T12 firms are subject to Principle 4-8 of the code. Other differences, such as a comparison between over- and non-compliers, are subjects of extensions we will consider later.

The construction of the immediate minimal compliance dummy needs a more detailed explanation. Some firms could anticipate the adoption of a regulation prior to the official introduction of the code of June 2015. In fact, the government revealed in January 2014 their economic plan that included a corporate governance reform. The government also mentioned the possibility of recommending multiple outside directors in February. They implied that firms could anticipate a regulation coming as early as in FY2013, April 2013 to March 2014 in the Japanese accounting framework. We therefore choose FY2012 to evaluate pre-code board structures. Also, we use an adjusted FY2014 to evaluate immediate compliance. The government reached a consensus of recommending two outside directors in November 2014. Firms with the accounting year end of December 2014 or later could start to comply the code. We use an adjusted fiscal year end: firms that had two outside directors in the accounting year end from December 2014 to November 2015 could be immediate compilers.

To sum, we define immediate minimal compliers as firms who did not have exactly two outside directors (most had fewer) in FY2012, but did in adjusted FY2015, and maintained the number up to FY2018. March is the most common fiscal year end in Japan, used by about 70% of listed firms. We therefore evaluate pre-pandemic board structures as of March 2013, their

compliance as of March 2015, and the prior-to-COVID-19 board structures as of March 2019 for these firms.

The regressand is the change in monthly firm value, from the previous year, measured by Tobin's Q. It is represented by ΔQ_{iym}, where the subscript i refers to firms, y to the last two digits of the calendar year, and m to the month. For example, ΔQ_{i2004} refers to a change in Q from April 2019 to April 2020. Monthly, not yearly, measures can examine whether a change in firm value is observed only in some months or in consecutive months in the COVID-19 crisis. Our main analysis uses ΔQ_{i1912}, ΔQ_{i2001}, ΔQ_{i2002}, …, and ΔQ_{i2011}. We also use ΔQ_{i1812}, ΔQ_{i1901}, ΔQ_{i1902}, …, and ΔQ_{i1911} for a placebo test to examine a pre-existing trend.

We choose some of control variables following Fauver et al. (2017) and Ding et al. (2021). Both papers use international data and examine firm value. The former focuses on governance regulations with data prior to COVID-19 and the latter on various attributes, including governance, during COVID-19. These variables represent cash holdings, tangibility, leverage, maturing debt, credit lines, cash flows, exports, capital expenditures, R&D expenses, firm size, firm age, ownership structures, board structures, managerial incentive schemes, and takeover defense. Board independence, the ratio of outside directors on the board, and board size are directly relevant to our paper. The former allows us to study the valuation of immediate minimal compliance after controlling for the effect of board independence itself on firm value. The latter addresses the potential discount due to large board size (Yermack 1996). The fiscal month dummies help mitigate potential differences in the timing of accounting reporting. We also include industry dummies.

We control for factors that are relevant in Japanese contexts as well. The first addresses the effect of a 2015 corporate law reform that introduced an elective board structure.[6] We call it a committee board system. If a firm adopts it, it must have a board with an audit committee that consists of at least three directors, the majority of whom must be outsiders. Thus, there must be at least two outside directors. The adoption rate was 28.7% in 2018.

We furthermore deal with concerns that other recommendations of the code simultaneously affect the appointment of outside directors and firm value. This approach helps isolate the role of outside directors, after controlling for general improvements of governance practices via the code. For example, the code recommends an English translation of proxy statements. It not only makes their annual general meetings more accessible, but also could reveal otherwise

[6] Japanese corporate law provides two alternatives that resemble the board system with committees present in the US. In 2003, a committee board system was introduced as a voluntary alternative. This system aims to separate decision-making from monitoring by boards. A firm that adopts this system is required to have a board with three committees, for nominations, compensation, and audits. Each committee must have a majority of outside directors. Only 1.7% of our sample firms had adopted this system as of 2018. The second system was introduced in 2015. This system requires firms to have boards with only an audit committee that has a majority of outside directors. This system is more widely used than the first, with an adoption rate of 27.0% in 2018. Due to the dominance of the latter over the former, we do not make a distinction between them.

unobservable firm attributes to attract foreign investors. The appendix explains the definitions of all variables in detail. We estimate the parameters of the following equation:

$$\Delta Q_{iym} = \alpha + \beta_1 comply_{it-1} \times T12_{it-1} + \beta_2 comply_{it-1} + \beta_3 T12_{it-1} + \gamma X_{it-1} + ym_m + ind_j + \epsilon_{iym}, \quad (1)$$

where ΔQ_{iym} is the one-year change in Tobin's Q of firm *i* in calendar year *y* and month *m*; $comply_{it-1}$ is a compliance variable, such as the immediate-minimal-complier dummy, of firm *i* in fiscal year *t-1* (i.e., FY2018), $T12_{it-1}$ is the dummy for being listed in the first or second section of the Tokyo Stock Exchange, X_{it-1} is the vector of control variables, ym_m is the fiscal month fixed effects, ind_j is the industry fixed effects on industry *j*, and ϵ_{iym} is the error term.

5. Data

Our data sources are Nikkei NEEDS FinancialQUEST for financial information and Nikkei NEEDS Executive Data and Corporate Governance Data for governance. These three sources cover all listed firms in Japan.[7] We select firms that issued their financial statements both in FY2012 and FY 2018 to define immediate minimal compliance. Firms which listed or delisted their stocks in these periods are excluded. We still have as many as 3,039 firms.

Figure 1 shows a drastic change in board structures in 2014-15 among Japanese public firms. Up to 2013, 74.3% of them had fewer than two outside directors with a slightly declining trend. This figure shows that insider-dominated boards were the pre-code equilibrium in Japan. The percentage dropped sharply to 30.6% in 2015 and down to 17.1% in 2018. These numbers demonstrate that the code has encouraged firms to deviate from the long-lasting equilibrium. This figure also shows that the percentage of firms with exactly two outside directors was relatively stable across time: it was 43.2% in 2015 and barely changed afterwards. The number of non-compliers decreased, while that of over-compliers increased monotonically.

A shortcoming of Figure 1 is that it does not make a distinction between a change in individual firms' decisions and that of the composition of firms in each of the three groups. Figure 2 examines a firm-level change in board structures only among firms with other than two outside directors in 2012. It shows the percentage of firms with exactly two outside

[7] Unlisted firms are not the target of the code. In theory, firms can delist their stocks if the costs of regulation exceed the benefits. Delisting is not necessarily unusual in Japan. For example, 66 firms delisted their stocks in 2015. Over 85% of them were acquired by or merged with other firms, according to their disclosure statements. Because firms targeted for acquisition are unlikely to have a say in the matter, they should be less likely to delist their stocks to avoid the cost of complying with the regulation. In addition, the benefits of listing are high, especially in our data period, because of favorable capital market conditions and the associated better access to equity and debt financing. Delisting is thus unlikely to affect our paper.

directors among them in various other years. The value was zero in 2012 by definition. This figure shows that 36% of them had two outside directors both in 2015 and 2018. These statistics further support our argument from Figure 1 that the percentage of minimal compliers was stable between the introduction of the code and the outbreak of COVID-19.

Table 1 presents summary statistics. Immediate minimal compliers make up 13.4% of our sample firms. Minimal compliers in 2018, those with exactly two outside directors, account for 41.3% of firms. Hence, one-third of minimal compliers had complied with the code immediately and did not change their minimal compliance. Many of the rest of the minimal compliers are gradual minimal ones. For example, 25.1% and 29.1% of our sample firms had two outside directors in 2015 and 2016, respectively, and maintained their minimal compliance They suggest a considerable variation among minimal compilers in terms of immediateness.

This table also demonstrates that Japanese firms still maintain their traditional governance systems to some extent despite the implementation of *Abenomics*. The average board independence was 29.9% in 2018. It was considerably lower than that in the US and a worldwide average of over 60% reported in Ding et al. (2021). Corporations and financial institutions owned 26.8% and 17.4% of shares of public firms on average, respectively. They reflect traditional Japanese business group structures, called *keiretsu*, and bank-centered governance systems. They were higher than those by foreign investors of 11.8%. Chairs of boards were and remain predominantly insiders.

Table 1 provides further observations. Our regressand, the change in monthly Tobin's Q from the previous year, is highly negative from February to April due to COVID-19. The median exports to sales ratio is zero, with mean of 0.15. This suggests that exporting is not necessarily a major emphasis for many Japanese firms. Non-manufacturers consist of over half of our sample firms. 28.7% of firms adopted the committee board system. 73.9% of firms listed their stocks in the first or second section of the Tokyo Stock Exchange.

6. Results

6.1 Base Estimation

Table 2 provides our first evidence that immediate minimal compliance shielded firm value during COVID-19. The coefficients on *Immediate minimal compliance * T12* exhibit negative and significant coefficients in all the months. The magnitudes of the estimates are economically significant. On average, Tobin's Q declined by 0.115 in February and 0.167 in March from Table 1. The coefficients of 0.102 in February and 0.137 in March in Table 2 imply that immediate minimal compliance almost avoided the decline.

This table provides further support for our reputation argument. Reputation building via the code can function only among T12 firms since the recommendation of Principle 4-8 applies only to them. This panel reports negative coefficients on *Immediate minimal compliance*. They imply that firm value among immediate minimal compliers of non-T12 firms declined relative

to others. Non-positive estimates are consistent with our reputational argument. The negative ones can be explained by Orihara and Eshraghi (2022), who find inefficient herding of non-target firms using data prior to COVID-19 in Japan.

Estimates on control variables can be interpreted as support of the relative strength of this evidence regarding immediate minimal compliance. None of the control variables exhibit systematic effects across different months. For example, although more disclosures measured by *Compensation Policy* and *Compensation Disclosure* increased firm value in some months, the effects are not as consistent as those of immediate minimal compliance. We observe significant effects of credit lines in some months, but the effects are negative, in opposition to recent findings during COVID-19 (e.g., Fahlenbrach et al. 2021). One possible interpretation is that they could reflect captive relationships with banks, as reported by Pinkowitz and Williamson (2001) with Japanese data. Cash holdings did not exert positive effects either. This finding supports the contention that a crisis increases the possibility of managerial expropriation under still weak governance systems in Japan, as well as studies on the relationship between corporate governance and liquidity (Chen et al. 2012; Dittmar and Mahrt-Smith, 2007; Dittmar, Mahrt-Smith, and Servaes 2003; Harford, Mansi, and Maxwell 2008; Pinkowitz, Stultz, Williamson 2006; Kusnadi and Wei 2011).

6.2 Immediate or Gradual Compliance?

The previous subsection examines being immediate and minimal compliers simultaneously, while this subsection addresses the former. In Panel A of Table 3, we replace the immediate minimal compliance dummy with the minimal compliance one. The latter takes one if the firm did not have two outside directors in 2012 and had two in 2018. For example, a firm that appointed two outside directors in 2015 and maintains the minimal compliance afterwards, or another firm that had two outside directors only in 2018 are classified as the latter, not the former. In Panel B, we include both *Immediate minimal compliance* and *Minimal compliance*. This panel can isolate the immediateness through a comparison between immediate and non-immediate minimal compilers in one integrated estimation.

Both panels of Table 3 support our assertion that immediate compliance is a core factor in determining firm value in the COVID-19 era. Panel A shows that the coefficients on *Minimal compliance * T12* are insignificant in all months. Panel B also shows that they are not systemically significant, while those on *Immediate minimal compliance * T12* are significant in all months. They show that investors did not appreciate or depreciate minimal compliance if it was not immediate. These findings are consistent with our bonding hypothesis that immediate, not gradual, compliance can serve as a stronger commitment to the code.

6.3 Over-Compliance, Non-Compliance, and Board Independence

This subsection examines the "minimal" aspect of immediate minimal compliance. In Panel A of Table 4, we replace the immediate minimal compliance dummy with the over-compliance one, the dummy for firms with more than two outside directors. Panel B uses the non-compliance dummy, the dummy for firms with less than two outside directors. These two panels report that neither *Over-compliance * T12* nor *Non-compliance * T12* affect firm value systemically. They suggest that exceeding or deviating from the required standard do not serve as signaling, inconsistent with Chhaochharia and Laeven (2009) and Luo and Salterio (2014) with data from non-crisis periods.

Panel C includes all three dummies simultaneously, for immediate minimal compliance, over-compliance, and non-compliance. In this estimation, the base variable of *T12* refers to gradual minimal compilers and those which had two or more outside directors in 2012 and two in 2018. This panel shows positive coefficients on *Immediate minimal compliance * T12*, consistent with Table 2 in almost all months. It also demonstrates that *Over-compliance * T12* or *Non-compliance * T12* did not affect firm value, consistent with Panels A and B of Table 4.

Panel D uses *Board independence* instead of *Immediate minimal compliance* to compare our arguments with numerous existing studies, including Ding et al. (2021). This estimation is the same in sprit with Panel A, since over-compliers are likely to have high board independence, although board independence relies on a continuous measure. Panel D does not show significant effects on firm value systematically. This finding is consistent with Ding et al. (2021) in the COVID-19 era.

6.4 Placebo Test

Table 5 conducts a placebo test to demonstrate that our findings are unique in the COVID-19 era as well as the absence of a pre-trend. The regressand is the change in monthly firm value one year before (e.g., from January 2018 to 2019). We correspondingly use one-year lagged variables for others as well. This panel does not show any significant association between immediate minimal compliance of T12 firms and firm value. This panel suggests that reputation building through compliance to a governance regulation functions only in crises, consistent with bonding theories.

6.5 Director Characteristics

We have so far focused on board structures as a whole, with no attention paid to individual director characteristics. This might cause a bias in estimates if some firms, depending on their compliance choices, have directors with certain characteristics, such as CEOs (Fahlenbrach et al. 2010 and Fich 2005), being female (Ahern and Dittmar 2012), or those with financial expertise (Dittmann et al. 2010; Güner et al. 2008; Huang et al. 2014; Kroszner and Strahan 2001; Mitchell 2015; Sisli-Ciamarra 2012). Banker directors could have the potential to affect firm value, especially during the COVID-19 crisis that caused liquidity shortage, due to their

financial expertise. Moreover, some compliers that were more conscious about governance may have appointed these directors quickly in response to the introduction of the code. Directors also have an incentive to join more reputable firms (Masulis and Mobbs 2014).

We introduce additional variables that represent director characteristics in equation (1). The new variable takes a value of one if the firm has a director with one of the following characteristics: being a CEO, female, or a bank executive. We evaluate these variables in 2018. Table 1 shows that 23.3% of firms had CEO directors, 40.8% female directors, and 15.2% banker directors as of 2018.

Table 6 does not show systematic effects of the interaction of *Immediate minimal compliance * T12* with director characteristics on firm value in Panel A with the CEO dummy, Panel B with the female dummy, and Panel C with the banker dummy. We thus attribute our findings to board structures, not director characteristics.

6.6 Reduced Mobility and Firm Value

This subsection ties our arguments more closely to COVID-19. The analyses implicitly assume that COVID-19 evenly affected all firms. Although it is an economy-wide shock, we could classify firms into those who were directly affected and those who were relatively unaffected. A key characteristic of COVID-19 is reduced mobility. We conjecture it should affect non-manufacturers, such as those in service industries, more than manufacturers. The former consist of 54.6% of the sample firms from Table 1. We also construct a dummy for non-manufacturers who do not export, i.e., domestic non-manufacturers. It can isolate firms that are relatively immune to global disruptions in product markets due to COVID-19 among non-manufacturers. They consist of 45.7% of firms, implying a 9 percentage point reduction.

Panel A of Table 7 uses the industry dummy and Panel B the adjusted dummy. Panel A shows positive effects of *Immediate minimal compliance * T12 * Non-manufacturer* on firm value from February to October. Panel B shows a clearer and larger effect from February to November. These findings support the contention that reduced mobility explains our main finding in Table 2.

7. Conclusion

Policy measures to change board structures, which can be mandatory or voluntary, are widespread around the globe. Using a difference-in-differences approach that relies on the pre-determined variation in board structures induced by the voluntary Japanese corporate governance code, we find that firms meeting the regulatory minimum immediately gained firm value relative to others in Japan. Being over-compliers, in contrast, did not have an effect on firm value. They imply that reputational building via compliance to a governance regulation, not governance as such, shield firm value in crises.

Our findings provide an explanation for the puzzling evidence presented by Ding et al. (2021) that board structures did not affect stock prices in the COVID-19 era. Our reputational bonding argument via immediate minimal compliance can explain how governance can shield firm value in the COVID-19 era. Another critical difference between our paper and most other works, including Fauver et al. (2017) with international data, is that the latter address quick responses to the introduction of regulations, while ours considers more long-term responses to the sudden shock of COVID-19.

References

Acharya, V. V. and S. Steffen, 2020, "The Risk of Being a Fallen Angel and the Corporate Dash for Cash in the Midst of COVID," *Review of Corporate Financial Studies* 9(3), 430-471.

Adams, R. B., 2012, "Governance and the Financial Crisis," *International Review of Finance* 12(1), 7-38.

Adams, R. B., 2017, "Boards, and the Directors Who Sit on Them," In *Handbook of the Economics of Corporate Governance* (Vol. 1, pp. 291-382). North-Holland.

Adams, R. B. and D. Ferreira, 2007, "A Theory of Friendly Boards," *Journal of Finance* 62(1), 217-250.

Adams, R. B., B. E. Hermalin, and M. S. Weisbach, 2010, "The Role of Boards of Directors in Corporate Governance: A Conceptual Framework and Survey," *Journal of Economic Literature* 48, 58-107.

Aguilera, R. V. and A. Cuervo-Cazurra, 2004, "Codes of Good Governance Worldwide: What is the Trigger?," *Organization Studies* 25(3), 415-443.

Akkermans, D., H. Van Ees, N. Hermes, R. Hooghiemstra, G. Van der Laan, T. Postma, A. Van Witteloostuijn, 2004, "Corporate Governance in the Netherlands: An Overview of the Application of the Tabaksblat Code in 2004," *Corporate Governance: An International Review* 15(6), 1106-1118.

Altig, D., S. R. Baker, J. M. Barrero, N. Bloom, P. Bunn, S. Chen, S. J. Davis, J. Leather, B. H. Meyer, E. Mihaylov, P. Mizen, N. B. Parker, T. Renault, P. Smietanka, and G. Thwaites, 2020, "Economic Uncertainty before and during the COVID-19 Pandemic," *Journal of Public Economics* 191, 104274.

Altınkılıç, O., V. S. Balashov, and R. S. Hansen, 2019, "Investment Bank Monitoring and Bonding of Security Analysts' Research," *Journal of Accounting and Economics* 67(1), 98-119.

Baek, J., J. Kang, and K. Park, 2004, "Corporate Governance and Firm Value: Evidence from the Korean Financial Crisis," *Journal of Financial Economics* 71(2), 265-313.

Baker, S. R., N. Bloom, S. J. Davis, K. Kost, M. Sammon, and T. Viratyosin, 2020a, "The Unprecedented Stock Market Reaction to COVID-19," *Review of Asset Pricing Studies* 10(4), 742-758.

Baker, S. R., N. Bloom, S. J. Davis, and S. J. Terry, 2020b, "Covid-induced Economic Uncertainty," NBER Working Paper 26983.

Balsmeier, B., L. Fleming, and G. Manso, 2017, "Independent Boards and Innovation," *Journal of Financial Economics* 123(3), 536-557.

Banerjee, S., M. Humphery-Jenner, and V. Nanda, 2015, "Restraining Overconfident CEOs through Improved Governance: Evidence from the Sarbanes-Oxley Act," *Review of Financial Studies*,
28(10), 2812–2858.

Becht, M., P. Bolton, and A. Röell, 2003, "Corporate governance and control," *Handbook of the Economics of Finance* 1, 1-109.

Beltratti, A. and R. M. Stulz, 2012, "The Credit Crisis around the Globe: Why Did Some Banks Perform Better?," *Journal of Financial Economics* 105(1), 1-17.

Benveniste, L. M., W. Y. Busaba, W. J. Wilhelm Jr., 1996, "Price Stabilization as a Bonding Mechanism in New Equity Issues," *Journal of Financial Economics* 42(2), 223-255.

Beuselinck, C., L. Cao, M. Deloof, and X. Xia, 2017, "The Value of Government Ownership during the Global Financial Crisis," *Journal of Corporate Finance* 42, 481-493.

Black, B. S., H. Jang, and W. Kim, 2006, "Does Corporate Governance Predict Firms' Market Values? Evidence from Korea," *Journal of Law, Economics, and Organization* 22(2), 366-413.

Black, B. and W. Kim, 2012, "The Effect of Board Structure on Firm Value: A Multiple Identification Strategies Approach Using Korean data," *Journal of Financial Economics* 104(1), 203-226.

Bris, A. and C. Cabolis, 2008, "The Value of Investor Protection: Firm Evidence from Cross-Border Mergers," *Review of Financial Studies* 21(2), 605-648.

Booth, J. R. and R. L.Smith II., 1986, "Capital Raising, Underwriting and the Certification Hypothesis," *Journal of Financial Economics* 15(1-2), 261-281.

Bruno, V. and S. Claessens, 2010, "Corporate Governance and Regulation: Can There Be Too Much of A Good Thing?," *Journal of Financial Intermediation* 19, 461-482.

Campello, M., J. R. Graham, and C. R. Harvey, 2010, The Real Effects of Financial Constraints: Evidence from a Financial Crisis. *Journal of financial Economics* 97(3), 470-487.

Chattopadhyay, A., M. D. Shaffer, and C. C. Y. Wang, 2020, "Governance through Shame and Aspiration: Index Creation and Corporate Behavior," *Journal of Financial Economics* 135(3), 704-724.

Chari, A., P. P. Ouimet, L. L. Tesar, 2010, "The Value of Control in Emerging Markets," *Review of Financial Studies* 23(4), 1741-1770.

Chen, Q., X. Chen, K. Schipper, Y. Xu, and J. Xue, 2012, "The Sensitivity of Corporate Cash Holdings to Corporate Governance," *Review of Financial Studies* 25(12), 3610-3644.

Chhaochharia, V. and Y. Grinstein, 2007, "Corporate Governance and Firm Value: The Impact of the 2002 Governance Rules, *Journal of Finance* 62(4), 1789-1825.

Chhaochharia, V. and L. Laeven, 2009, Corporate Governance Norms and Practices, *Journal of Financial Intermediation* 18(3), 405-431.

Choi, J. J., S. W. Park, and S. S. Yoo, 2007, "The Value of outside Directors: Evidence from Corporate Governance Reform in Korea," *Journal of Financial and Quantitative Analysis* 42(4), 941-962.

Coffee, J., 1999, "The Future as History: The Prospects for Global Convergence in Corporate Governance and Its Implications," *Northwestern University Law Review* 93, 641-708.

Cuervo, A., 2002, "Corporate Governance Mechanisms: A Plea for Less Code of Good Governance and More Market Control," *Corporate Governance: An International Review* 10(2), 84-93.

Cuomo, F., C. Mallin, and A. Zattoni, 2016, "Corporate Governance Codes: A Review and Research Agenda," *Corporate Governance: An International Review* 24(3), 222-241.

Dahya, J., & J. J. McConnell, 2007, "Board Composition, Corporate Performance, and the Cadbury Committee Recommendation," *Journal of Financial and Quantitative Analysis* 42(3), 535-564.

Dahya, J. and J. J. McConnell, and N. G. Travlos, 2002, "The Cadbury Committee, Corporate Performance, and Top Management Turnover", *Journal of Finance* 57(1), 461-483.

Dass, N., O. Kini, V. Nanda, B. Onal, and Jun Wang, 2014, "Board Expertise: Do Directors from Related Industries Help Bridge the Information Gap?," *Review of Financial Studies* 27(5), 1533-1592

Datta, S., M. Iskandar-Datta, and A. Patel, "Bank Monitoring and the Pricing of Corporate Public Sebt," *Journal of Financial Economics* 51(3), 435-449.

Denis, D.J., Denis, D.K., and M.D. Walker, 2015, "CEO Assessment and the Structure of Newly Formed Boards," *Review of Financial Studies* 28, 3338-2266.

Dharmapala, D. and V. Khanna. 2013, "Corporate Governance, Enforcement, and Firm Value: Evidence from India," *Journal of Law, Economics, and Organization* 29(5), 1056-1084.

Ding, W., R. Levine, C. Lin, and W. Xie, 2021, "Corporate Immunity to the COVID-19 Pandemic," *Journal of Financial Economics* 141(2), 802-830.

Dittmann, I., E. Maug, and C. Schneider, 2010, "Bankers on The Boards of German firms: What They Do, What They Are Worth, and Why They Are (Still) There", *Review of Finance* 14(1), 35-71.

Dittmar, A., and J. Mahrt-Smith, 2007, "Corporate Governance and the Value of Cash Holdings," *Journal of Financial Economics* 83, 599-634.

Dittmar, A., J. Mahrt-Smith, and H. Servaes, 2003, "International Corporate Governance and Corporate Cash Holdings," *Journal of Financial and Quantitative Analysis* 38(1), 111-133.

Doidge, C., G. A. Karolyi, R. M. Stulz, 2004, "Why are Foreign Firms Listed in the U.S. Worth More?," *Journal of Financial Economics* 71(2), 205-238.

Dore, R., 2005, "Deviant or Different? Corporate Governance in Japan and Germany," *Corporate Governance: An International Review* 13(3), 437-446.

Drobetz, W., F. von Meyerinck, D. Oesch, and M. Schmid, 2018, "Industry Expert Directors," *Journal of Banking and Finance* 92, 195-215.

Eaton, J. and H. S. Rosen, 1983, "Agency, Delayed Compensation, and the Structure of Executive Remuneration," *Journal of Finance* 38(5), 1489-1505.

Ellis, J. A., C. E. Fee, and S. Thomas, 2018, "Playing Favorites? Industry Expert Directors in Diversified Firms, *Journal of Financial and Quantitative Analysis* 53(4), 1679-1714.

Erkens, D. H., M. Hung, and P. Matos, 2012, "Corporate Governance in the 2007–2008 Financial Crisis: Evidence from Financial Institutions Worldwide," *Journal of Corporate Finance* 18, 389-411.

van Essen, P. Engelen, and M. Carney, 2013, "Does "Good" Corporate Governance Help in a Crisis? The Impact of Country- and Firm-Level Governance Mechanisms in the European Financial Crisis," *Corporate Governance: An International Review* 21(3), 201-224.

Fahlenbrach, R., A. Low, and R. M. Stulz, 2010, "Why Do Firms Appoint CEOs as Outside Directors?," *Journal of Financial Economics* 97(1), 12-32.

Fahlenbrach, R., K. Rageth, and R. M. Stulz, 2021, "How Valuable Is Financial Flexibility When Revenue Stops? Evidence from the COVID-19 Crisis," *Review of Financial Studies* 34(11), 5474-5521.

Fama, E. F., 1980, "Agency Problems and the Theory of the Firm," *Journal of Political Economy* 88(2), 288-307.

Fama, E. F. and M. C. Jensen, 1983, "Separation of Ownership and Control," *Journal of Law and Economics* 26(2), 301-325.

Fauver, L., M. Hung, X. Li, and A. G. Taboada, 2017, "Board Reforms and Firm Value: Worldwide Evidence," *Journal of Financial Economics* 125(1), 120-142.

Fee, C. E., C. J. Hadlock, S. Thomas, 2006, "Corporate Equity Ownership and the Governance of Product Market Relationships," *Journal of Finance* 61(3), 1217-1251.

Fernández-Rodríguez, E., S. Gómez-Ansón, and Á. Cuervo-García, 2004, "The Stock Market Reaction to the Introduction of Best Practices Codes by Spanish Firms," *Corporate Governance: An International Review* 12(1), 29-46.

Fich, E. M., 2005, "Are Some Outside Directors Better than Others? Evidence from Director Appointments by Fortune 1000 Firms," *Journal of Business*, 78(5) 1943-1972.

Francis, B. B., I. Hasan, Q. Wu, 2012, "Do Corporate Boards Matter during the Current Financial Crisis?," *Review of Financial Economics* 21(2), 39-52.

Géczy, C. C., B. A. Minton, and C. M. Schrand, 2007, "Taking a View: Corporate Speculation, Governance, and Compensation," *Journal of Finance* 62(5), 2405-2443.

Goncharov, I., J. R. Werner, and J. Zimmermann, 2006, "Does Compliance with the German Corporate Governance Code Have an Impact on Stock Valuation? An Empirical Analysis," *Corporate Governance: An International Review* 14(5), 432-445.

Gozzi, J. C., R. Levine, and S, L. Schmukler, 2008, "Internationalization and the Evolution of Corporate Valuation," *Journal of Financial Economics* 88(3), 607-632.

Güner, A. B., U. Malmendier, and G. Tate, 2008, "Financial expertise of directors," *Journal of Financial Economics* 88(2), 323-354.

Gupta, K., C. Krishnamurti, and A. Tourani-Rada, 2013, "Is Corporate Governance Relevant during the Financial Crisis?," *Journal of International Financial Markets, Institutions and Money* 23, 85-110.

Harford, J., S. A. Mansi, W. F. Maxwl, 2008, "Corporate Governance and Firm Cash Holdings in the US," *Journal of Financial Economics* 87, 535-555.

Harris, M. and A. Raviv, 2008, "A Theory of Board Control and Size," *Review of Financial Studies* 21(4), 1797-1832.

He, W. and C. K. Li, 2018, "The effects of a Comply-or-Explain Dividend Regulation in China," *Journal of Corporate Finance* 52, 53-72.

Hermalin, B. E. and M. S. Weisbach, 1998, "Endogenously Chosen Boards of Directors and their Monitoring of the CEO, *American Economic Review* 88(1), 96-118.

Howell, S. T., M. Niessner, and D. Yermack, 2020, "Initial Coin Offerings: Financing Growth with Cryptocurrency Token Sales," *Review of Financial Studies* 33(9), 3925-3974.

Huang, Q., F. Jiang, E. Lie, K. Yang, 2014, "The Role of Investment Banker Directors in M&A," *Journal of Financial Economics* 112(2), 269-286.

Jackson, G. and A. Moerke, 2005, "Continuity and Change in Corporate Governance: comparing Germany and Japan," *Corporate Governance: An International Review* 13(3), 351-361.

Jacoby, S. M., 2007, "Principles and Agents: CalPERS and corporate governance in Japan," *Corporate Governance: An International Review* 15(1), 5-15.

Jensen, M.C., 1986, "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers," *American Economic Review* 76, 323-329.

Johnson, S., P. Boone, A. Breach, and E. Friedman, 2000, "Corporate Governance in the Asian Financial Crisis," *Journal of Financial Economics* 58(1-2), 141-186.

Kang, S. E. H. Kim, and Y. Lu, 2018, "Does Independent Directors' CEO Experience Matter?," *Review of Finance* 22(3), 905–949.

Karolyi, G. A. and A. G. Taboada, 2015, "Regulatory Arbitrage and Cross-Border Bank Acquisitions," Journal of Finance 70(6), 2395-2450.

Kim, E. H. and Y. Lu, 2013, Corporate Governance Reforms around the World and Cross-Border Acquisitions, *Journal of Corporate Finance* 22, 236-253.

King, M. R. and D. Segal, 2009, "The Long-Term Effects of Cross-Listing, Investor Recognition, and Ownership Structure on Valuation," *Review of Financial Studies* 22(6), 2393-2421.

Kroszner, R. S. and P. E. Strahan, 2001, "Bankers on Boards: Monitoring, Conflicts of Interest, and Lender Liability," *Journal of Financial Economics* 62(3), 415-452.

Kumar, P. and K. Sivaramakrishnan, 2008, "Who Monitors the Monitor? The Effect of Board Independence on Executive Compensation and Firm Value," *Review of Financial Studies* 21(3), 1371-1401.

Kusnadi, Y., and J. K. C. Wei, 2011, "The Determinants of Corporate Cash Management Policies: Evidence from around the World," *Journal of Corporate Finance* 17, 725-740.

Lel, U. and D. P. Miller, 2008, "International Cross-Listing, Firm Performance, and Top Management Turnover: A Test of the Bonding Hypothesis," *Journal of Finance* 63(4), 1897-1937.

Larcker, D. F., G. Ormazabal, and D. J. Taylor, 2011, "The Market Reaction to Corporate Governance Regulation," *Journal of Financial Economics* 101, 431-448.

Lemmon, M. L. and K. V. Lins, 2003, "Ownership Structure, Corporate Governance, and Firm Value: Evidence from the East Asian Financial Crisis," *Journal of Finance* 58(4), 1445-1468.

Li, D. D. and S. Li, 1996, "A Theory of Corporate Scope and Financial Structure," *Journal of Finance* 51(2), 691-709.

Linck, J. S., J. M. Netter, and T. Yang, 2009, "The Effects and Unintended Consequences of the Sarbanes-Oxley Act on the Supply and Demand for Directors," *Review of Financial Studies* 22(8), 3287-3328.

Lins, K. V., H. Servaes, and A. Tamayo, 2017, "Social Capital, Trust, and Firm Performance: The Value of Corporate Social Responsibility during the Financial Crisis," Journal of Finance 72(4), 1785-1824.

Lins, K.V., H. Sarvaes, and P. Tufano, 2010, "What Drives Corporate Liquidity? An International Survey of Cash Holdings and Lines of Credit," J*ournal of Financial Economics* 98, 160-176.

Lins, K. V., P. Volpin, and H. F. Wagner, 2013, "Does Family Control Matter? International Evidence from the 2008–2009 Financial Crisis," *Review of Financial Studies* 26(10), 2583-2619.

Luo, Y. and S. E. Salterio, 2014, "Governance Quality in a "Comply or Explain" Governance Disclosure Regime," *Corporate Governance: An International Review* 22(6), 460-481.

von Meyerinck, F., D. Oesch, and M. Schmid, 2016, "Is Director Industry Experience Valuable?," *Financial Management* 45(1), 207-237.

Mallin, C., 2002, "Institutional Investors: The Growth of Global Influences," *Corporate Governance: An International Review* 10(2), 67–68.

Megginson, W. L. and K. A. Weiss, 1991, "Venture Capitalist Certification in Initial Public Offerings," Journal of Finance 46(3), 879-903.

Minton, B. A., J. P. Taillard, and R. Williamson, 2014, "Financial Expertise of the Board, Risk Taking, and Performance: Evidence from Bank Holding Companies," *Journal of Financial and Quantitative Analysis* 49(2), 351-380.

Mitchell, M., 2015, "Bank Dependency and Banker Directors," *Managerial Finance* 41(8), 825-844.

Mitton, T., 2002, "A Cross-firm Analysis of the Impact of Corporate Governance on the East Asian Financial Crisis," *Journal of Financial Economics* 64(2), 215-241.

Morck, R. and M. Nakamura, 1999, "Banks and Corporate Control in Japan," *Journal of Finance* 54(1), 319-339.

Morck, R., M. Nakamura, and A. Shivdasani, 2000, "Banks, Ownership Structure, and Firm Value in Japan," *Journal of Business* 73(4), 539-567.

Opler, T., L. Pinkowitz, R. Stulz, and R. Williamson, 1999, "The Determinants and Implications of Corporate Cash Holdings," *Journal of Financial Economics* 52, 3-46.

Orihara, M. and A. Eshraghi, 2022, "Corporate Governance Compliance and Herding," *International Review of Financial Analysis* 80, 102029.

Pinkowitz, L., R. Stultz, and R. Williamson, 2006, "Does the Contribution of Corporate Cash Holdings and Dividends to Firm Value Depend on Governance? A Cross-country Analysis," *Journal of Finance* 61, 2725-2751.

Price, R., F. J. Román, and B. Rountree, 2011, "The Impact of Governance Reform on Performance and Transparency," *Journal of Financial Economics* 99(1), 76-96.

Raheja, C. G., 2005, "Determinants of Board Size and Composition: A Theory of Corporate Boards," *Journal of Financial and Quantitative Analysis* 40(2), 283-306.

Ramelli, S. and A. F. Wagner, 2020, "Feverish Stock Price Reactions to COVID-19," *Review of Corporate Finance Studies* 9(3), 622-655.

Rebucci, A., J. S. Hartley, and D. Jiménez, 2022, "An Event Study of COVID-19 Central Bank Quantitative Easing in Advanced and Emerging Economies, In *Essays in Honor of M. Hashem Pesaran: Prediction and Macro Modeling*, Emerald Publishing Limited.

Rossi, S. and P. F. Volpin, 2004, "Cross-country Determinants of Mergers and Acquisitions," *Journal of Financial Economics* 74(2), 277-304.

Siegel, J., 2005, "Can Foreign Firms Bond Themselves Effectively by Renting U.S. Securities Laws?," *Journal of Financial Economics* 75(2), 319-359.

Sisli-Ciamarra, E., 2012, "Monitoring by Affiliated Bankers on Board of Directors: Evidence from Corporate Financing Outcomes," *Financial Management* 41(3), 665-702.

Stulz, R., 1999, "Globalization, Corporate Finance, and the Cost of Capital," *Journal of Applied Corporate Finance* 26, 3-28.

Vallascas, F., S. Mollah, and K. Keasey, 2017, "Does the impact of board independence on large bank risks change after the global financial crisis?," *Journal of Corporate Finance* 44, 149-166.

Werder, A. V., T. Talaulicar, and G. L. Kolat, 2005, "Compliance with the German Corporate Governance Code: An Empirical Analysis of the Compliance Statements by German Listed Companies," *Corporate Governance: An International Review* 13(2), 178-187.

Williamson, O. E., 2008, "Corporate Boards of Directors: In Principle and in Practice," *Journal of Law, Economics, and Organization* 24(2), 247-272.

Yafeh, Y., 2000, “Corporate Governance in Japan: Past Performance and Future Prospects,” *Oxford Review of Economic Policy* 16(2), 74-84.

Yermack, D. “Higher Market Valuation of Companies with a Small Board of Directors,” *Journal of Financial Economics* 40(2), 185-211.

Zattoni, A. and F. Cuomo, 2010, “How Independent, Competent and Incentivized Should Non-executive Directors Be? An Empirical Investigation of Good Governance Codes,” *British Journal of Management* 21(1), 63-79.

Zhang, D., M. Hu, and Q. Ji, 2020, “Financial markets under the global pandemic of COVID-19,” *Finance Research Letters* 36, 101528.

Figure 1: Board Structures in Japan

This figure shows changes in board structures from the fiscal year 2009 to 2018. These three lines show the percentage of firms with less than, exactly, or over two outside directors, respectively.

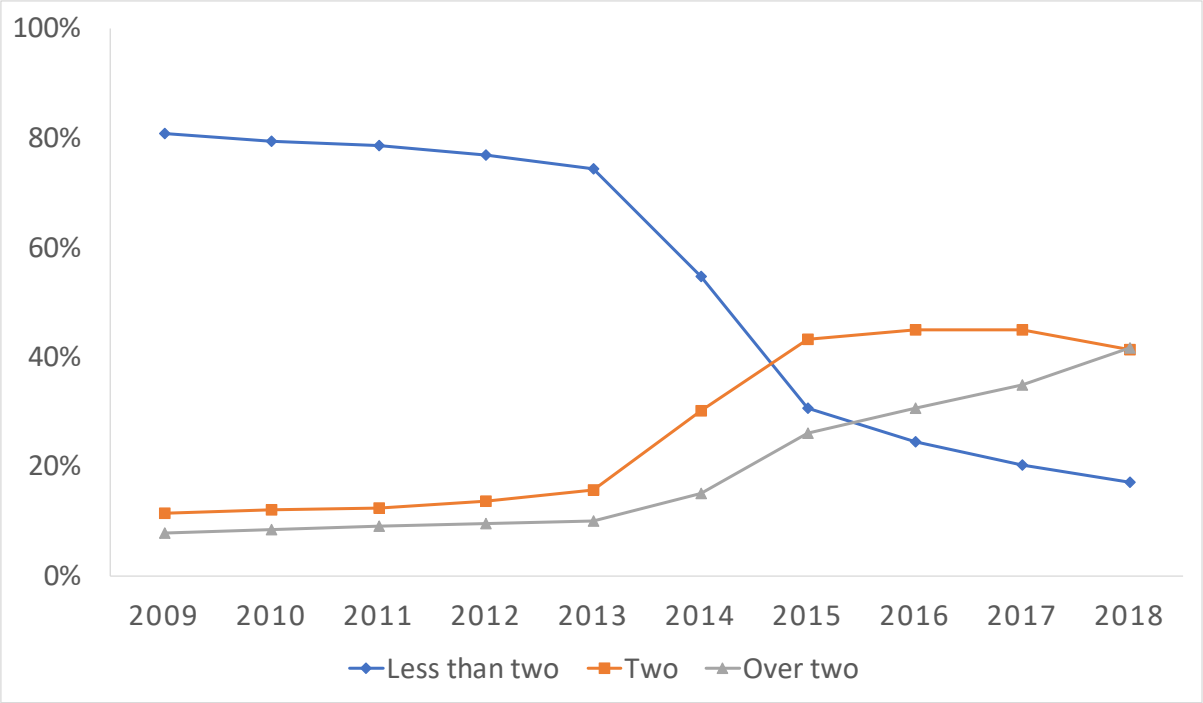

Figure 2: Compliance Decisions

This figure shows the percentage of firms that had two outside directors in years from 2009 to 2018, but not in 2012. This value is zero in 2012 by definition.

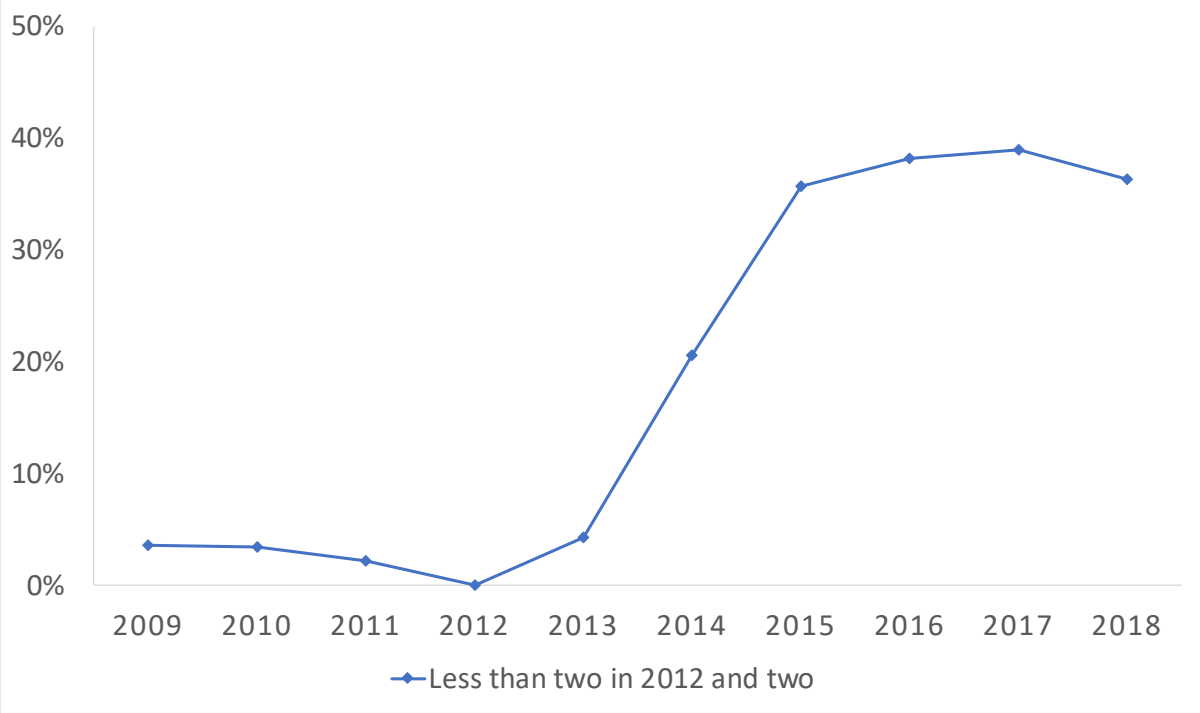

Table 1: Summary Statistics

This table shows the summary statistics. Changes in Tobin's Q are from December 2018 to 2019, January 2019 to 2020, February 2019 to 2020, …, and November 2019 to 2020. Other variables are lagged ones, i.e., those for the fiscal year of 2018.

	Mean	SD	p1	p10	p25	p50	p75	p90	p99	N
Change in Dec. Tobin's Q	0.132	0.618	-1.294	-0.117	-0.020	0.035	0.140	0.433	2.825	3039
Change in Jan. Tobin's Q	0.076	0.462	-1.151	-0.133	-0.037	0.016	0.099	0.346	2.215	3039
Change in Feb. Tobin's Q	-0.115	0.441	-2.166	-0.372	-0.145	-0.055	-0.003	0.088	1.138	3039
Change in Mar. Tobin's Q	-0.167	0.480	-2.590	-0.470	-0.186	-0.076	-0.016	0.065	0.941	3039
Change in Apr. Tobin's Q	-0.107	0.446	-2.064	-0.382	-0.159	-0.059	0.000	0.110	1.453	3039
Change in May Tobin's Q	0.026	0.482	-1.332	-0.207	-0.077	-0.013	0.057	0.246	2.435	3039
Change in Jun. Tobin's Q	0.023	0.538	-1.412	-0.242	-0.093	-0.022	0.043	0.267	2.852	3039
Change in Jul. Tobin's Q	-0.046	0.563	-1.924	-0.362	-0.135	-0.047	0.014	0.193	2.513	3039
Change in Aug. Tobin's Q	0.073	0.638	-1.273	-0.199	-0.072	-0.009	0.069	0.333	2.970	3039
Change in Sep. Tobin's Q	0.078	0.621	-1.384	-0.203	-0.075	-0.009	0.083	0.348	2.847	3039
Change in Oct. Tobin's Q	-0.012	0.513	-1.578	-0.295	-0.129	-0.041	0.025	0.225	2.355	3039
Change in Nov. Tobin's Q	0.010	0.630	-1.598	-0.300	-0.118	-0.035	0.040	0.258	2.862	3039
Immediate minimal compliance	0.134	0.340	0	0	0	0	0	1	1	3039
Minimal compliance	0.363	0.481	0	0	0	0	1	1	1	3039
Over-compliance	0.416	0.493	0	0	0	0	1	1	1	3039
Non-compliance	0.171	0.377	0	0	0	0	0	1	1	3039
T12	0.739	0.439	0	0	0	1	1	1	1	3039
Cash	0.216	0.157	0.015	0.052	0.100	0.176	0.290	0.438	0.729	3039
Tangibility	0.263	0.188	0.002	0.030	0.118	0.237	0.370	0.525	0.797	3039
Leverage	0.135	0.142	0.000	0.000	0.011	0.093	0.218	0.339	0.576	3039
Current portion of borrowing	0.026	0.037	0.000	0.000	0.000	0.011	0.038	0.069	0.183	3039
Maturing debt	0.002	0.008	0.000	0.000	0.000	0.000	0.000	0.005	0.044	3039
Credit line	0.047	0.099	0.000	0.000	0.000	0.000	0.047	0.175	0.467	3039
Cash flow	0.080	0.075	-0.234	0.025	0.051	0.079	0.113	0.154	0.266	3039
Exports	0.153	0.239	0.000	0.000	0.000	0.000	0.260	0.556	0.871	3039
Capex	0.041	0.038	0.000	0.006	0.015	0.031	0.056	0.086	0.191	3039
R&D	0.013	0.027	0.000	0.000	0.000	0.002	0.015	0.036	0.124	3039
Firm size	10.664	1.747	7.098	8.582	9.446	10.487	11.688	12.969	15.482	3039
Firm age	58.239	25.583	11	21	39	61	74	89	123	3039
Ownership by top ten shareholders	49.549	15.313	18.965	30.588	37.587	48.043	60.861	71.043	84.398	3039
Ownership by financial institutions	17.377	12.834	0.030	1.525	6.687	15.389	26.106	36.254	50.478	3039
Ownership by corporations	26.796	18.417	0.374	4.720	11.809	23.755	39.458	53.796	75.459	3039
Ownership by individuals	41.870	21.152	6.001	15.344	24.908	39.298	56.606	72.977	90.289	3039
Ownership by executives	6.241	10.364	0.007	0.070	0.263	1.512	6.791	20.588	48.077	3039
Ownership by foreign investors	11.822	12.187	0.010	0.500	2.015	7.765	18.489	29.250	50.719	3039
Board independence	0.299	0.128	0.000	0.154	0.200	0.286	0.375	0.455	0.667	3039
Board size	2.459	1.174	0	1	2	2	3	4	6	3039
Committee board	0.287	0.453	0	0	0	0	1	1	1	3039
Outside board chair	0.007	0.085	0	0	0	0	0	0	0	3039
Incentive compensation	0.328	0.470	0	0	0	0	1	1	1	3039
Stock option	0.269	0.443	0	0	0	0	1	1	1	3039
Takeover defense	0.123	0.329	0	0	0	0	0	1	1	3039
Electrical voting	0.351	0.477	0	0	0	0	1	1	1	3039
Voting platform	0.260	0.439	0	0	0	0	1	1	1	3039
Compensation policy	0.824	0.381	0	0	1	1	1	1	1	3039
Compensation disclosure	0.090	0.286	0	0	0	0	0	0	1	3039
English proxy statements	0.308	0.462	0	0	0	0	1	1	1	3039
CEO director	0.233	0.423	0	0	0	0	0	1	1	3039
Female director	0.408	0.491	0	0	0	0	1	1	1	3039
Banker director	0.152	0.359	0	0	0	0	0	1	1	3039
Non-Manufacturer	0.546	0.498	0	0	0	1	1	1	1	3039
Domestic non-manufacturer	0.457	0.498	0	0	0	0	1	1	1	3039

Table 2: Immediate Minimal Compliance

This table examines the effect of immediate minimal compliance on firm value. The regressand is the change in monthly Tobin's Q. The main regressor is the interaction of the dummy for being listed in the first or second section of the Tokyo Stock Exchange with the immediate minimal complier dummy. Standard errors are clustered at the industry level and reported in parenthesis. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

	Yearly change in monthly Tobin's Q											
	Dec.	Jan.	Feb	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Immediate minimal compliance * T12	0.079*	0.088**	0.102**	0.137**	0.137**	0.185***	0.203***	0.189**	0.216***	0.203***	0.144***	0.141***
	(0.044)	(0.038)	(0.041)	(0.067)	(0.056)	(0.051)	(0.067)	(0.071)	(0.068)	(0.058)	(0.051)	(0.047)
Immediate minimal compliance	-0.068**	-0.100***	-0.102**	-0.118*	-0.116**	-0.168***	-0.206***	-0.191***	-0.224***	-0.201***	-0.158***	-0.166***
	(0.032)	(0.032)	(0.040)	(0.059)	(0.048)	(0.046)	(0.061)	(0.068)	(0.067)	(0.060)	(0.053)	(0.048)
T12	0.043*	0.025	0.001	0.014	-0.006	0.001	0.016	0.006	0.007	0.011	0.008	0.015
	(0.022)	(0.019)	(0.015)	(0.019)	(0.021)	(0.018)	(0.022)	(0.025)	(0.029)	(0.026)	(0.026)	(0.029)
Cash	0.047	-0.092	-0.261***	-0.305***	-0.183**	-0.006	0.033	-0.034	0.035	0.028	-0.011	-0.017
	(0.165)	(0.128)	(0.086)	(0.095)	(0.088)	(0.082)	(0.095)	(0.091)	(0.115)	(0.112)	(0.089)	(0.100)
Tangibility	-0.069	-0.056	0.114***	0.239***	0.104*	0.008	0.002	0.030	-0.202	-0.221	-0.135	-0.135
	(0.144)	(0.126)	(0.028)	(0.037)	(0.056)	(0.088)	(0.099)	(0.104)	(0.176)	(0.186)	(0.122)	(0.108)
Leverage	0.024	0.083	0.099	0.069	0.037	-0.003	0.067	0.115	0.176	0.127	0.102	0.099
	(0.067)	(0.082)	(0.077)	(0.080)	(0.110)	(0.133)	(0.177)	(0.166)	(0.166)	(0.153)	(0.130)	(0.124)
Current portion of borrowing	0.058	-0.353	0.015	0.143	0.107	-0.038	-0.145	-0.129	-0.313	-0.105	0.216	0.279
	(0.262)	(0.239)	(0.280)	(0.265)	(0.239)	(0.301)	(0.312)	(0.295)	(0.306)	(0.300)	(0.278)	(0.261)
Maturing debt	1.175	0.181	-0.168	-0.848*	-0.736**	-0.628	-1.103	-1.502*	-1.442	-1.502	-0.648	-0.487
	(0.792)	(0.434)	(0.369)	(0.455)	(0.337)	(0.463)	(0.962)	(0.775)	(1.032)	(0.979)	(0.888)	(0.974)
Credit line	-0.194	-0.226***	-0.081	-0.093	-0.099	-0.181**	-0.146***	-0.092*	-0.274***	-0.285***	-0.191**	-0.185*
	(0.124)	(0.064)	(0.048)	(0.056)	(0.065)	(0.067)	(0.043)	(0.051)	(0.054)	(0.056)	(0.081)	(0.102)
Cash flow	0.269	-0.105	-0.269	-0.300	-0.505	-0.337	-0.550*	-0.551	-0.467	-0.101	-0.270	-0.103
	(0.388)	(0.142)	(0.299)	(0.500)	(0.420)	(0.331)	(0.298)	(0.503)	(0.320)	(0.223)	(0.224)	(0.234)
Exports	0.044	-0.019	-0.013	-0.058	-0.091	-0.045	-0.027	-0.086	-0.042	-0.057	-0.059	-0.033
	(0.162)	(0.093)	(0.064)	(0.056)	(0.070)	(0.091)	(0.069)	(0.081)	(0.088)	(0.072)	(0.071)	(0.085)
Capex	0.102	0.329	-0.467**	-0.719***	-0.142	0.534	0.444	0.050	0.817**	0.561**	0.374*	0.314
	(0.200)	(0.400)	(0.189)	(0.203)	(0.334)	(0.345)	(0.317)	(0.318)	(0.379)	(0.259)	(0.211)	(0.209)
R&D	4.332***	0.536	-2.305*	-2.617*	-0.802	1.562	1.951**	0.728	2.239	2.047	0.942	0.781
	(1.008)	(0.378)	(1.224)	(1.477)	(1.121)	(0.995)	(0.875)	(1.117)	(1.575)	(1.610)	(1.609)	(1.821)
Firm size	-0.086***	-0.054***	0.023	0.055*	0.026	-0.023	-0.034**	-0.006	-0.079***	-0.081***	-0.039***	-0.029*
	(0.024)	(0.014)	(0.017)	(0.030)	(0.021)	(0.014)	(0.013)	(0.014)	(0.023)	(0.027)	(0.013)	(0.015)
Firm age	-0.001	-0.000	0.001***	0.001**	0.001	-0.001*	-0.001	-0.000	-0.001	-0.001	-0.000	-0.001
	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)
Ownership by top ten shareholders	-0.001	0.001	0.003**	0.003*	0.003*	0.001	0.001	0.002	-0.001	0.000	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Ownership by financial institutions	-0.000	-0.002	0.001	0.001	-0.005	-0.012**	-0.013**	-0.008	-0.011*	-0.007	-0.004	-0.009
	(0.004)	(0.004)	(0.004)	(0.003)	(0.004)	(0.005)	(0.006)	(0.005)	(0.006)	(0.007)	(0.005)	(0.007)
Ownership by corporations	0.000	-0.001	0.002	0.003	-0.005	-0.012**	-0.012**	-0.007	-0.010**	-0.009	-0.005	-0.009
	(0.004)	(0.005)	(0.004)	(0.004)	(0.004)	(0.005)	(0.006)	(0.005)	(0.005)	(0.005)	(0.004)	(0.006)
Ownership by individuals	-0.002	-0.001	0.004	0.006	-0.002	-0.011**	-0.012**	-0.007	-0.012**	-0.009	-0.004	-0.009
	(0.004)	(0.005)	(0.005)	(0.004)	(0.004)	(0.006)	(0.006)	(0.005)	(0.005)	(0.006)	(0.004)	(0.006)
Ownership by executives	0.004***	-0.000	-0.003***	-0.006**	-0.004***	-0.002	-0.002	-0.003	-0.001	-0.002	-0.003	-0.002
	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Ownership by foreign investors	0.004	0.003	0.002	0.003	-0.004	-0.009	-0.010	-0.005	-0.005	-0.003	-0.002	-0.005
	(0.006)	(0.006)	(0.004)	(0.004)	(0.004)	(0.006)	(0.006)	(0.005)	(0.006)	(0.007)	(0.005)	(0.007)
Board independence	-0.007	-0.057	-0.067	-0.164***	-0.120	-0.194	-0.365	-0.348	-0.346	-0.330	-0.400**	-0.351*
	(0.087)	(0.062)	(0.055)	(0.057)	(0.084)	(0.126)	(0.222)	(0.233)	(0.265)	(0.252)	(0.183)	(0.176)
Board size	-0.003	-0.000	0.002	0.010	0.008	0.014*	0.022	0.012	0.029*	0.032**	0.037***	0.030***
	(0.013)	(0.007)	(0.007)	(0.008)	(0.006)	(0.008)	(0.014)	(0.017)	(0.017)	(0.012)	(0.009)	(0.009)
Committee board	0.043	0.036	0.031*	0.039**	0.037*	0.047	0.044	0.064	0.043	0.046	0.040	0.042
	(0.036)	(0.024)	(0.017)	(0.017)	(0.021)	(0.039)	(0.041)	(0.044)	(0.057)	(0.057)	(0.053)	(0.055)
Outside board chair	-0.117	-0.040	0.034	0.030	-0.009	-0.092***	-0.054	0.007	-0.010	-0.036	-0.051	-0.106**
	(0.072)	(0.049)	(0.062)	(0.066)	(0.050)	(0.032)	(0.054)	(0.055)	(0.055)	(0.058)	(0.049)	(0.039)
Incentive compensation	0.034	0.018	0.009	0.007	0.006	0.007	0.018	0.019	0.009	-0.012	-0.018	-0.024
	(0.022)	(0.019)	(0.012)	(0.011)	(0.012)	(0.016)	(0.017)	(0.016)	(0.017)	(0.016)	(0.017)	(0.020)
Stock option	-0.023	-0.014	-0.051**	-0.058**	-0.038	-0.017	-0.006	-0.014	0.016	0.034*	0.031*	0.045***
	(0.033)	(0.019)	(0.021)	(0.025)	(0.029)	(0.023)	(0.029)	(0.025)	(0.019)	(0.018)	(0.017)	(0.014)
Takeover defense	0.018	0.018	0.014	0.023	0.004	0.002	0.002	-0.006	-0.006	-0.014	-0.010	-0.000
	(0.037)	(0.029)	(0.024)	(0.022)	(0.019)	(0.015)	(0.019)	(0.023)	(0.023)	(0.026)	(0.023)	(0.028)
Electrical voting	0.034	-0.007	-0.034	-0.015	-0.018	0.012	-0.006	-0.015	0.015	0.029	0.021	-0.028
	(0.040)	(0.023)	(0.032)	(0.034)	(0.042)	(0.042)	(0.065)	(0.065)	(0.049)	(0.048)	(0.043)	(0.047)
Voting platform	0.032	0.057**	0.057	-0.001	0.023	0.027	0.017	0.044	0.038	0.028	-0.000	0.027
	(0.044)	(0.028)	(0.035)	(0.030)	(0.041)	(0.043)	(0.047)	(0.057)	(0.054)	(0.047)	(0.052)	(0.064)
Compensation policy	0.049	0.032**	0.004	-0.002	0.023*	0.042**	0.059**	0.054	0.074*	0.076*	0.047	0.068
	(0.032)	(0.014)	(0.019)	(0.020)	(0.013)	(0.020)	(0.023)	(0.034)	(0.038)	(0.039)	(0.037)	(0.049)
Compensation disclosure	0.157*	0.095**	0.051	0.005	0.036	0.074*	0.082*	0.042	0.115**	0.086**	0.056*	0.069*
	(0.084)	(0.044)	(0.041)	(0.040)	(0.043)	(0.044)	(0.044)	(0.037)	(0.044)	(0.038)	(0.031)	(0.036)
English proxy statements	-0.011	-0.020	-0.041*	-0.052**	-0.041**	-0.010	0.016	-0.004	-0.006	-0.017	-0.010	0.019
	(0.027)	(0.022)	(0.022)	(0.020)	(0.018)	(0.021)	(0.019)	(0.017)	(0.019)	(0.015)	(0.027)	(0.033)
Industry dummies	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039
Fiscal month dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039

Table 3: Minimal Compliance

Panels A-B of this table examine the effect of minimal, not immediate minimal, compliance on monthly firm value. Panel A replaces the immediate minimal compliance dummy with the minimal compliance one from Table 2, and Panel B adds the minimal compliance dummy in Table 2. Standard errors are clustered at the industry level and reported in parenthesis. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Only Minimal Compliance

	Yearly change in monthly Tobin's Q											
	Dec.	Jan.	Feb	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Minimal compliance * T12	0.003	-0.023	-0.046	-0.032	-0.028	-0.016	-0.017	-0.009	0.027	0.028	-0.002	-0.028
	(0.027)	(0.020)	(0.030)	(0.022)	(0.029)	(0.052)	(0.050)	(0.050)	(0.052)	(0.055)	(0.051)	(0.085)
Minimal compliance	0.004	0.003	0.017	0.008	0.013	-0.009	-0.026	-0.038	-0.055	-0.040	-0.025	-0.009
	(0.036)	(0.014)	(0.016)	(0.017)	(0.015)	(0.029)	(0.025)	(0.028)	(0.033)	(0.032)	(0.031)	(0.045)
T12	0.049**	0.043**	0.031*	0.044**	0.021	0.030	0.049	0.036	0.024	0.024	0.026	0.042
	(0.022)	(0.019)	(0.016)	(0.019)	(0.014)	(0.024)	(0.034)	(0.036)	(0.038)	(0.032)	(0.032)	(0.039)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fiscal month dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039

Panel B: Both Immediate Minimal and Minimal Compliance

	Yearly change in monthly Tobin's Q											
	Dec.	Jan.	Feb	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Immediate minimal compliance * T12	0.101*	0.133**	0.171***	0.204**	0.201**	0.250***	0.271***	0.244**	0.247***	0.232***	0.183***	0.202***
	(0.058)	(0.051)	(0.057)	(0.088)	(0.078)	(0.084)	(0.095)	(0.092)	(0.079)	(0.071)	(0.055)	(0.068)
Minimal compliance * T12	-0.028	-0.063**	-0.099**	-0.097**	-0.092**	-0.095	-0.102	-0.086	-0.048	-0.043	-0.057	-0.089
	(0.037)	(0.027)	(0.039)	(0.039)	(0.044)	(0.070)	(0.067)	(0.064)	(0.060)	(0.064)	(0.055)	(0.096)
Immediate minimal compliance	-0.093**	-0.133***	-0.149***	-0.160**	-0.162***	-0.208***	-0.241***	-0.209***	-0.236***	-0.222***	-0.180***	-0.206***
	(0.041)	(0.043)	(0.048)	(0.067)	(0.058)	(0.066)	(0.071)	(0.065)	(0.065)	(0.063)	(0.049)	(0.070)
Minimal compliance	0.032	0.043**	0.062***	0.057***	0.061***	0.054	0.047	0.025	0.016	0.027	0.029	0.053
	(0.043)	(0.021)	(0.019)	(0.020)	(0.019)	(0.039)	(0.030)	(0.022)	(0.031)	(0.033)	(0.027)	(0.056)
T12	0.048**	0.043**	0.031*	0.044**	0.021	0.030	0.049	0.036	0.024	0.023	0.026	0.042
	(0.022)	(0.019)	(0.016)	(0.019)	(0.014)	(0.024)	(0.034)	(0.036)	(0.038)	(0.032)	(0.032)	(0.039)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fiscal month dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039

Table 4: Alternative Definitions of Compliance or Board Structures

Panels A and B respectively use over- and non-compliance dummies, and Panel C includes both. Panel D uses board independence. Standard errors are clustered at the industry level and reported in parenthesis. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Over-Compliance

	Yearly change in monthly Tobin's Q											
	Dec.	Jan.	Feb	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Over-compliance * T12	0.033	0.079**	0.080**	0.066	0.017	0.025	0.019	-0.021	-0.069	-0.087	-0.055	-0.103
	(0.039)	(0.032)	(0.031)	(0.040)	(0.032)	(0.051)	(0.063)	(0.061)	(0.079)	(0.078)	(0.071)	(0.079)
Over-compliance	-0.076	-0.087*	-0.074**	-0.073*	-0.036	-0.012	0.029	0.082	0.115	0.114	0.088	0.152*
	(0.083)	(0.046)	(0.027)	(0.036)	(0.030)	(0.046)	(0.062)	(0.063)	(0.075)	(0.080)	(0.075)	(0.076)
T12	0.041**	0.011	-0.010	0.011	0.004	0.013	0.031	0.031	0.046*	0.053*	0.036	0.054*
	(0.019)	(0.020)	(0.019)	(0.020)	(0.020)	(0.021)	(0.022)	(0.022)	(0.026)	(0.028)	(0.027)	(0.032)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fiscal month dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039

Panel B: Non-Compliance

	Yearly change in monthly Tobin's Q											
	Dec.	Jan.	Feb	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Non-compliance * T12	0.016	-0.004	0.032	0.018	0.073	0.024	0.024	0.036	0.031	0.010	0.012	0.055
	(0.049)	(0.033)	(0.047)	(0.042)	(0.066)	(0.058)	(0.055)	(0.051)	(0.060)	(0.064)	(0.054)	(0.058)
Non-compliance	0.018	0.041	0.006	0.012	-0.015	-0.005	0.017	0.008	0.003	-0.035	-0.027	-0.055
	(0.050)	(0.031)	(0.019)	(0.024)	(0.028)	(0.038)	(0.034)	(0.041)	(0.047)	(0.044)	(0.039)	(0.041)
T12	0.052**	0.041**	0.006	0.028	-0.007	0.014	0.033	0.018	0.021	0.021	0.012	0.004
	(0.025)	(0.018)	(0.020)	(0.017)	(0.028)	(0.024)	(0.023)	(0.021)	(0.026)	(0.024)	(0.024)	(0.028)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fiscal month dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039

Panel C: Both Over- and Non-Compliance

	Yearly change in monthly Tobin's Q											
	Dec.	Jan.	Feb	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Immediate minimal compliance * T12	0.108	0.138**	0.186***	0.211**	0.207**	0.256***	0.267***	0.235***	0.233***	0.216***	0.164***	0.159***
	(0.074)	(0.062)	(0.061)	(0.087)	(0.079)	(0.076)	(0.088)	(0.082)	(0.068)	(0.054)	(0.042)	(0.038)
Over-compliance * T12	0.057	0.111**	0.150***	0.134**	0.095**	0.109	0.097	0.050	-0.012	-0.028	-0.006	-0.042
	(0.067)	(0.048)	(0.049)	(0.051)	(0.044)	(0.071)	(0.074)	(0.073)	(0.082)	(0.076)	(0.069)	(0.080)
Non-compliance * T12	0.051	0.059	0.121*	0.104	0.143	0.110	0.108	0.098	0.067	0.035	0.038	0.067
	(0.063)	(0.051)	(0.069)	(0.062)	(0.089)	(0.085)	(0.077)	(0.071)	(0.055)	(0.047)	(0.050)	(0.054)
Immediate minimal compliance	-0.101*	-0.142**	-0.170***	-0.178**	-0.176***	-0.225***	-0.246***	-0.210***	-0.229***	-0.218***	-0.177***	-0.182***
	(0.059)	(0.055)	(0.053)	(0.069)	(0.060)	(0.065)	(0.070)	(0.062)	(0.062)	(0.057)	(0.047)	(0.052)
Over-compliance	-0.105	-0.127**	-0.135***	-0.130***	-0.101***	-0.081	-0.043	0.020	0.055	0.060	0.041	0.095
	(0.100)	(0.061)	(0.038)	(0.042)	(0.031)	(0.053)	(0.056)	(0.051)	(0.068)	(0.071)	(0.070)	(0.072)
Non-compliance	-0.002	-0.013	-0.069**	-0.054*	-0.067	-0.080	-0.067	-0.060	-0.047	-0.077	-0.071	-0.096*
	(0.063)	(0.038)	(0.031)	(0.029)	(0.040)	(0.059)	(0.048)	(0.046)	(0.049)	(0.053)	(0.049)	(0.056)
T12	0.014	-0.024	-0.083*	-0.059	-0.078	-0.071	-0.049	-0.042	-0.013	-0.004	-0.012	-0.006
	(0.045)	(0.038)	(0.041)	(0.038)	(0.052)	(0.051)	(0.043)	(0.038)	(0.034)	(0.032)	(0.026)	(0.036)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fiscal month dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039

Panel D: Board Independence

	Yearly change in monthly Tobin's Q											
	Dec.	Jan.	Feb	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Board independence * T12	-0.023	0.162	0.202	0.281*	0.046	0.019	0.172	0.209*	0.084	-0.006	0.174	-0.078
	(0.275)	(0.214)	(0.171)	(0.156)	(0.187)	(0.248)	(0.191)	(0.121)	(0.157)	(0.162)	(0.153)	(0.160)
Board independence	0.008	-0.161	-0.195	-0.338**	-0.148	-0.207	-0.476**	-0.481*	-0.403	-0.329	-0.513***	-0.309*
	(0.210)	(0.133)	(0.125)	(0.127)	(0.142)	(0.147)	(0.181)	(0.243)	(0.302)	(0.286)	(0.172)	(0.178)
T12	0.057	-0.013	-0.045	-0.048	-0.004	0.014	-0.013	-0.034	0.003	0.031	-0.028	0.047
	(0.077)	(0.061)	(0.042)	(0.037)	(0.040)	(0.065)	(0.055)	(0.037)	(0.044)	(0.043)	(0.035)	(0.040)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fiscal month dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039

Table 5: Placebo Test

This table conducts a placebo test. It uses one-year lagged variables relative to Table 2. Standard errors are clustered at the industry level and reported in parenthesis. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

	Yearly change in monthly Tobin's Q (One year ago)											
	Dec.	Jan.	Feb	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Immediate minimal compliance * T12	0.136	0.034	0.064	0.052	0.027	-0.048	-0.002	0.013	0.039	0.008	-0.018	0.049
	(0.130)	(0.091)	(0.089)	(0.087)	(0.087)	(0.069)	(0.055)	(0.066)	(0.067)	(0.074)	(0.046)	(0.054)
Immediate minimal compliance	-0.054	0.023	-0.003	0.019	0.034	0.072	0.040	0.030	-0.009	0.033	0.029	-0.022
	(0.102)	(0.074)	(0.071)	(0.076)	(0.075)	(0.069)	(0.050)	(0.057)	(0.047)	(0.059)	(0.050)	(0.031)
T12	-0.025	0.023	-0.012	-0.022	-0.020	-0.018	-0.037	-0.040	-0.012	-0.034	-0.000	0.000
	(0.042)	(0.027)	(0.015)	(0.019)	(0.019)	(0.021)	(0.026)	(0.028)	(0.039)	(0.043)	(0.022)	(0.027)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fiscal month dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039

Table 6: Director Characteristics

This table examines whether director characteristics affect firm value. They are being a CEO in Panel A, female in Panel B, and a banker in Panel C. Standard errors are clustered at the industry level and reported in parenthesis. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Panel A: CEO Director

	Yearly change in monthly Tobin's Q											
	Dec.	Jan.	Feb	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Immediate minimal compliance * T12 * CEO director	0.234**	0.055	0.243	0.269	0.238	0.206	0.128	0.206	0.155	0.165	0.120	-0.011
	(0.112)	(0.126)	(0.273)	(0.290)	(0.234)	(0.215)	(0.238)	(0.235)	(0.252)	(0.280)	(0.284)	(0.387)
Immediate minimal compliance * T12	0.059	0.089*	0.070*	0.101	0.106	0.163**	0.191**	0.160*	0.195**	0.179**	0.123**	0.141**
	(0.049)	(0.048)	(0.036)	(0.072)	(0.063)	(0.061)	(0.079)	(0.080)	(0.083)	(0.071)	(0.057)	(0.057)
Immediate minimal compliance * CEO director	-0.361***	-0.127	-0.263	-0.258	-0.247	-0.258	-0.174	-0.165	-0.119	-0.102	-0.026	0.061
	(0.112)	(0.113)	(0.284)	(0.314)	(0.247)	(0.209)	(0.230)	(0.249)	(0.251)	(0.297)	(0.314)	(0.414)
T12 * CEO director	-0.193*	-0.074	-0.044	-0.073	-0.126*	-0.157**	-0.095*	-0.098*	-0.063	-0.114	-0.024	0.051
	(0.100)	(0.070)	(0.101)	(0.085)	(0.073)	(0.073)	(0.054)	(0.049)	(0.072)	(0.082)	(0.032)	(0.140)
Immediate minimal compliance	-0.026	-0.087**	-0.067	-0.084	-0.085	-0.138**	-0.186**	-0.171**	-0.211**	-0.191**	-0.155**	-0.175**
	(0.036)	(0.041)	(0.041)	(0.072)	(0.058)	(0.054)	(0.072)	(0.082)	(0.082)	(0.077)	(0.070)	(0.076)
CEO director	0.231*	0.115	0.044	0.065	0.121	0.175**	0.114	0.087	0.076	0.122	0.012	-0.023
	(0.125)	(0.095)	(0.100)	(0.083)	(0.076)	(0.085)	(0.072)	(0.057)	(0.077)	(0.085)	(0.030)	(0.121)
T12	0.068**	0.034	0.007	0.024*	0.011	0.021	0.028	0.019	0.015	0.026	0.011	0.009
	(0.028)	(0.023)	(0.015)	(0.013)	(0.016)	(0.021)	(0.026)	(0.027)	(0.034)	(0.030)	(0.028)	(0.039)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fiscal month dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039

Panel B: Female Director

	Yearly change in monthly Tobin's Q											
	Dec.	Jan.	Feb	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Immediate minimal compliance * T12 * female director	0.033	0.042	-0.204	-0.067	-0.050	-0.038	-0.040	0.021	0.147*	0.222**	0.209**	0.063
	(0.063)	(0.058)	(0.134)	(0.119)	(0.078)	(0.105)	(0.093)	(0.070)	(0.084)	(0.084)	(0.082)	(0.077)
Immediate minimal compliance * T12	0.075	0.082	0.148**	0.146	0.147*	0.197***	0.217**	0.182**	0.175**	0.141**	0.083	0.120**
	(0.055)	(0.051)	(0.071)	(0.095)	(0.075)	(0.072)	(0.086)	(0.078)	(0.066)	(0.055)	(0.056)	(0.058)
Immediate minimal compliance * female director	-0.039	-0.043	0.221*	0.115	0.073	0.038	0.040	0.014	-0.086	-0.145**	-0.123*	-0.015
	(0.050)	(0.041)	(0.122)	(0.116)	(0.063)	(0.088)	(0.072)	(0.067)	(0.067)	(0.061)	(0.063)	(0.046)
T12 * female director	0.078	0.083	0.066	0.030	0.047	0.078	0.089	0.058	0.015	-0.019	-0.046	-0.010
	(0.053)	(0.062)	(0.054)	(0.057)	(0.062)	(0.074)	(0.082)	(0.052)	(0.054)	(0.052)	(0.051)	(0.058)
Immediate minimal compliance	-0.062	-0.094**	-0.154**	-0.145	-0.134**	-0.179***	-0.219***	-0.198**	-0.207***	-0.170***	-0.131**	-0.164***
	(0.041)	(0.041)	(0.068)	(0.086)	(0.062)	(0.064)	(0.076)	(0.079)	(0.069)	(0.060)	(0.056)	(0.052)
Female director	-0.052	-0.062	-0.073	-0.041	-0.054	-0.084	-0.106	-0.101	-0.082	-0.054	-0.032	-0.052
	(0.041)	(0.052)	(0.062)	(0.062)	(0.058)	(0.071)	(0.080)	(0.066)	(0.055)	(0.046)	(0.032)	(0.035)
T12	0.021	0.002	-0.017	0.007	-0.018	-0.021	-0.008	-0.009	0.004	0.018	0.023	0.019
	(0.027)	(0.029)	(0.026)	(0.031)	(0.036)	(0.031)	(0.031)	(0.026)	(0.029)	(0.024)	(0.023)	(0.028)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fiscal month dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039

Panel C: Banker Director

	Yearly change in monthly Tobin's Q											
	Dec.	Jan.	Feb	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Immediate minimal compliance * T12 * banker director	0.059	0.130	0.096	0.038	0.034	0.021	-0.042	-0.087	0.065	0.086	0.110	0.037
	(0.084)	(0.094)	(0.097)	(0.070)	(0.067)	(0.094)	(0.097)	(0.120)	(0.105)	(0.130)	(0.116)	(0.197)
Immediate minimal compliance * T12	0.078	0.083**	0.095**	0.137**	0.137**	0.191***	0.212***	0.201**	0.216***	0.202***	0.139***	0.146***
	(0.048)	(0.039)	(0.040)	(0.064)	(0.053)	(0.050)	(0.069)	(0.074)	(0.071)	(0.060)	(0.051)	(0.042)
Immediate minimal compliance * banker director	-0.123	-0.168*	-0.058	-0.024	-0.045	-0.093	-0.004	0.055	-0.075	-0.082	-0.077	-0.039
	(0.078)	(0.085)	(0.064)	(0.062)	(0.055)	(0.085)	(0.102)	(0.129)	(0.097)	(0.124)	(0.107)	(0.194)
T12 * banker director	-0.012	-0.129**	-0.142**	-0.144*	-0.102*	-0.130*	-0.093	-0.079	-0.189**	-0.242***	-0.234***	-0.278**
	(0.080)	(0.059)	(0.068)	(0.073)	(0.054)	(0.070)	(0.057)	(0.053)	(0.069)	(0.083)	(0.079)	(0.105)
Immediate minimal compliance	-0.057	-0.090**	-0.101**	-0.120*	-0.114**	-0.163***	-0.209***	-0.199**	-0.224***	-0.202***	-0.160***	-0.173***
	(0.035)	(0.034)	(0.041)	(0.060)	(0.048)	(0.048)	(0.066)	(0.074)	(0.070)	(0.064)	(0.056)	(0.050)
Banker director	0.006	0.124*	0.121*	0.120*	0.076	0.125*	0.090*	0.082*	0.185**	0.241***	0.230***	0.296***
	(0.068)	(0.064)	(0.064)	(0.063)	(0.047)	(0.067)	(0.052)	(0.046)	(0.068)	(0.083)	(0.080)	(0.100)
T12	0.043*	0.033	0.011	0.024	0.001	0.009	0.022	0.011	0.019	0.027	0.024	0.033
	(0.022)	(0.021)	(0.014)	(0.017)	(0.019)	(0.018)	(0.022)	(0.025)	(0.028)	(0.024)	(0.025)	(0.026)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fiscal month dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039

Table 7: Manufacturers versus Non-Manufacturers

This table examines whether immediate minimal compliers in non-manufacturing industries performed better. Panel A uses the non-manufacturer dummy, and Panel B excludes exporters from them. Standard errors are clustered at the industry level and reported in parenthesis. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Full Non-Manufacturers

	Yearly change in monthly Tobin's Q											
	Dec.	Jan.	Feb	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Immediate minimal compliance * T12 * non-manufacturer	-0.107	-0.088	0.110*	0.236***	0.165**	0.136*	0.215**	0.239**	0.201**	0.209**	0.187**	0.139
	(0.068)	(0.063)	(0.062)	(0.085)	(0.073)	(0.072)	(0.080)	(0.097)	(0.094)	(0.081)	(0.076)	(0.084)
Immediate minimal compliance * T12	0.153**	0.147***	0.038	0.002	0.042	0.107*	0.078	0.045	0.093	0.075	0.029	0.052
	(0.067)	(0.030)	(0.029)	(0.040)	(0.043)	(0.053)	(0.055)	(0.072)	(0.060)	(0.056)	(0.064)	(0.079)
Immediate minimal compliance * non-manufacturer	0.096	0.078	-0.104*	-0.185**	-0.134**	-0.132**	-0.214***	-0.272***	-0.261***	-0.270***	-0.257***	-0.231**
	(0.075)	(0.051)	(0.053)	(0.072)	(0.058)	(0.060)	(0.073)	(0.095)	(0.095)	(0.086)	(0.077)	(0.097)
T12 * non-manufacturer	0.152**	0.095**	-0.004	-0.025	-0.012	0.016	0.000	-0.020	-0.008	-0.005	0.008	0.013
	(0.070)	(0.037)	(0.037)	(0.047)	(0.046)	(0.043)	(0.037)	(0.060)	(0.052)	(0.039)	(0.051)	(0.059)
Immediate minimal compliance	-0.135**	-0.153***	-0.041	-0.009	-0.037	-0.092**	-0.081**	-0.031	-0.071	-0.043	-0.009	-0.032
	(0.061)	(0.034)	(0.026)	(0.034)	(0.031)	(0.036)	(0.039)	(0.058)	(0.055)	(0.054)	(0.060)	(0.076)
Non-manufacturer	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
T12	-0.056	-0.037	0.004	0.030	0.002	-0.009	0.017	0.021	0.014	0.016	0.006	0.010
	(0.063)	(0.032)	(0.031)	(0.041)	(0.033)	(0.034)	(0.034)	(0.055)	(0.046)	(0.034)	(0.050)	(0.059)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fiscal month dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039

Panel B: Excluding Exporters from Non-Manufacturers

	Yearly change in monthly Tobin's Q											
	Dec.	Jan.	Feb	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Immediate minimal compliance * T12 * domestic non-manufacturer	-0.121**	-0.047	0.208**	0.341**	0.231**	0.138**	0.249***	0.247***	0.220***	0.205***	0.218***	0.157*
	(0.053)	(0.078)	(0.080)	(0.128)	(0.092)	(0.063)	(0.074)	(0.083)	(0.075)	(0.064)	(0.068)	(0.077)
Immediate minimal compliance * T12	0.143**	0.109***	-0.010	-0.041	0.016	0.112**	0.072	0.055	0.093*	0.088*	0.025	0.052
	(0.061)	(0.034)	(0.048)	(0.062)	(0.046)	(0.047)	(0.049)	(0.062)	(0.051)	(0.045)	(0.056)	(0.068)
Immediate minimal compliance * domestic non-manufacturer	0.084	0.001	-0.208**	-0.310**	-0.211**	-0.153**	-0.258***	-0.305***	-0.289***	-0.270***	-0.279***	-0.249***
	(0.060)	(0.083)	(0.077)	(0.124)	(0.083)	(0.063)	(0.073)	(0.091)	(0.084)	(0.069)	(0.066)	(0.080)
T12 * domestic non-manufacturer	0.142**	0.065*	-0.038	-0.062	-0.035	0.007	-0.017	-0.014	-0.047	-0.037	-0.032	-0.006
	(0.063)	(0.035)	(0.040)	(0.056)	(0.048)	(0.036)	(0.034)	(0.049)	(0.046)	(0.035)	(0.046)	(0.050)
Immediate minimal compliance	-0.118**	-0.103**	0.008	0.045	-0.005	-0.089**	-0.073*	-0.034	-0.072	-0.060	-0.013	-0.038
	(0.048)	(0.042)	(0.049)	(0.065)	(0.044)	(0.035)	(0.038)	(0.053)	(0.048)	(0.045)	(0.052)	(0.063)
Domestic non-manufacturer	0.032	0.065	0.097	0.106	0.075	0.063	0.090**	0.080**	0.087**	0.065*	0.050	0.034
	(0.087)	(0.106)	(0.085)	(0.096)	(0.082)	(0.062)	(0.043)	(0.032)	(0.042)	(0.036)	(0.032)	(0.048)
T12	-0.034	-0.009	0.026	0.052	0.017	-0.001	0.029	0.018	0.037	0.035	0.029	0.022
	(0.052)	(0.029)	(0.032)	(0.041)	(0.027)	(0.029)	(0.031)	(0.045)	(0.040)	(0.030)	(0.043)	(0.048)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fiscal month dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039	3039

Appendix: Variable Definition

	Definition
Change in Dec. Tobin's Q	Change in December Tobin's Q, which is market capitalization in December plus total liabilities divided by assets, from 2018 to 19
Change in Jan. Tobin's Q	Change in January Tobin's Q from 2019 to 20
Change in Feb. Tobin's Q	Same as above except for a change in February
Change in Mar. Tobin's Q	Same as above except for a change in March
Change in Apr. Tobin's Q	Same as above except for a change in April
Change in May Tobin's Q	Same as above except for a change in May
Change in Jun. Tobin's Q	Same as above except for a change in June
Change in Jul. Tobin's Q	Same as above except for a change in July
Change in Aug. Tobin's Q	Same as above except for a change in August
Change in Sep. Tobin's Q	Same as above except for a change in September
Change in Oct. Tobin's Q	Same as above except for a change in October
Change in Nov. Tobin's Q	Same as above except for a change in November
Immediate minimal compliance	Dummy is one if the firm had other than two outside directors in 2012 and two from 2014 to 2018
Minimal compliance	Dummy is one if the firm had two outside directors in 2018
Over-compliance	Dummy is one if the firm had over two outside directors in 2018
Non-compliance	Dummy is one if the firm had less than two outside directors in 2018
T12	Dummy is one if the firm listed its stock in the first or second section of Tokyo Stock Exchange in 2018
Cash	Cash divided by assets in 2018
Tangibility	Tangible assets divided by assets in 2018
Leverage	Debts divided by assets in 2018
Current portion of borrowing	Current portion of long-term bank borrowing divided by assets in 2018
Maturing debt	Debt maturing within a year divided by assets in 2018
Credit line	Credit lines divided by assets in 2018
Cash flow	Operating profits plus depreciation divided by assets in 2018
Exports	Exports divided by sales in 2018
Capex	Capital expenditures divided by assets in 2018
R&D	R&D expenses divided by assets in 2018
Firm size	Log of assets in 2018
Firm age	Years since establishment as of 2018
Ownership by top ten shareholders	Ownership shares by the top ten largest shareholders in 2018
Ownership by financial institutions	Ownership shares by financial institutions in 2018
Ownership by corporations	Ownership shares by corporations in 2018
Ownership by individuals	Ownership shares by individuals in 2018
Ownership by executives	Ownership shares by executives in 2018
Ownership by foreign investors	Ownership by foreign investors in 2018
Board independence	The ratio of outside directors to total directors in 2018
Board size	Number of directors in 2018
Committee board	Dummy is one if the firm adopted either the three- or one-committee system in 2018
Outside board chair	Dummy is one if board chair was outside director in 2018
Incentive compensation	Dummy is one if the firm adopted a performance compensation scheme in 2018
Stock option	Dummy is one if the firm adopted a stock option in 2018
Takeover defense	Dummy is one if the firm adopted a takeover defense measure in 2018
Electrical voting	Dummy is one if the firm adopted an electrical voting system at annual general meetings in 2018
Voting platform	Dummy is one if the firm joined a platform for electrical voting at annual general meetings in 2018
Compensation policy	Dummy is one if the firm disclosed its policy to determine compensation in 2018
Compensation disclosure	Dummy is one if the firm disclosed executive compensation in 2018
English proxy statements	Dummy is one if the firm issues an English translation of its proxy statement
CEO director	Dummy is one if the firm had a CEO director in 2018
Female director	Dummy is one if the firm had a female director in 2018
Banker director	Dummy is one if the firm had a director with banking experience in 2018
Non-Manufacturer	Dummy is one if the firm is in a non-manufacturing sector
Domestic non-manufacturer	Dummy is one if the firm is in a non-manufacturing sector and does not export