Can Market Reform Engineer Value Creation:

Evidence from Japan

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Masters in Finance
Spring 2025

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Abstract

Japanese equities have long delivered low performance and carried low valuations relative to global peers. We analyse efforts to reform this market and achieve higher levels of investor returns. In particular, we examine the Action to Implement Management that is Conscious of Cost of Capital and Stock Price announced in 2023. Our event study analysis indicates that this reform did not lead to price appreciation for companies who adopted the reform, neither upon announcement nor the publication of the List of companies complying with the request. We cannot equally say companies were punished for not adopting this action and broadly observe little differentiated impacts within groups of stocks, based on metrics such as ROE or leverage. There is evidence of the reforms being more context dependent, with cumulative abnormal returns for compliant firms increasing inversely with price-to-book ratios, so some of the laggards targeted by the reform may be benefiting. We also question the speed of information processing, with less conventional, longer event windows providing more powerful results. While this latest initiative displays many encouraging elements to promote value creation, the evidence thus far is that the market only rewards companies with low valuations, and even then, requires time to reach this conclusion. There are positive indications, but by no means broad success, in these reforms.

Keywords: *Japanese markets, value creation, event study, valuation theory, corporate governance*

Acknowledgements: *We would like to thank our Tutor, Professor Anders Anderson, for his support & feedback during the entire thesis process. We also acknowledge the work of the European Institute of Japanese Studies within SSE, whose postgraduate courses and further seminars helped motivate our interest in this exciting region.*

1. Introduction

"This time is different" - four of the most dangerous words in the English language, according to John Templeton (Wallace, 1987), yet optimism regarding improvements in Japanese equities and their corporate governance is sky-high. Much has been written in popular media and the investment industry on the *Revolution* bracing Japan - Benes (2021), JP Morgan (2024), and Weiss (2025) are just three investment managers using that very phrase easily found in a Google search. But little academic analysis has been done.

Japanese equities have long underperformed relative to the West, with poor returns on capital and many trading below book value. A major contributor to this has been the value-destructive actions of management, who have not historically cared for outside or minority shareholders, but this may finally be changing. Japanese stocks have delivered strong returns in recent years, even matching a runaway American stock market (see Exhibit 1a in *Appendix B*), and when combined with the significant reform made to corporate governance in the last decade, it is understandable to see the trend hailed as a compelling opportunity for investors. Yet, many trade at dismal valuations, as presented in Figure 1.

Figure 1:
% of Nikkei 225 Trading Below Book Value

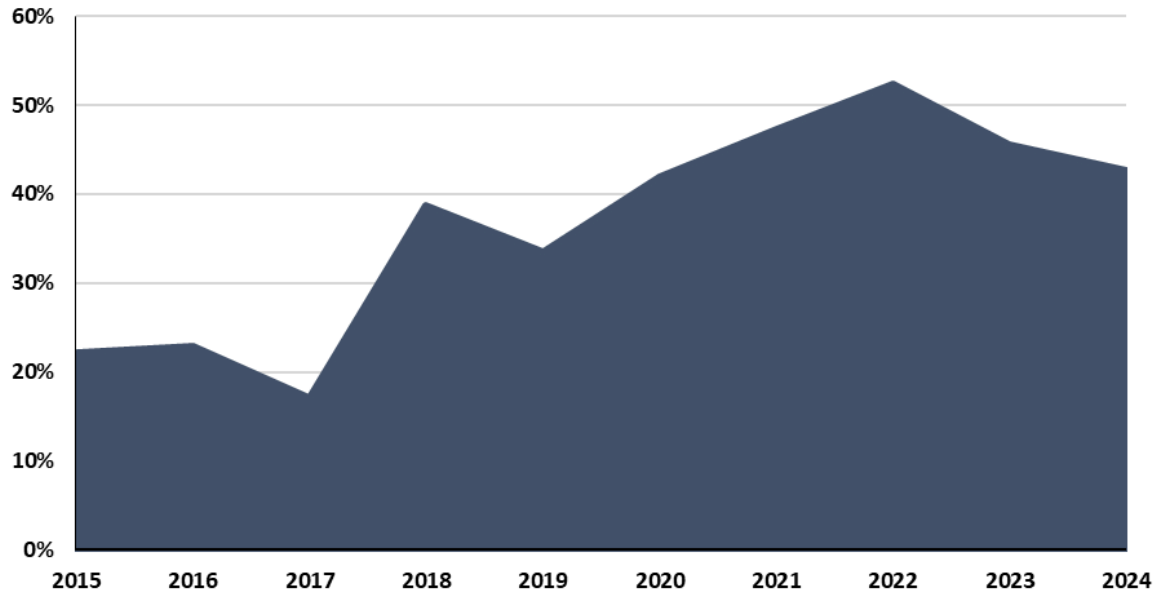


Figure 1: Nikkei 2025 constituents trading below book value, using data retrieved at end of each year, as per Capital IQ, 2025

Even at the end of 2024, about 43% of the flagship Nikkei 225's constituents traded below book value - in the S&P 500, this is only ~3% of names (Capital IQ data, 2025). Moreover, this immense stock market appreciation has not come with multiple expansion, as the Price-to-Earnings (PER) and Price-to-Book (PBR) ratios of Japan remain stagnant over recent years and often lower than Western peers in Europe and the US (see Exhibit 1b in *Appendix B*). Fundamentals suggest that the TOPIX (Japan's major cap-weighted index) could trade at a PBR of ~2.5x, but at year-end 2024, it traded at 1.25x[1]. These low valuations and value spread compared to the world suggest investors have material concerns about the economic value-add of companies; that companies could not sustainably earn a spread above the market consensus cost of capital, and this additional risk is heavily tied to Japan's poor corporate governance. We can infer the market-implied cost of equity for Japan using the valuation ratios of its market-weighted TOPIX index (Figure 2).

Figure 2: Implied Cost of Equity
Japan vs US & Europe

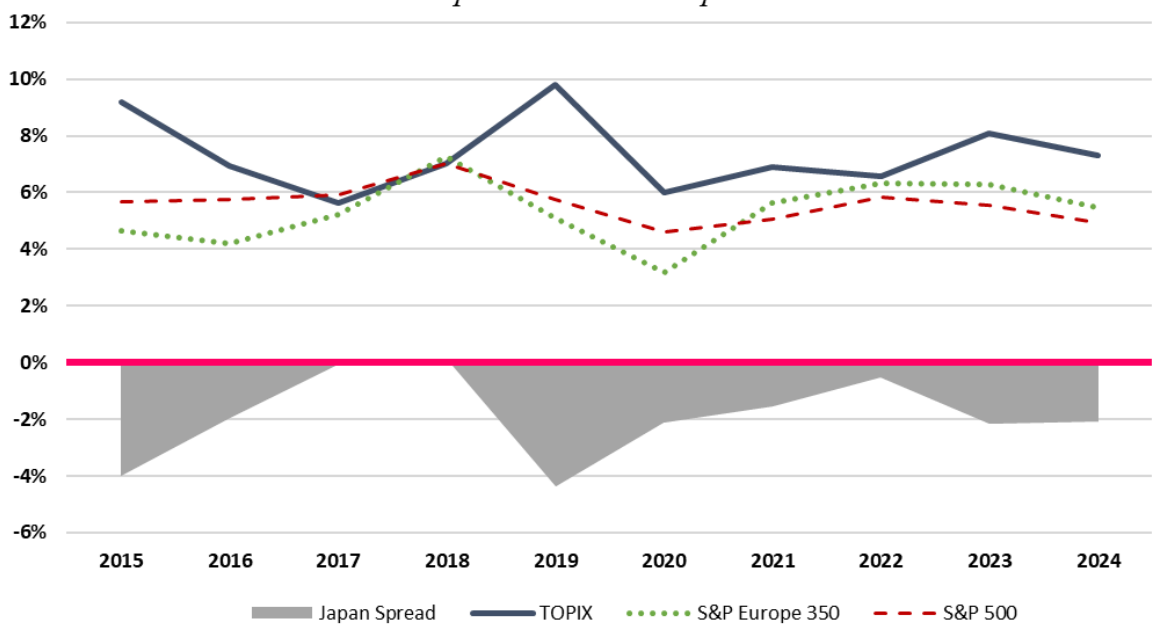


Figure 2: Author calculations of the implied cost of equity capital, using Capital IQ data (2025) on TOPIX to represent Japan, the S&P 500 to represent the US, and the S&P Europe 350 to represent Europe. This has been calculated as the average implied cost of equity using the price earnings ratio and price book ratio of the market at year end, as per formulae under "Corporate Value". Complete versions shwn in Exhibits 1c,d,e

The Japan Spread refers to the difference between the average of the US & Europe versus Japan.

This displays that Japanese equities carry a clear risk premium versus Western peers, and this spread has been persistent over the last decade and longer. Japan's corporate

[1] More context on this under Corporate Value; this refers to a justified PBR formula calculation using fundamentals such as ROE, cost of equity and growth.

governance contributes to this via agency and opportunity costs, as it doesn't prioritise shareholder interests, with insulated management, poor capital allocation and bloated balance sheets, and indifference to outside or minority investors all being institutionally normalised. While the Japan Exchange Group (JPX), which runs the Tokyo Stock Exchange (TSE), have attempted many reforms to improve the quality of corporate governance in Japan, their 2023 edict could plausibly be one of the most substantial. This was called the *Action to Implement Management that is Conscious of Cost of Capital and Stock Price*. This is referred to as the *Initiative* throughout, and is the key subject of this paper.

The *Initiative* is a formal requirement for all firms listed on the Prime and Standard market of the TSE (large and mid-caps alike) to explicitly disclose how management thought about maximising value for shareholders: in terms of their capital allocation, business performance, and overall valuation. When a firm publishes these plans, they are said to have 'complied' or 'opted in' (we use these terms interchangeably throughout). These companies are published on a List each month, informing the market of their status. All non-compliant firms are implicitly *named and shamed*, when they do not appear on the List in any month.

Our research question is to understand: *Did the Initiative affect corporate value?* This effect can be hypothesised to be negative or positive, based on how a firm reacted to the request, but also based on firm characteristics which may explain their likelihood to generate positive/negative returns. We test this both at the time of its initial announcement in March 2023, and each month of 2024, as the JPX disclosed the names of all companies that had complied with the *Initiative* on the 'List'. Specifically, we test three alternative hypotheses:

H_1: *The Initiative Announcement is associated with outperformance in Japanese equities*

H_2: *Being published on the List is associated with abnormal returns across the market*

H_3: *There is an effect of being published on the list dependent on firm level characteristics*

If investors take note of these reforms as financially material, we should see the impact: initiatives to reduce the cost of capital, increase returns (either on capital or shareholder returns), or increase the growth of earnings over time will correspond with an increase in stock prices around the event announcement. Secondly, companies that do not comply may be seen as providing a negative signal: either because they are relatively falling behind competitors, or it demonstrates a continuation of business as usual over longer time horizons, damaging shareholder value more than previously expected, or just a sentiment

shock to that effect. It is possible for good governance firms or those with an individually low cost of equity that the relative impact of the reform is more marginal - this motivates our segmental analysis of groups and interaction terms.

Our findings suggest that the impact of the *Initiative* was not significant, neither upon announcement in March 2023 nor in the monthly List publications. Over the conventional short-term horizon of (0,2), we observe no significance of this compliance variable in multivariate regressions or the test statistics in the event study. It is also not significant, in pre-event trading or a longer window. For our controls, we typically observe that longer post-event windows carry more powerful statistics, in magnitude and significance, and so we must also question a potential violation of market efficiency or just delayed information processing reflect the complexity of the information - investors need to both weigh up its probability of success within the firm, and its success relative to peers, and we expand on this competitive element throughout.

So while compliance is not effective overall, it can improve CAR depending on a firm's characteristics. Our use of interaction variables, combining the compliance variable for each company at each date with their PBR, their Return on Equity (ROE), and their size, tells us if the impact of the reform over short and long post-event windows is dependent upon firm level characteristics, based on the motivations of the reform. Low PBR firms react more positively to being published on the List than higher PBR firms, perhaps supporting the *Initiative's* mission to address the considerable PBR laggards and bring the market back towards global peers. However, the overall PBR was not significant on average, and as we observe that the effects of compliance increase positively with size (over a short 0,2 window), we must doubt the efficacy of the risk reduction argument that the reforms implicitly target. Small firms realise less CAR from complying than large firms, but this coefficient changes as we extend the window, perhaps due to market repricing. Overall, we do not see it as a risk-reducing reform: the market still reacts to favour size and value in the immediate aftermath, but with time, small stocks and low PBRs benefit more from complying than larger or higher PBR names. Fundamentals like ROE are not significant at any window, suggesting the *Initiative* is not signalling improved profitability or likely capital efficiency.

Given the List was updated 12 times in 2024, we can analyse each date as its own event. We analyse CARs per event date and within segments of various controls (such as leverage, ROE, PBR), and primarily only find significance around the month of June, around

the time of Japan's packed Annual General Meeting (AGM) season (Fukuda, 2024). There is perhaps a heightened time dependence regarding significance: investors take more notice of capital efficiency plans around the AGM season, when management may be more inclined to communicate more actively with investors to get re-election, but are otherwise not particularly bothered by the reporting. This may also reflect behavioural limitations of investors, focusing only on material information when it is available or prominent.

We also discuss why this *Initiative* was needed in the first place: *Management that is Conscious of the Cost of Capital and Stock Price* had been mentioned in the Japanese Corporate Governance Code, but it was just a guideline. This created an *implementation gap* between policy and practice, and the 'quiet-life' that eroded value was able to continue (Ikeda et al. 2018). At the time of the announcement, even after decades of post-Bubble reform, 50% of the TSE's flagship Prime Market traded below book value, 60% of the midcap-Standard Market also had PBRs below 1 and an ROE below 8% (JPX, 2023, p. 2). This suggested the market had concerns about the growth prospects of major Japanese companies, *and/or* the risk required to invest in them (JPX, 2023). This is a clear indictment of past reform efforts, but the *Initiative* appears different: instead of spreading principles, the JPX is enforcing practices, in that it enforces compliance, progressively improves, and carries a credible threat of delisting. All of these challenge the institutional norms of Japanese business, and we have already seen record levels of companies leave the Exchange in 2024 due to these increased costs of communicating with investors)[2]. We believe there is a potential motivation in analysing this design, especially if successful, for exchange operators globally hoping to close valuation gaps against global rivals. This is especially topical in 2025, given media awareness of the "transatlantic value gap" and the spate of delistings from European exchanges to achieve higher valuations (see Johnston, 2025).

The empirical analysis employs an event study methodology as popularised by MacKinlay (1996), Fama et al. (1969) and others. We test if firms who opted into the List[3], in any given month, experienced cumulative abnormal returns over the short-term event window. We calculate the CARs primarily to a (0,2)[4] event window, with several others employed for robustness, including a pre-event test to assess information leakage and

[2] The TSE was merged with the Osaka Securities Exchange in 2013, creating one larger Exchange for Japan's largest companies. This merger created the Japan Exchange Group, as the overall operator.
[3] Opting in refers to being featured on the List. Terms like opted in, compliant, and disclosing all refer to a company's compliance with this request, meaning they are in the treatment group
[4] This means the CAR calculation includes abnormal returns from the day of the event (day 0) until two days after (day 2)

potentially anticipatory trading. To account for potential event-related volatility clustering and the prevalence of event-date cross correlations between stocks (given the shared event date), we test grouped portfolios of stocks (as per Campbell et al. 1997) and follow the t-stat calculation method of Kolari and Pynnönen (2010). This disclosure format, with clear in and out groups, also allows us to test asymmetrical effects: it is likely that disclosing capital efficiency plans or not disclosing plans will have different effects (similar to Guest and Nerino, 2020, who studied corporate governance ratings), and crucially, the companies disclosing plans may be starting from a different base level of cost-conscious management, so the change to consensus expectations is of course different. These effects of compliance or non-compliance could also change within certain clusters of stocks, such as large vs small size, low vs high price to book, and others, as the *Initiative* was designed to improve valuation ratios and overall value.

This paper contributes to corporate governance and value creation-related literature. The format of the List - in that treatment and control groups are publicly announced - creates a quasi-natural experiment, which is rare in governance settings, as regulation is often immediately effective market-wide, or gradually disseminated with no clear event date (Black and Khanna, 2007). Therefore, we think this study is not only a Japan-specific study of a famously lacklustre market, but can provide more general insights into how effective value-creation reforms are on equity prices. Direct studies on the quantitative impact of Japan's corporate governance reform also appear rare (Morikawa, 2020), and is compromised by the relative recency of the reforms. This is where an event study can contribute, as it captures investor reactions as pricing machines, rather than needing years of cross-sectional data. While we do not delve into macroeconomic analysis or the *Japanification* debate, the efficacy of structural reforms in reinvigorating corporate dynamism is a vital component for the *three arrows* philosophy, and our analysis shows limitations in most historical efforts, by nature of their optionality, lack of enforcement, and reticence to punish non-compliance.

The paper proceeds as follows: Section 2 analyses the history of Japan's very different corporate governance, and why reforms have failed to achieve change thus far. Section 3 introduces the *Initiative* and assesses its design relative to past corporate governance efforts. Section 4 is a methodology-specific literature review. Section 5 then explains the methodology and data employed, using event study and panel regression analysis to understand the impacts of the *Initiative*. Our findings are discussed in Section 6.

2. Background

2.1 Corporate Governance

Corporate governance can be a nebulous term; the JPX defines it as "*a structure for transparent, fair, timely and decisive decision-making by companies, with due attention to the needs and perspectives of shareholders and also customers, employees and local communities*" (JPX/FSA, 2021, p. 1). This has largely aligned Japan with Western definitions, such as CFA Institute, 2018[5]. While parties like employees and communities are essential in describing a good governance system, more explicit reference is made to the main purpose of governance as protecting the long term viability of the organisation, to "*prevent one group from expropriating the cash flows of one or more other groups"* (CFA Institute, 2018, p. 4). So, improvements in governance should contain material information regarding corporate value, as it affects both the prioritisation of corporate value in the firm. The announcement of this change should be a market-moving event.

2.2 Corporate Value

Corporate value is closely linked to how companies manage and allocate their resources. It is, in short, about making the firm sustainably more valuable in the medium-to-long term, and the JPX promotes this through targeting key financial metrics (JPX, 2023). These metrics include valuation ratios, such as Price-to-Book-Ratio (PBR) and Price-to-Earnings-Ratio (PER), measures of risk and return like the Weighted Average Cost of Capital (WACC) and Cost of Equity, and profitability indicators like Return on Equity (ROE) and Return on Invested Capital (ROIC). Admittedly, the PBR is the most referred-to metric from the TSE in their disclosure, and given that many commentators called this the "PBR Reform", this is a central improvement to target (Nikkei, 2023; Watanabe, 2024). This suite of variables stems from academic valuation theory, including the formulae for calculating the justified valuation ratios of an asset (Damodaran, 2011, 2025):

Justified PER formula: $\frac{D/E}{k-g}$

Justified PBR formula: $\frac{ROE-g}{k-g}$

*Where *D/E* is the payout ratio; *k* is the cost of equity; and *g* is the sustainable long-run growth rate

[5] The CFA Institute's *Manual for Investors* describes corporate governance as "*a framework that defines the rights, roles, and responsibilities of various groups—including management, the board, controlling shareowners, and minority or non controlling shareowners—within an organization"*

These three 'fundamentals' are also summarised in Exhibit 2a (*Appendix B)*. These formulae are not confidently assumed to be fair values, as deriving a proper, sustainable *ROE, g,* and *payout ratio* for the market is impossible *ex-ante*. However, the calculations provide a helpful reference point for the relative risk still embedded in Japanese equities. For instance, if we insert the fundamentals of the TOPIX, we could derive a justified PBR of 2.1 using the index's average ROE of 11% over the last 3 years, and a CAPM-calculated cost of equity of 6.8%[6]; given the TOPIX posted 15% ROE last year, we could be more aggressive and arrive at around 3x book value with the same inputs (Capital IQ data, 2025). Either of these ROEs is surely above any typical cost of equity calculation; yet, we know from Exhibit 1b that the valuation remains near half of this: investors must have a higher return requirement, and this risk premium ultimately suppresses the valuation of Japanese firms. This means the cost of equity is higher, and the longer-term, sustainable return expectation is lower, as investors fear poor long-term growth, and do not see Japanese equities as generating economic value-add.

Secondly, one can perform *comparative statistics* on any of these formulae when considering the channel by which corporate governance reforms improve corporate value. For instance, improving shareholder payouts by unwinding cross-shareholdings/cash piles can improve dividends in the short term, but also increase the returns on capital, as balance sheets are reduced. More importantly, a clearer outline of how management will use shareholders' capital and be held accountable for their performance can credibly reduce the risk required for any particular company (reducing agency conflicts). While Japan's sovereign risk premium is low (Damodaran, 2025), the effective risk premium charged on many stocks can be inferred as higher. The valuation gaps referred to previously reflect higher costs of capital on the secondary market, as the rearranged equations show:

PER-implied Cost of Equity: $k = \frac{D/E}{PER\,(trading)} + g$

PBR-implied Cost of Equity: $k = \frac{ROE - g}{PBR\,(trading)} + g$

This is a stark contrast to globally shrinking risk premia (Figure 2). Given Japan's prolonged period of incredibly low long-term interest rates, the risk premium of equities still comprises the vast majority of this return expectation among investors.[7] Reducing the cost of equity improves overall firm value and relative value multiples (in expectation, at least), and this is a primary channel through which we expect the reform to improve corporate value.

[6] Using a 1.1% 10 year JGB yield and a MRP of 5.7% at year-end 2024
[7] As CAPM is a combination of equity risk premium, risk free rate, and market beta.

The *Initiative* also highlights the potential to improve longer-term growth in earnings and payouts, but these come with more uncertainty.

2.3 Japan's Struggles with Value Creation

Japan's model of capitalism has always been different to Anglo-Saxon orthodoxy - it is a less pro-shareholder and more path-dependent model, where consensus-based decision-making, lifetime employment, and stakeholder orientation have been central to how companies function (Gilson and Milhaupt, 2004). At the heart of this is the concept of *sanpo-yoshi*—the principle of creating mutual benefits for sellers, buyers, and society as a whole. This philosophy may indeed have been successful in the past: Japan grew expeditiously post-War, and these principles probably assisted in that (Flath, 2014). But, its model of capitalism looks to have become less suited to a more globally competitive economy and capital market, as it does not place sufficient emphasis on shareholder returns and value creation.

Several governance red flags, such as non-independent Boards, large cross-shareholdings and cash hoarding, low shareholder activism, and enduring poor returns on capital, have all provided evidence of the 'quiet-life' phenomenon limiting corporate value creation (Ikeda et al. 2018). These problems persisted post-1989, even as regulators attempted reforms to improve market dynamism and transparency. For example, look at the stubborn prevalence of cross-shareholdings, both historically and in more recent years (Exhibit 2b *in Appendix B*). Additionally, at year-end 2023, TOPIX-150 constituent companies held cash of 97% of the outstanding market cap across the index (as per Capital IQ data, 2025), so there has long been a habit of suboptimal capital allocation, with little market pressure holding management accountable. Many governance initiatives were trialled, such as the decision to allow US-style committee board structures, instead of the traditional *kansayaku* auditing system (an internal employee, who could never truly hold management to account; see Allen and Lee (2013) for more). But these came with large degrees of flexibility and optionality, and no credible threats for poor compliance. There was no incentive for management to shift, especially if the market was not pressuring them: The impotence of post-Bubble reforms is summarised by Ahmadjian (2007, p. 57): *"Japanese firms have responded to corporate governance reforms with surface-level adjustments that often preserve traditional control structures. Outside directors are appointed, but they rarely challenge management decisions*." Companies could comply only in *word*, not in *spirit*, as no real penalties were in place to punish companies who defied them, either from the market or

the Board (Buchanan et al. 2019). We call this an 'implementation gap', and it reoccurs in future reform efforts.

2.4 Corporate Governance Code

The first Japanese Corporate Governance Code (CGC) was enacted in June 2015, and represented one of the most significant realignments of Japanese corporate governance. This sought to move Japan broadly into line with Western definitions, such as *CFA Institute (2018)*[8], and laid the groundwork for improving corporate value over the longer term, through individual companies' "self-motivated actions" (FSA, 2015, p. 1). The Code introduced a 'comply or explain' approach to governance, meaning companies did not legally have to comply with the Principles, but must either *comply* with the Principles and adopt them in practice, or *explain* why they cannot, in their governance reports and AGM. The advantage of such an approach is that it necessitates a response from all firms listed on the TSE's Prime & Standard market, so non-compliers won't be able to just hide in the background. On the other hand, the explanation wasn't specifically assessed or criticised, and it was up to investors to be diligently aware of single-security developments, which, considering the dearth of activism historically, is not guaranteed (Badger, 2024; Exhibit 3b in *Appendix B)*. Traditionally, passive institutional investors were often unlikely to challenge management, accepting incumbent control in exchange for receiving stable, consistently increasing dividends (Patrick, 2015). The Code established five Principles which managers and Board members should consider in running their company:

(1) Securing the rights and equal treatment of shareholders, (2) the appropriate cooperation with stakeholders other than shareholders, (3) ensuring appropriate information disclosure and transparency, (4) the responsibilities of the board, and (5) dialogue with shareholders.

There are two significant changes worth highlighting concerning promoting corporate value. First, it was implemented that all companies listed on the First and Second Sections of the Tokyo Stock Exchange had to have at least two independent directors on their boards. The old First and Second Sections correspond broadly to today's Prime and Standard markets (following a 2022 Market Restructuring). This change to Board composition was significant, given the historically internal staffing of company Boards: Charkham (1994) describes it as a position often filled by internal promotion and something company loyalists aspired to. Even

[8] The Corporate Governance of Listed Companies describes it as "*a framework that defines the rights, roles, and responsibilities of various groups—including management, the board, controlling shareowners, and minority or non controlling shareowners—within an organization"*

when directors were externally-sourced, they usually represented a trading partner or a firm with an equity stake in the company (Aoki 1988; Morck and Nakamura 1999). Increasing the independence of Japanese Boards was a major change, one which could credibly begin unwinding the "quiet-life" phenomenon endemic in Japan (Ikeda et al. 2018). The Code was largely complied with in this regard - the level of firms employing two or more outside directors rose markedly post-2015, as shown in Exhibit 2c *(Appendix B)*. Secondly, the Code carried specific reference to greater capital efficiency and encouraged the divestment of cross-shareholdings, and more generally, consideration of the cost of capital. Companies were expected to disclose their overall policy and voting criteria for cross-shareholdings, to allow critical assessment of the strategic rationale and return-accretiveness of any investment in an affiliate company.

Despite all of this, and the issuance of supporting disclosures and guidelines to improve investor relations (FSA, 2021), the principles were not translating to change in practice: Morikawa (2020) studies the impact of the reforms using an instrumental variable regressions to compare the performance of listed and unlisted firms post-2015 (the CGC in 2015 only applied to listed firms). His finding was that over 2014-2017, no performance improvements were observed based on the introduction of the Code, in terms of returns on capital, or total factor productivity. He also found it did not meaningfully lead to increased investments or risk-seeking, implying the relative risk of the company (its true cost of capital) may not have improved. This would be a concerning development for the real economy, as improving corporate dynamism and investment is essential for economic growth (JPX, 2023).

Another empirical study of the Code's impact was produced by Mielcarz et. al (2021), which compared listed companies before and after the introduction of the Code in 2015. Their analysis associates the higher Board independence with greater returns (as in ROE), greater cash distribution, and lower tangible investment (or capex). The difference in returns came primarily from operating profit margin improvements, with capital turnover very slightly affected. This improvement was driven primarily by the underperformance within the lowest tercile of independence, suggesting that increasing governance strength can control against very poor performance, but that to achieve strong relative results in both ROE and operating profitability, one has to achieve best-in-class governance [9]. Nevertheless, the study lends credence to the idea that outside directors are more likely to be shareholder advocates, versus management loyalists, and thus promote returns on capital.

[9] This is based upon the regression results finding a strong relationship at the 5% level between top 25th-percentile firms in board independence and ROE/operating margins.

These results may sound contradictory to Morikawa (2020), but it is important to consider both methodologies. While returns may have improved over that period, Mielcarz et al (2021) don't control for other procyclical factors or the performance of firms in the private market who did not face the same compliance expectations. Moreover, their sample inherently suffers from an endogeneity problem: board composition usually correlates with unobserved good governance indicators, so the CGC wouldn't have been the causal event. We can't conclude that treated firms (Japan) closed valuation or return gaps vs. the rest of the world - from the data, it appears the opposite is true. The persistent valuation gap and ongoing differences in returns on capital between Japan and the US *(*Exhibits 1b; 2d in *Appendix B*) suggest investors are neither seeing nor rewarding performance improvements.

This raises concerns about the *implementation gap* between policy and practice in governance. While many superficial indicators of good governance were adopted, it didn't necessarily motivate changes in practice, as there was little pressure from markets or regulators, and the cultural and institutional norms of Japan were not challenged. For example, while independent directorships soared after the CGC was finalised in 2015, this didn't ensure oversight: Johnston and Miyamoto (2022) explain how historical alliances and cross-shareholdings often meant companies picked *truly-not-independent* board members (see *Case Study; Appendix C; Bhagat & Black, 1998*). Secondly, managers weren't incentivised to improve shareholder returns: many viewed engagement with shareholders as a "formality", rather than ongoing and informed (FSA, 2018). Buchanan et al (2019) features a quote from a manager at a smaller listed company (potentially many of the low PBR companies in the Standard market) about how they feigned compliance with the CGC: "*All you have to do is to write a few things for the current year into what you have already produced…that is the way things go"* (p. 19). Other interviews corroborate this managerial ignorance: of the 73 clauses involved in the CGC, only 11 were actually covered via disclosure, so if you took care of these, investors or the JPX were unlikely to follow up on the remaining 62. Relatedly, anti-shareholder provisions like takeover defences have remained elevated in recent years, despite some initially promising trends (FSA, 2022; Exhibit 2e in *Appendix B*). So while Japan can identify its problems, fixing them remains elusive, as the "*informal constraints embodied in customs, traditions, and codes of conduct are much more impervious to deliberate policies*" (Buchanan et al. 2019, p. 3). In short, translating good governance mandates to value creation takes more than just signing up to charters and ticking boxes. It involves challenging, through proper incentives, the institutional norms of Japanese business. The JPX may have noticed this; thus, the *Initiative* appears different in its design.

3. Action to Implement Management that is Conscious of Cost of Capital and Stock Price (The *Initiative*)

The *Action to Implement Management that is Conscious of the Cost of Capital and Stock Price* was unveiled on 31 March 2023. Applying to all companies listed on the Prime & Standard Markets of the TSE, it set out a process to get management's involvement in assessing their company's relative position with regards to cost-conscious management - both balance sheet and income statement costs. Because of their focus on achieving sustainable value creation and reviving the attractiveness of Japanese equities, the price-to-book ratio is of key concern - many commentators ultimately called this *Initiative* the "PBR Reforms" colloquially (Nikkei, 2023; Watanabe, 2024).

While Japan's Corporate Governance Code explicitly references the expectation that management make capital allocative decisions while always considering the cost of that capital (Principle 5.2), the change had not manifested in practice, with dismal returns and valuations persisting: 50% of companies in the TSE's flagship Prime Market had a Return on Equity (ROE) below 8% and a price-to-book Ratio of less than 1 at the time the *Initiative's* announcement in 2023 (JPX, 2023)**.** This demonstrated investors' scepticism regarding the profitability and growth potential of firms in the market (JPX< 2023), and is supported through the *Value Creation* formulae. This percentage of companies rose to 60% in the Standard Market. Therefore, the TSE and its Council of Experts Concerning the Follow-Up of Market Restructuring (a working group to monitor the progress of its market returning efforts) investigated methods to improve what they cited as the "thought processes of management" in order to be more cost-conscious and returns-seeking (JPX, 2023).

Management were given three steps to comply with the requested action: identify target variables relevant to shareholder returns, design strategic changes to improve these variables, and implement and advise the market on the timeline to completion (see Figure 3). Management and the Board were expected to collaborate on this, as critical variables like return expectations and future capex could only come with the consensus of key investors.

Figure 3: A summary of the requested action, as in Page 2 of the JPX's disclosure (JPX, 2023)

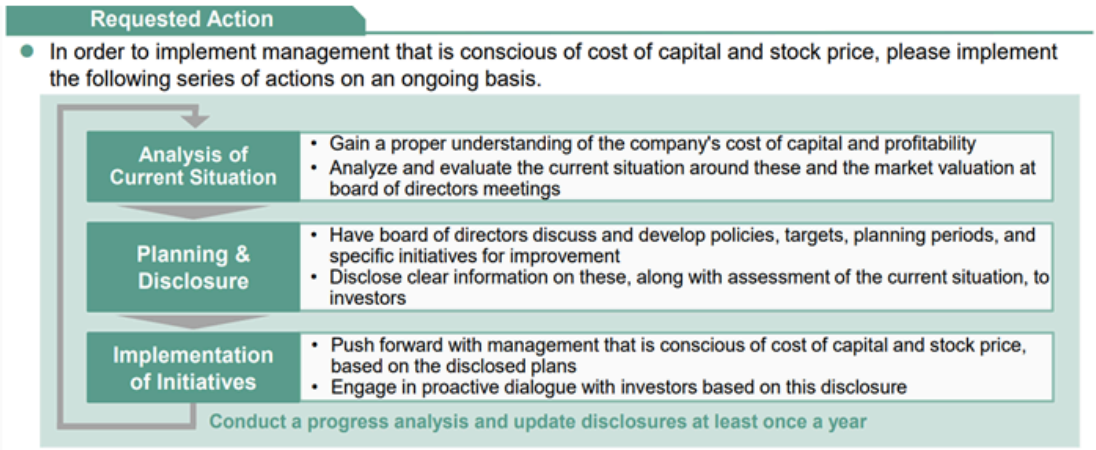


Figure 3 displays the three steps of complying with the Initative that the JPX asked all companies to perform. It also highlights, beneath the final box, that this is supposed to be a continuous improvement exercise, with the measures being frequently reviewed. It therefore represents the start of reform, rather than the final version

Commonly, there were three types of indicators to look at when assessing the current situation: those related to the cost of capital, balance sheet profitability, and market valuation. Cost of capital would typically be the WACC or cost of equity, as informed by market pricing, as this captures investors' risk expectations and return requirements (simply using CAPM would be an incomplete approach). Balance sheet profitability was a core aim of this *Initiative*, as the JPX believed that management thought about profitability only in terms of the income statement (JPX, 2023). That is, they thought solely of margins, neglected capital turnover, and held bloated balance sheets. Therefore, incorporating returns on capital (ROIC or ROE) would consider the effect of excess cash or non-core holdings on the company's (and investor's) returns. Lastly, market valuation refers to common valuation ratios such as the Price to Book ratio or the Price to Earnings ratio of the company (not exclusively). The valuation gap between Japan and other developed markets appears to be a persistent bugbear of JPX management, as it can provide a gauge of whether investors have positive or negative sentiment about a market. Japanese equities have displayed a widening valuation gap against the US over the last decade, and were valued below comparable European large caps up until 2023 (after this *Initiative* was published (Exhibits 1b-e in *Appendix B*). This indicates that, in spite of the progress made on various reforms throughout the 2010s, Japanese equities were not being valued as richly as international rivals; empirically, we know these concerns will be

linked to either the perceived risk or relatively poorer growth expectations in the market. So while Step 1 of Figure 3 - the selection and promotion of metrics - is clearly relevant to our method, Steps 2 and 3 are also worthy of remark. Design and implementation do not necessarily translate effectively in attempts to reform governance. Hence, the material 'event' may not just be the announcement in March, as we often hypothesise in finance. It may instead occur when the company communicates their plans, and this could lead to less efficient, post-event drift as the market digests the disclosure.

The initial announcement of the *Initiative* was in March 2023. This allowed for a period of consultation, both with companies and investors, and allowed companies to prepare their responses to investors. However, the overall response was not necessarily as impressive as the TSE would have liked. At the end of 2023, about 1,000 Prime Market listings and close to 2,000 overall stocks had not complied with the request to disclose enhancements to corporate value (JPX, 2024; Inagaki & Keohane, 2024). This included many blue-chip names like Sony and Toyota, and so to preserve legitimacy, the TSE sought to follow up with more frequent action. In October 2023, the TSE announced that it would publish the List each month on an indefinite basis, starting in January 2024. Each month, the List was updated to include the names of new companies disclosing capital efficiency plans. Compliance improved steadily throughout 2024, most notably around June - the time of Japan's AGM season *(*see Figure 4*)*. We think this increased compliance can be credited to the design of the *Initiative* and its communication.

Figure 4: Cumulative Opt-Ins and Compliance Rate Over Time

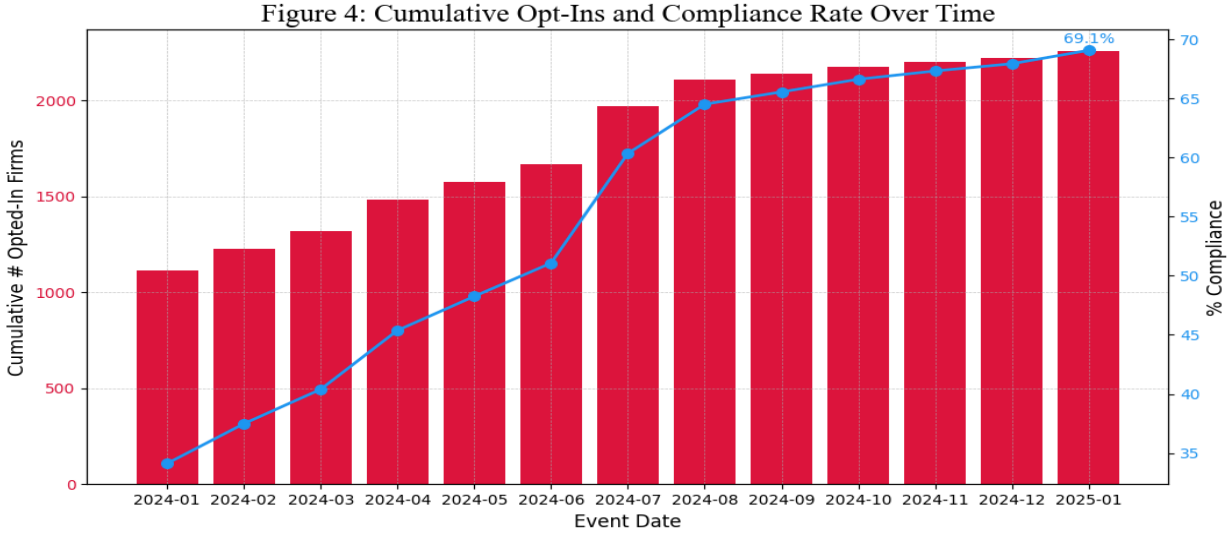


Figure 4 displays the number of TSE-listed firms complying with the Initiative (disclosing plans) throughout 2024, This number is also shown as a percentage of our starting sample at the beginning of 2024. Some firms may have delisted due to the effort of compliance, but we consider this a reflection of the Initiative as well. Therefore, the percentage is calculated relative to our sample as of December 31st, 2023.

3.1 Design of the Initiative

Below, we discuss three characteristics that make the *Initiative* more likely to succeed than historical efforts: the JPX's continuous enforcement, the peer pressure created by such public List announcements, and the presence of a credible threat for firms who try to dodge reform. More importantly, these explain why the publication of the List should be a material event.

In short, this reform is stronger than past efforts due to the continuously active role of the JPX, both helping firms realise higher valuations and constantly improving and revising the methods to get there. An additional layer of potency comes from their ability to tap into the unique cultural mores of Japanese business: honour and shame are material concepts, and managers like to fly in formation (Gilson and Milhaupt, 2004 provides more insight on this path-dependency). Many have only maintained a listing in the past because it was seen as ‘prestigious’ (Keohane & Inagaki, 2024), but now, this prestige comes with a cost and ongoing expectation from the JPX and investors. Additionally, if peers are complying with a new governance format, it can reach a level of popular momentum that necessitates broad compliance.

3.1.1 Kaizen - Continuous Improvement

The primary reason we see this *Initiative* as more effective than past Corporate Governance Code publications is the continuous improvement of the JPX and how frequently they increase and refine their follow-ups with the market. This *Initiative* is supposed to be an ongoing disclosure requirement and a continuous source of dialogue with investors, so by actively looking to challenge examples of “bad compliance”, it increases the chance that all firms can revise plans, improve disclosure iteratively, and in theory, capture the performance benefits associated with the reform. Many past attempts - both within Japan and outside of it - to improve corporate governance involve simply signing up to a charter or *box-ticking*, but this action should be revisited at least once a year (JPX, 2023), with a monthly update for new names who have complied. Therefore, the positive effects (be they empirical or simply optical) would manifest with greater immediacy and frequency, so management could be persuaded to comply by market reactions, especially if their rivals are seen to benefit.

The JPX also plays an active role in providing supporting documents targeting investors and managers. One of these was the document entitled “Key Points Considering the Investor’s Point of View”, first published in February 2024 and later revised that November. It sought to educate management on how to communicate with them more proactively to

achieve greater returns for them in the medium to long-term (JPX, Nov. 2024). Additionally, the JPX has published case studies of firms that had complied with the request, both adequately and insufficiently (JPX, Feb 2024; JPX, Nov 2024 respectively). Both of these create a positive feedback template for companies, giving laggards a model to improve upon, as seen in *Appendix B:* Exhibit 3a. The negative case studies are also relevant to our analysis, as they legitimise the risk that some companies on the List were actually *ineffective compilers*, meaning that the plans they published may have lacked materiality and thus, market participants were reluctant to price them as aggressively as something like Clause 49 (Black and Khanna, 2007). Unlike the Corporate Governance Code, where explanations for non-compliance were not challenged by the JPX, any company's response to the *Initiative* can be criticised overtly. In one example, a firm (whose name was redacted in the public disclosure) had simply stated that "*The Board of Directors has confirmed the company has been able to secure a return on capital that exceeds the cost of capital*" (JPX, Nov. 2024, p. 6); this statement was deemed unsatisfactory by the JPX and investors, as it does not explain *how* this result was arrived at, and additionally, does not set a target for future improvement. The JPX is similarly critical of companies not analysing their cost of capital more deeply: simply using the CAPM was deemed insufficient, and this is an era where several firms fell short (JPX, Nov. 2024). Instead, managers must consider the market consensus cost of capital, and this requires investor input. As demonstrated in Exhibit 1b, this is the important one for listed companies' valuations in the secondary market. Improving returns to exceed the cost of capital should empirically justify a PBR above 1, but simply achieving a PBR above 1 isn't good enough. The message of the *Initiative* is to seek higher valuations, not to just reach parity (JPX, 2023)

Improvements are also being made continuously through broadening the scope of the reform. From January 2025, the TSE will adopt a more tiered approach to improving value creation, by segmenting listed firms to specifically target those who need to improve the implementation of their published changes. It will also specifically target non-compliant firms, and tailor their outreach to improve their capital efficiency. This is designed to tackle latent superficial compliance; a major shortcoming of past corporate governance attempts (see *Background*). Additionally, the List will also become more granular and add columns beyond just compliance: expanding to include the date of the most recently updated disclosure, and a new column indicating that any given company wishes to be contacted by investors (TSE, Aug 2024). The latter could be especially useful in the midcap market, where there is little pre-existing institutional contact. The TSE will also set a time limit for how long

companies can describe their capital efficiency plans as "*Under Consideration"* (as opposed to having *Disclosed* their plans). Again, this prevents what many investors fear: companies superficially complying, doing the bare minimum, and not seeking further improvement (TSE, Aug 2024).

In summation of the first point, past reforms have failed to hold superficial compliance accountable as regulators failed to follow up and always set a higher standard (Buchanan et al. 2019). But the JPX appears to have learned some lessons, and this new, high-touch, and high-frequency approach to publication and guidance is notably different.

3.1.2 Peer Pressure

Secondly, peer pressure plays a significant role in broadening compliance, as cited by Hiromi Yamaji in a 2023 interview (*with* Lewis and Keohane, 2023). The format of the List is that each month, companies that have complied with the request to publish plans are named in the List. Therefore, any Prime or Standard market company that is not named on the List must have failed to disclose any plans. This *name-and-shame* approach seeks to harness business culture in Japan, with embarrassment promoting participation (Lewis and Keohane, 2023). Past market-wide initiatives and disclosures didn't carry such regular and public accountability. It is credible that if rivals within a sector comply with the request, it pressures a company to compete and match their capital efficiency plans, for reputational and competitive reasons. If one company sees a benefit on the stock market from communicating greater capital efficiency, it only intensifies the pressure on their peers to follow suit. This is a very deliberate move on the part of the JPX, and one which could be a model for improving competitiveness in other markets (if intermediate and long-term evidence suggests it's helpful to stock prices). We think this peer pressure aspect is supported by the fact that in the first List, more than half of the Prime market and 89% of the Standard market had failed to disclose their improvement plans (Inagaki & Keohane, 2024). Yet, we reached broad-scale compliance by year-end on the Prime market, and overall adoption hit ~70%. Japanese management has often been 'path-dependent': many prefer to stick to norms and fly in formation, so designs that enhance the legitimacy of a reform are critical to their adoption (Gilson & Milhaupt, 2004).

3.1.3 Credible Threats

Thirdly, the TSE's *Initiative* includes a credible threat of delisting, and we believe this could attack some of the cultural legacies preventing shareholder primacy. Past rules in Japan would only posit delisting if the overall value of a company collapsed or corporate fraud had occurred, but now, the TSE has imposed additional disclosure criteria to cut down on aimless listings. This increased cost and effort required to maintain a Prime market listing has increased, and delisting shave increased as the market becomes more competitive: while 2024 exhibited the highest ever levels of delisting, the Q1 run rate of 31 firms is even higher, and proves the effort required to keep this prestige may deter bad firms (TSE, 2025).

Past non-compliance with the Corporate Governance Code could simply be explained away: it was up to the market to be dissatisfied with the published information, and then to penalise firms. This is a poor compliance mechanism: either the length and complexity of corporate governance reports which makes acting on this information more difficult, or the lack of minority shareholder protection and prevalence of cross-holdings make investor activism futile. Even if the market can punish firms, this directly explains why bad-performing companies with substandard governance would trade at dire valuations - it just penalises them with a poor valuation, but it doesn't provide a new incentive to fix this form of managerial myopia. Unless investors are able to come in and reduce this cost of capital on the public markets, the problem persists.

Companies with persistently sub-1 price-to-book ratios could be delisted from the Exchange, if management actions to improve the PBR had been tried and failed (JPX, 2023). The TSE would target these firms with more specific requirements, actively helping them to achieve an increase in PBR, but if unsuccessful or non-engaging, they would remove them from the Exchange. Many of these companies have been allowed to languish at implied value-destructive valuations in past reform attempts. Now, with credible consequences of maintaining the status quo, management are pressed to comply, even if their incentives are not strictly based on valuation. The embarrassment caused by delisting would incentivise management to comply, and this relates to the peer pressure Yamaji mentioned to Lewis and Keohane (2023).

Japan's approach to imposing Western value-creating practices has shifted away from principles and towards prescription. This *Initiative* is a major reform and is well-suited to an event study methodology, which we will now describe.

4. Literature Review

4.1 Event Studies in Finance

Fama et al. (1969) provided the introductory paper to the modern understanding of event studies in finance, and defined the common approach of assessing cumulative abnormal returns (CAR) against an estimated model of performance had the event not occurred. But it also highlights the challenges of finding clean events: the firms targeted by the event were found to drift upwards before the announcement, implying prices may adjust before announcement, either because of insider activity or investor anticipation. Therefore, if the actual event is anticipated or correlated with prior performance, discerning its causal impact is more difficult. This endogeneity problem is something many event studies struggle with. For us, poor performing firms (those with a PBR below 1, or poor ROEs) may be more likely to opt-in visibly, and signal to the market an improvement story. Equally, they may be among the most inward and anti-shareholder firms – hence their low relative valuation, and this makes them less likely to disclose. To account for this, we test the pre-event window and group firms on control characteristics.

There are also insights for information transmission in markets: while the pricing of a capital efficiency plan sounds positive, investors must then parse the details, assess its impact, and its probability of implementation. This is much messier than many clean events that come into markets, and hence, we believe there is merit to also assessing longer post-event window lengths. With new disclosure and depth constantly being added throughout 2023, and even marginal improvements over the 2024, the actual pricing impact could theoretically evolve at each point, and this gradual development of regulation is one reason why governance event studies are rare and challenging (Black and Khanna, 2007; Bhagat and Romano, 2002). Secondly, companies' plans to improve capital efficiency often involve more complex definitions of an event date and there is potential for various degrees of information to be disseminated - interviews, conversations, and presentations all provide challenges to the cleanliness of an event. We still believe the out-group reflects a clean event, as firms are less likely to publish bad information (Guest and Nerino, 2020); not featuring on the List is likely the first time non-compliance becomes public.

4.2 Event Studies & Governance

Conventional corporate governance research tends to look at the long-term performance associated with firms carrying certain governance structures, while event studies are focused more on short-term reactions to a change in governance (an event) and a definable time of dissemination (an event date). Both of these are often lacking, as governance events are often gradually implemented, imperfectly adopted (as in Japan), and applied market-wide.

Black and Khanna (2007) is one of the most directly similar papers, in terms of researching the effect of a change to governance or regulation on asset prices, when the reform affects groups of stocks (an *in-group*), but not all. The authors analyse the impact of a compulsory governance reform in India called "Clause 49", which aimed to reduce the agency conflict and required risk premium among investors, thus improving valuations. They found that Clause-49-affected firms saw a 4% CAR versus the control group of small firms over a (0,+1) event window[10]. This increased to 7% over the next 5 days, and 10% over 2 weeks, implying the market may have taken some time to digest the impact of the reform, and this slow speed would be contradictory to conventional market efficient theory. Similar to the PEAD phenomenon, the *treatment* stocks may have attracted a new group of investors given the reform, providing a demand-based explanation of this drift, or perhaps participants struggled to accurately price the value of the reforms instantaneously.

A second extension of their study was the segmentation of this treatment and control group by firm-level characteristics, which then informs us as to whether certain types of companies saw more pronounced valuation impacts. Faster-growing firms react more positively, as do cross-listed firms, and the authors make plausible connections between this and the potential bonding to good governance which Clause 49 implied. That is, the risk inherent to these stocks is mitigated by more robust governance requirements, increasing valuations and investor demand. Cross-listed firms may have more foreign exposure, and these investors are much more governance sensitive, hence the increasing returns for these stocks. Interestingly, they referenced other studies on similar reforms, like those studying the Sarbanes-Oxley Act in the USA, which many cited as having a negative consequence on valuations (such as Litvak, 2007), and this provides another key insight: regulation, while ostensibly good and enhancing corporate value (or the expected values of the fundamentals)

[10] CAR is effectively the return from close on day -1, to the close price two trading days later, so only days 0 and 1 are counted.

may not necessarily manifest in a strong price response - it depends on both the market and the segment.

The authors cite Litvak's (2007) conclusion that firms in countries with relatively strong governance or individual firms with already relatively strong governance are more likely to see a negative reaction to such regulation that targets the status quo: India or another Emerging Market may see a positive reaction to governance changes due to the relatively large change from the status quo and mitigation of a sizable country risk premium, but for Japan and its blue-chip firms, this reaction is not guaranteed. The sovereign risk is already low, but within certain companies, the *de-facto* expropriation risk (due to bad capital allocation) may be higher. This is supported by Durnev and Fauver (2011), who saw valuations improve in emerging and developing economies upon the imposition of stronger governance practices.

Karpoff et al (2011)[11] differs in that the governance proposals come from the market, not the regulator, so the authority and probability of success may differ. The firms most likely to receive a proposal were those firms with poor returns on sales, poor relative book-to-market ratios, and poor sales growth in past years; all of these track with the reasons for promoting greater investor activism and management accountability in Japan. Yet still, they found that news of changes to governance practices were not associated with abnormal returns post-announcement, and manager turnover rates didn't materially increase - two major concerns for the *Initiative*. Their sample ran from 1986-1990, on US equities.

Karpoff et al. (2011), through their methodology for identifying event dates, also highlights the challenge in selecting a proper event window. Under efficient market theory (namely the semi-strong form of Fama et al (1969)), the reaction to stock prices from disclosing a piece of material information such as the governance event should occur quickly and only upon the announcement. Karpoff et al (2011) therefore, test several possible event dates for any particular company's governance initiative being reacted to by the market. The authors consider possible event dates such as WSJ articles (which had a smaller sample due to reporting biases), proxy mailing dates, shareholder meeting dates (which is when any votes would occur), and occurrences where the proposal was voted on at the meeting, and passed successfully. The only positive indicator from this study was that two-day returns for firms

[11] Karpoff et al. was first published in 1996 and last revised in 2011, so the paper may be commonly known as Karpoff et al. (1996) online and the sample is therefore set in the 1980s-1990s, but we discuss and cite the most recent version.

who experienced a successful shareholder vote on their proposal at the AGM were significantly different from zero at the 10% level - this would imply that governance initiatives that win, versus just being proposed, can lead to wealth gains for shareholders, Investors may be sceptical that change will be enacted, and this leads to the non-reactions in other events and literature. This insight could be relevant to our findings, as ultimately the success of the reform rests on the legitimacy of the JPX and follow-up pressure from investors. However, when the authors adjust for one large positive outlier case in their sample, the significance disappears. Thus, the evidence broadly was no real CAR was observed for governance initiatives, both regarding the announcement of the change and the announcement that the change had passed shareholder scrutiny. Both the short-term price reaction and longer-term operational improvements (as in, returns on capital or sales) were not impacted by these proposals, so again, markets could remain sceptical that announced changes will actually transpire into value creation.

The takeaway from this paper is that governance proposals initiated by a variety of sponsors (investor types and management) were not additive to the stock price in an event study, but also didn't translate to realised changes in operating performance, implying the long-run efficacy is questionable also. The next question to ask is how these prospects relate to the efforts of the JPX; one key reason why this study's insights may not apply to Japan is the existence of a credible threat as part of the 2023 *Initiative,* and a different path to implementing reform. In all probability, underperformers will likely not be allowed to continue lagging, unlike the sample of Karpoff et al. (2011). The role of credible threats for failure or credible hopes for implementation in creating a price reaction is supported, we believe, by findings from Cuñat, Gine, and Guadalupe, 2012, which found a separation in price reactions to votes which passed, as opposed to just being proposed.

Cuñat, Gine, and Guadalupe (2012) and other modern papers are more constructive on the role of governance reform in creating corporate value. The authors analysed the difference in returns around the results of "close-call" votes, finding passed votes to be associated with 1.3% CAR around the announcement period. The advantage of this is that in a close call, the probability of success and failure going into the event is quite similar, so the market should move more in its relative reaction as one outcome goes to 100% from ~50%. They also found that more capital-intensive firms were also likely to see bigger relative returns, perhaps reflecting less scope for capital misallocation if pro-shareholder proposals were passed, sort of in line with Jensen's (1986) hypothesis of cash flow increasing agency

risks. This transpired to Tobin's Q and PBRs improving over the next three years, but not necessarily ROE. This opens a channel for risk reduction and improved valuation to be seen in Japan, effectively increasing a justified price multiple as per *Value Creation*, even before the returns on capital improve. A secondary core insight from this paper is that the market may reward governance proposals which pass, and shirk firms who fail to implement it - it is plausible this logic may apply to firms that either opt in or fail to disclose plans to improve capital efficiency in response to the JPX *Initiative*.

Given the importance of corporate governance information to investors, information intermediaries such as ISS have emerged to distil this data into practical insights. Guest and Nerino (2020) examines the effect of publicly available corporate governance ratings announcements on share prices; rather than looking necessarily at the rating, it is the dissemination of a new rating (a change to the status quo) that creates market reactions, and this is then empirically tested. A key contribution of the paper was the differentiation between announcements (completely) and the type of announcement made, which is then used to test and rationalise asymmetric price effects. They do not have positive and negative responses as one would expect asymmetry in reactions - a yes and a no to any governance initiative are not necessarily equal, particularly for a broad variety of companies, sectors, and investor types. The authors find that downgrades are more substantial than upgrades in magnitude, and only downgrades are significant at 95% confidence levels, not upgrades. The magnitude of negative returns increases with the magnitude of the downgrade

Additionally, the authors attempt to explain the asymmetry of the price impacts, which contain useful insights for other event study designs: the authors acknowledge how information leakage will lead to earlier trading ahead of the event, primarily for upgrades, which, of course, lessens their event window return. Secondly, poor governance firms are more likely to be sold when this information comes to the market, either due to a change in the investment case or mandates that fund managers will have to adhere to.

A relevant insight here for those studying Japan is the governance quality hypothesis that the authors compose. If downgrades signal poor governance, then finding firms where this concern of governance risk is higher should correspond with more pronounced negative effects. They proxy this using the agency costs estimation, as per Jensen (1986): more cash flow provides more scope for poor capital allocation, low growth firms are more likely to be less valued as a going concern (as in, looking for firms with a low PBR), and lastly, leverage

constrains the ability of management to scupper resources, implied by the immediacy of debt servicing costs. Their findings found lower returns, upon downgrades, among firms with higher cash flow, lower growth opportunities, and lower leverage. Again, the upgrade case didn't yield statistically significant results.

4.3 Japan-centric papers

Most literature focuses on the US, and there is a possibility Japan could be a special case: the low levels of shareholder activism, cultural acceptance of familial succession, and the importance of employee-company commitment (*sanpo-yoshi*) may not mean these effects translate as cleanly. Chan-Lau (2001) found that the implementation of legislation (specifically the Commercial Rehabilitation Law (CRL)) improved market reactions to corporate actions such as M&A announcements and job cuts; previously, layoffs were seen as a negative signal, but now had become positive. Chen-Lau (2001) also found that the total number of restructuring announcements increased 15% after the CRL, which perhaps speaks to the authority a market player like the JPX could have in legitimising reforms. But whether the market values this reform is an open question: Mitsuyama and Shimizutani (2015) found zero CAR related to a commendation of best in class ESG, awarded by the TSE to less than 1% of its companies, meaning the announcement of exceptional *governance* (in all forms) was not seen as a material piece of information. Then again, it wasn't a new piece of information - just one authority's assessment of each company's performance, and the market may have felt they already priced ESG risk well. The *Initiative* is different in this regard as it signals a change to the status quo, and thus may necessitate a repricing of governance risk/rewards for each company. Another component of the PBR is growth, and Matsuno et al. (2024) produce an event study to analyse the impact of METI-backed IT commendation. Less than 1% of firms were designated IT leaders by METI, but no at-event or post-event CAR was observed at conventional significance levels. This could be market scepticism or ignorance of this commendation, despite the competitiveness of the selection process, or that this particular pool of investors is more desensitised to 'soft-indicators' like tech leadership.

Given the rarity of true, quasi-natural experiments related to governance reform announcements and the intrigue surrounding Japanese equities, we think this paper arrives in an interesting position to contribute to both spheres. Our event study method is well-suited to provide a contemporaneous assessment of the *Initiative's* impact on asset prices thus far.

5. Data & Methodology

5.1 Data

We screen the Tokyo Stock Exchange to collect data on all companies eligible to comply with the TSE's *Initiative* - that is, all firms listed on the Prime and Standard market of the Tokyo Stock Exchange. Data on the compliance is reported on a monthly basis and ranges from January 2024 to December 2024. The reports are published on the 15th[12] each month, and announce whether a company has disclosed their compliance or is still under consideration as of the end of the preceding month. We collect financial data, consisting of earnings, market capitalisation and book value of equity for each firm from Bloomberg. All data, both prices and company-specific financials, is acquired in local currency (Japanese Yen). Financial statement data is published quarterly, ranging from December 31 2023, to December 31 2024. We map the most recently released datapoint for each company to each month. Market capitalisation data is retrieved for the last day of each month. In their absolute form, these variables are transformed to their natural logarithms to allow for more favourable distribution and magnitudes in the regression.

We collect daily returns for the relevant stocks from Bloomberg, using the data function called "TOT_RETURN_INDEX_GROSS_DVDS". The construction of this index is to provide a daily total return, accounting for equity issuance or capital returns which would increase or decrease equity value, gross of taxes - potentially mitigating outlier price movements in the case of special dividends or rights issuances, which is likely in a sample of >3000 stocks. The daily return data reaches from January 2023 up until 2025, and includes all intervening trading days. We also collect the GICS sector classification of each company, using Capital IQ data (2025).

5.2 Sample

We retrieve data for 3,268 stocks listed on the Prime and Standard markets of the Tokyo Stock Exchange. Smaller companies are also listed on the *Growth* segment of the TSE, along with various ETFs and exchange-traded products - these are excluded due to their own disclosure rules applying. From the initial sample, a very small subset is shown to have

[12] Assuming it does not fall on a holiday / weekend, in that case it is published prior on the most recent trading day

missing data for earnings and various characteristics, and is subsequently removed from the dataset.[13] The final sample consists of 3,154 stocks.

5.3 Research Approach

Our analysis considers two distinct sets of events: first, the announcement of the *Initiative* in March 2023, and then the monthly publications of the List of companies each month throughout 2024. These follow very similar event study methodologies, but the original announcement is our preliminary hypothesis - if we found significant market reactions here, it would inform us of market optimism and perhaps negate the second phase of analysis. Our core analysis then focuses on the monthly publication of the List. We test them in order:

H_1: *The Initiative Announcement is associated with outperformance in Japanese equities*

H_2: *Being published on the List is associated with abnormal returns across the market*

H_3: *There is an effect of being published on the list dependent on firm level characteristics*

5.4 Event Window & Estimation Window

The event window is the period over which the prices of the securities of interest are analysed (MacKinlay, 1997). The event window involves multiple days, including days before and after the announcement. We test multiple event windows with varying length, ranging from 10 days pre- and post the date of each event. As the lists detailing the disclosure status of firms are being published on or around the 15th of each month, setting longer event windows can capture the effect of the market acquiring information about the compliance prior to the announcement itself.

We primarily choose an event window beginning on the date of publication and ending two trading days later (0,2) to capture the short-term effect of this List being published to the market. There is some subjectivity in defining this, but we choose (0,2) to segregate the pre-event and post-event period more cleanly, in accordance with prior literature (e.g. Black and Khanna, 2007). As MacKinlay (1997) explains, different window selection affects test-statistics and inference, so we test multiple windows and a cumulative CAR for illustration. There is a degree of subjectivity to this - most papers opt for a primarily short event window around the event date, but many differ on the initial starting date (e.g. Guest and Nerino, 2020; Black and Khanna, 2007). By testing both the pre- and post-event

[13] Manual inspection further reveals a number of stocks which become delisted during the timeframe for the event study, and are subsequently removed.

window in one t-test of the cumulative abnormal return at period end, there is a risk that the pre- and post-event effects (such as information leakage and public reaction) get mixed. Black and Khanna (2007) employ a (0,2) window, and we choose this as a pure test of a "clean-event", where information only becomes available on the date of publication. This is accurate for firms that are not featured on the List, who would likely not have communicated their non-compliance before now. Equally, we test the pre-event period on its own, so firms that have signalled capital efficiency plans prior to the List's monthly publication around the 15th day can be identified.. In the vein of Guest and Nerino (2020), we expect asymmetric effects for the *In* and *Out* groups, and this effect could vary over time. Therefore, we must have segmentation and clarity in creating event windows that capture the likely group-specific price movements. We employ several other windows for robustness checks, both in the event study illustrations and regressions.

The estimation window is the period prior to the event window in which the normal returns, in the absence of an event, is estimated (MacKinlay, 1997). We set our estimation window to 252 trading days (approximately 1 year), ranging from 273 days to 21 days before the event. This is to ensure no days prior to the announcement but within the event window are included, as they may affect the normal performance estimates. Our event windows and estimation window are illustrated in the timeline below in Figure 5. The estimation window is used to estimate the market model for the normal return. The pre-event window (-10,-1) is analysed to detect potential information leakage or market anticipation. Our main event window (0,2) attempts to quantify the initial market reactions to the announcement. The final post-event window (0,10) is applied to account for delayed market reactions to the announcement, allowing investors time to process the event. There is evidence that returns can continue drifting post-event in the literature, such as in Black & Khanna (2007).

Figure 5: Timeline of Estimation and Event Windows

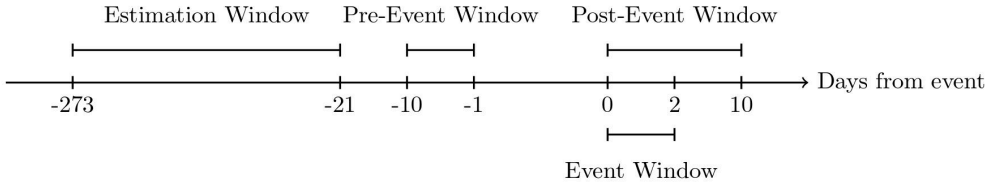


Figure 5 illustrates the timeline for the event study method. The estimation window (from day -273 to -21) is used to model expected returns. The pre-event window (from day -10 to -1) helps assess anticipatory effects. The event window (day 0 to 2) captures the immediate impact of the event, while the post-event window (day 0 to 10) examines any lingering effects. Tick marks denote key day labels on the timeline.

For the preliminary test of the announcement, we compare the abnormal return of the market-cap weighted Japanese market (calculated using our broad market estimation) against the estimated returns of a market model, where the market index is a global cap-weighted index (the MSCI World). This allows for a typical calculation of CAR, standardised CAR, and t-stats, elaborated upon using formulae under subsection (5.5). We follow the same pattern, with a 252-day estimation window, and analyse a pre- and post-event period from -10 to +10 days, ensuring no overlap. This announcement is a clean event, as companies were likely not aware of the *Initiative* pre-announcement; this first publication kicked off the consultation and disclosure process.

5.5 Variables

The formula for estimating the abnormal return is defined as follows:

(1) $$AR_{i\tau} = R_{i\tau} - E(R_{i\tau}|X_{\tau})$$

where the abnormal return (AR) for firm i at time τ is estimated as the actual return (R) for firm i on that date, minus the expected return based on information available (X) at time τ (MacKinlay, 1997).

Daily returns are calculated as the natural logarithm of the change in price each day, ln(D1/D0). This is consistent with much of the previous literature on event studies in finance, and allows for the additivity of returns. Furthermore, log normalisation yields data closer to a normal distribution than simple financial returns, which often exhibit several non-normal traits, especially positive kurtosis and skew (MacKinlay, 1997; Campbell et al. 1997).

$E(R_{i\tau}|X_{\tau})$ is modelled using the market model, assuming a linear relationship between the stock return and market return. It is defined as:

(2) $$R_{i\tau} = \alpha_i - \beta_i R_{m\tau} + \varepsilon_{i\tau}$$

$$E(\varepsilon_{it} = 0) \qquad var(\varepsilon_{it} = \sigma_{\varepsilon}^2)$$

where $R_{i\tau}$ and R_{mt} are the returns at time τ of stock i and the market portfolio respectively. α is the average return not explained by the market for firm i, β is the sensitivity of the return of

firm i to the market return and ε the portion of return unexplained by the market for firm i at time τ (MacKinlay, 1997). α and β are estimated using Ordinary Least Squares (OLS), regressing the daily returns of each individual firm on the corresponding market returns during the estimation window. The parameters are subsequently used to predict expected return during the event window. We then calculate abnormal return for the event window in (1) using the actual returns less the predicted expected return.

MacKinlay (1997) finds the benefit of employing more complete asset pricing models in event study estimations, such as the Fama-French three-factor model - to be limited, due to the marginal component of returns these explain. This is particularly true in such a broad market sample, where size or value are not likely to provide meaningful variance reduction across the whole market.

We calculate Cumulative Abnormal Return (CAR) at the individual firm level from the following equation:

(3) $$CAR_i = \sum_{\tau=\tau_1}^{\tau_2} AR_{i\tau}$$

which is the sum of abnormal returns over the event window starting at τ_1 and ending at τ_2.

The CAR for the sample is then aggregated as the average CAR across the same event-date group, denoted in equation (4).

(4) $$\overline{CAR}_{(\tau1,\tau2)} = \frac{1}{N}\sum_{i=1}^{N} CAR_{i(\tau1,\tau2)}$$

As the data contains overlaps between the event windows of the stocks, we cannot assume independent and identically distributed random variables (i.i.d). As such, we are unable to simply set the covariance to 0. We address this in both the univariate analysis and in the regression.

For the univariate analysis, the basic event study method is not well-suited to studying groups where the event date is shared among many firms, as it violates the assumption in the

t-stat calculation that the returns between firms are independent. If returns between firms are correlated over the event window, t-stats may be overestimated, with true standard errors underestimated. To account for this, we follow the method of Kolari and Pynnönen (2010), controlling for the cross-correlation within groups of stocks using an adjusted SE calculation. This method accounts for event-induced volatility by standardising CAR by the volatility of estimation residuals, as shown in the following equation:

(5) $$t = \sqrt{N}\frac{\overline{SCAR}}{S_{\overline{SCAR}}}$$

$$Where\ SCAR_i = \frac{CAR_i}{S_{CAR_i}}\ and\ S^2_{\overline{SCAR}} = \frac{1}{N-1}\sum_{i=1}^{N}(SCAR_i - \overline{SCAR})^2,$$

This denotes the forecast-error-corrected standard deviation from our market model regression (estimation period residuals). The method also includes calculating the average pairwise correlation between firms' residuals, scaling the standard error upwards based on this correlation. The adjustment of *t-stat* to account for cross-sectional correlation can be seen in equation (6):

(6) $$z = t\,.\sqrt{\frac{1-\bar{\rho}}{1+(N-1)\bar{\rho}}}$$

For the regression model, we employ clustered standard errors by event date and firm (Petersen, 2009). The model full model is defined as:

(7) $$CAR_{i,\tau} = \beta_0 + \beta_1 opted_in_{i,\tau} + \beta_2 size_{i,\tau} + \beta_3 momentum_{i,\tau} + \beta_4 leverage_{i,\tau} + \beta_5 price_book_ratio_{i,\tau} + \beta_6 return_on_equity_{i,\tau} + \alpha_j + \gamma_\tau + \varepsilon_{i,\tau}$$

where β_0 denotes the intercept, α_j denotes the industry fixed effects, γ_τ denotes the time fixed effects and $\varepsilon_{i,\tau}$ is the error term.

The dependent variable is CAR, calculated using equation (3) with abnormal returns estimated using the market model estimation from equation (2). Our variable of interest is $opted_in$, which denotes whether a firm is complying with the initiative at the specific event date. We run the regression with fixed effects, for both time and industry, to control for

time-specific, but firm-invariant features (like shocks, market crises), and for industry-specific, time-invariant characteristics (Guest and Nerino, 2020). We additionally extend equation (7) and include a set of interaction terms between controls and our variable of interest, specifically *opted_in * price_book_ratio, opted_in * size & opted_in * ROE.* These sets of interaction terms extend the analysis to the impact of the reform dependent on firm level characteristics explicitly mentioned as motivations behind the *Initiative.*

5.6 Variable Selection

Our set of control variables are defined as follows: *size* is the log-transformed value of the market cap at the end of each month. This seems like a logical control, as size is associated with different governance requirements, investor types, and agency risk - of course, there is also small stock risk, and we expect different returns over the window based on this. *leverage* is total debt divided by total assets, which provides a more stable and bounded ratio versus using equity, which can be technically altered (Guest and Nerino, 2020). This was included to consider financial risk and the capital mix generating any company's return; *momentum* is the 6-month rolling sum of log returns, up to the end of the previous calendar month. Six-month momentum provides a strong balance of recency and predictive power, useful over this shorter event window, and is known to play a role in explaining returns of stocks, as supported by papers such as Jegadeesh and Titman, 1993; Asness et al. 2013. *price_book_ratio* is the market value divided by the book value of equity - a valuation metric and a reflection of the company's valuation as a going-concern. *return_on_equity* is earnings divided by the average book value of equity. The average book value is calculated as the average of the opening and closing balance of equity for each month, as an estimation for the base that is generating the return. ROE provides a measure of capital efficiency and balance sheet profitability, as a combination of low operating margins and/or excessive balance sheets will reduce this metric. Returns and all control variables are winsorized at the 1st and 99th percentile to mitigate the impact of outliers or data errors on our analysis. We perform a VIF-test on the full model from equation (7) to address concerns for multicollinearity between the regression variables. The results are reported in Table A1 in *Appendix A*, and as no value exceeds the rule of thumb of 5, we conclude that it is not an issue in the model.

As the reforms target improving valuation ratios and capital efficiency, we select variables to capture a firm's performance on these criteria. Other papers have tried using ESG or governance ratings (Mitsuyama and Shimizutani, 2015; Guest and Nerino, 2020), but governance is a nebulous term, and we know governance indices provided by third parties

can vary wildly (Berg et al. 2022; Guest and Nerino, 2020). The focus of this *Initiative* is not just *governance*, but capital efficiency more pointedly,. Our controls include ROE, PBR, and similar reflections of corporate value and risk, which is ultimately what the JPX is seeking. Therefore, we believe these function as governance indicators, where the targeted governance model maximises and protects mid-to-long-term shareholder value. Variables used in other papers, such as institutional ownership and Free-Cash-Flow, are desirable, but we observed low quality, given the breadth of our sample and different accounting conventions in Japan.

5.7 Summary statistics & Sample Distribution

Table A2 (*Appendix A)* reports summary statistics for each variable included in equation (7). The total number of observations for the whole sample is 19382. That is, over the 12 event periods each firm that is either non-compliant or compliant for that event date is observed. Firms that have previously been identified as compliant are not included in subsequent events. The average CAR for the event window (0,2) for the entire sample is 0.5%, compared to the mean of 0.8% for compliant firms. We also see volatility being higher in the out-group. Compliant firms are on average larger, with an average size (denoted as the natural logarithm of a firm's market capitalisation), of 10.9451 compared to 9.6139. They also exhibit higher past returns (momentum) of 0.0659 relative to 0.0217. Overall, compliant firms have a lower leverage than non-compliant firms. The average price-to-book ratio is lower for firms choosing to opt in, with a value of 1.4483 compared to 1.7068 for firms not opting in. Finally, the mean of return on equity is 0.0805 and 0.0524, respectively.

Table A3 (*Appendix A)* presents sample distribution & statistics, including the event dates, the aggregated CAR and the number of firms reporting their compliance at each event date. The average CAR for firms not yet disclosing their compliance is slightly lower at 0.005 compared to firms who are disclosing at the event date at 0.0008. The total number of observations (N), are reduced for each event date as firms that have previously complied as they are not included in the subsequent sample for the following events. The summary statistics reveal a sizable variation of the number of firms complying at each event date. At the first event date, 1097 firms chose to opt in, which is more than half of the entire sample of firms complying over the entire year. Looking at the later event dates, the sample of complying firms becomes relatively small. Furthermore, the observed CAR for the earlier event dates are predominantly negative for both groups. For the later dates, we see the opposite, they contain mainly positive CARs. This is further analysed in the results section.

6. Data Analysis & Results

6.1 Preliminary Hypothesis: Initiative Announcement

The preliminary analysis is to conduct an event study on the announcement of the *Initiative* in March 2023, as if the market had a significant reaction here, we could conclude the event was fully priced well in advance. In analysing the announcement date of the *Initiative* (31st March 2023), we find no significant CAR in the Japanese market over short-term announcement windows (0,2) or longer durations (0,10) (Figure 6). The t-statistics for the event window are contained in Table A4 in *Appendix A*. The reported t-stat is insignificant around both pre- and post-event windows[14]. We also find our market proxy, the cap-weighted index of all our sample group, has a 0.993 beta against the mainstream TOPIX over this period, providing confidence in our conclusion that the overall market didn't exhibit abnormal returns. As such, we fail to reject the null hypothesis for H_1.

Figure 6: Standardized CAR After the Announcement

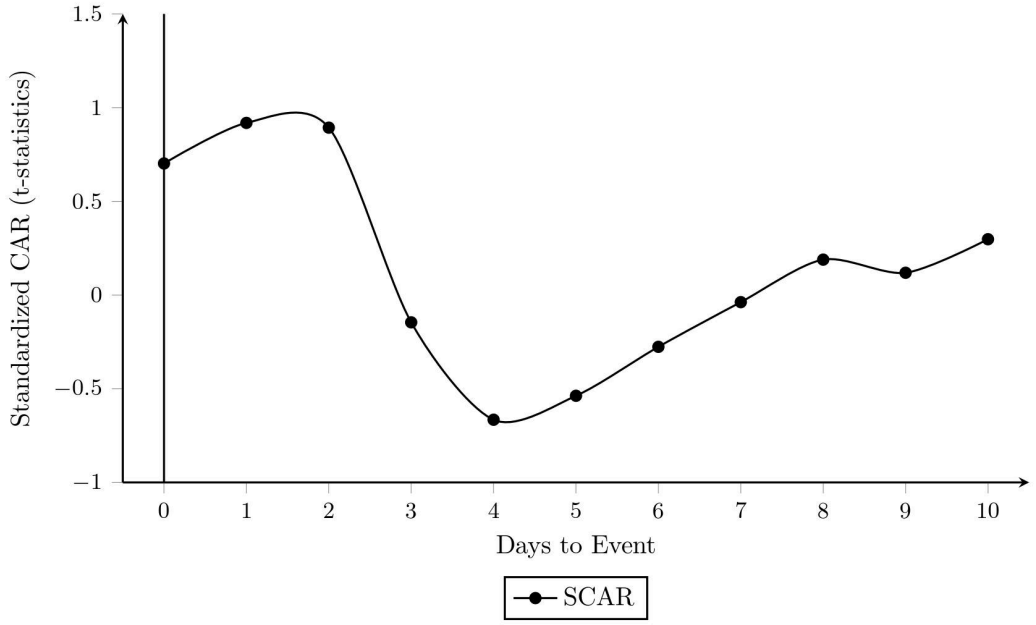


Figure 6 plots the t-statistics for the Standardized Cumulative Abnormal Returns (SCAR) for the initiative announcement around the event window 0 to +10. The plotted line represents the Standardized CAR values (t-statistics), with a vertical line at day 0 indicating the event date.

[14] The t-statistics for the full event window (-10, 10) is visualised in Figure A1 in *Appendix A*.

This is not surprising to us - the *Initiative* exists in its monthly publication format because of the relatively lacklustre response to the initial plan. We also know not all impacts will be equal: individual firms may have bigger reactions as capital efficiency may be more important to their investors (activists versus passive shareholders), or the specific actions they take (removing cross-holdings, distributing excess cash, selling non-core assets etc.) may be more material. Not all event dates will be equal either - many firms opted in quickly, many are yet to publish anything. The market should price this expected delay/managerial reluctance/"quiet-life" mindset at any point in time, discounting the benefits or costs appropriately. The follow-up announcements from the TSE that ensued over 2023 could also potentially alter the market pricing of *complying* or *defying* the reforms - motivating our multiple-date analysis. Therefore, we conclude that the informative event for any given company is likely when it publishes its improvement plans, not when the Exchange as a whole announces the concept. Additionally, investors may need time to price, individually, whether this was material disclosure; therefore, a relevant insight from the paper is that unlike more indicative, simple disclosures (such as an upgrade or downgrade, as in Guest and Nerino, 2020), capital efficiency plans are more opaque, and the processing delay is perhaps heightened by Japan's history of *false dawns*. This theme recurs in the below analysis.

We then proceed to analysing the publication of the List, containing all the names of companies who had complied, throughout 2024

6.2 Univariate Results

6.2.1 Main Event Window

We begin by performing a univariate analysis of our event study. Like Guest and Nerino (2020), we plot the average CAR for all announcements over the extended period (-10,10) in Figure 7. That is, the CAR represented on each day is the sum of abnormal returns up to that date. In the same graph, we plot the CAR over the period (0,10). This captures the CAR and t-stat calculation of different event windows. The trend between compliant and non-compliant firms is similar, trending downwards in anticipation of the event date and then generally trending upwards in the post-event window. We estimate the significance of the CAR at each event date using the methodology of Kolari and Pynnönen (2010), accounting for the cross-correlation within groups of stocks in the standard error calculation. This, however, yields no overall significant results (see Figure A2 in *Appendix A*).

Figure 7: Average CAR Around the Event Window

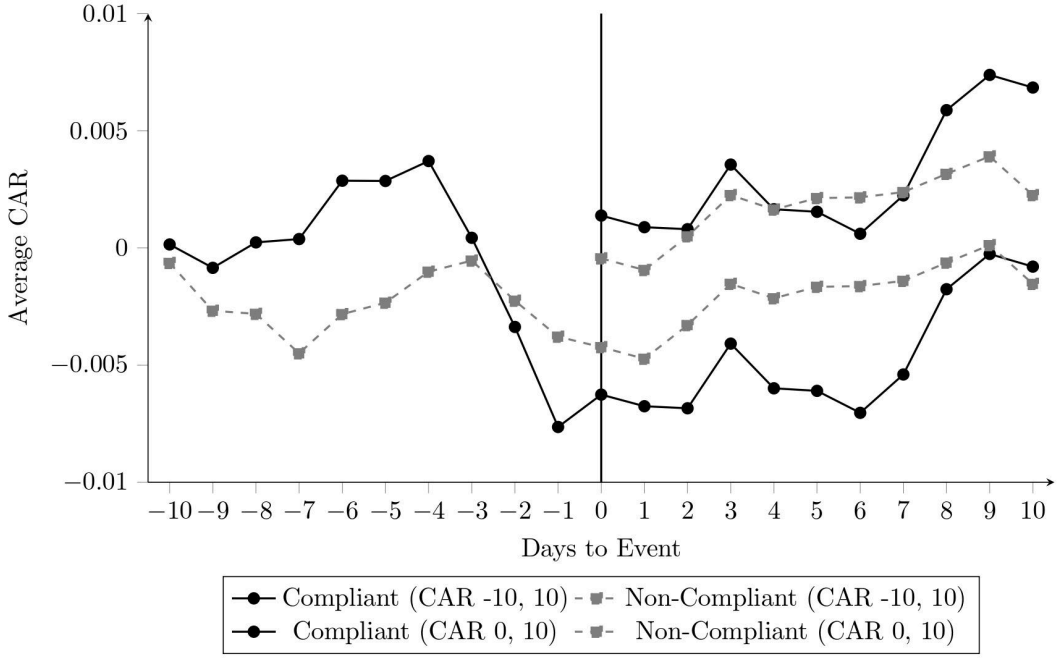


Figure 7 plots the average Cumulative Abnormal Returns (CAR) for compliant and non-compliant firms around the event window (-10,10). The solid black lines represent compliant firms, while the dashed gray lines represent non-compliant firms. The left set of lines shows CAR from -10 to +10 days, while the right set shows CAR from day 0 to +10 days. The vertical line at day 0 marks the event date.

We notice a negative pre-event drift in compliant firms, and this is about 20 basis points below non-compliant firms, on average, over 10 days pre-event - this is mainly driven within the 4 days pre-event. We posited explanations such as informed investors more accurately understanding the limitations and superficiality of the announcement, and we know this is an issue as the JPX published specific examples of poor compliance throughout 2024, indicating that some of the treatment group was not complying with great efficacy. This *superficial compliance* would mark a worrying motif in Japan's corporate governance, as this time may not be different after all. If insiders knew this was a value-creating event, where the market would revise growth or risk for companies disclosing plans, we would likely have seen the opposite pre-event trading, with a steady drift upwards as in Fama et al. (1969), so it is an interesting result, but is not significant under our test method.

For the post-event window, the relationship appears to be the opposite, where compliant firms see an increase in CAR, but the time for this to materialise is longer than comparable studies (Karpoff et al. 1996; Black & Khanna, 2007). Investors may use the

intervening days post-announcement to digest the materiality of the plans, or given the complexity and uncertainty of implementation, the information may necessitate additional time to process and price. It may also take a few days for the market to analyse the relative attractiveness of companies - both those complying and defying the *Initiative*, relative to their own sector or portfolio coverage universe. But the lack of an immediate impulse post-announcement introduces the risk of compounding effects or statistical artefacts, and suggests no immediate shift in sentiment, at least on average across all firms. Therefore, we would like to see this idea revisited in time with more than 12 data points.

Although we find no consistent significance over all event windows, there are still clear trends in the abnormal returns worth remarking upon. Furthermore, there may be individual significance within each event date, as it would be unreasonable to assume that the event day or those days around it are the same in each disclosure month, especially if the appreciation of the reforms changes.

6.2.2 Event Date Specific Analysis

Since our sample consists of 12 distinct event dates, we extend our analysis to include each event date in isolation. We estimate the average CAR over the (0,2) event window between the compliance groups, illustrated in Figure 8. We find that the average CAR for both groups is generally negative for the earlier event dates and positive around the later periods, with this effect tailing off in the final quarter of the year (lower CARs and t-stats). This is potentially related to the *Initiative* gaining legitimacy, as more and more companies opt in. Alternatively, we may see some time-dependent behaviour, in that some seasonal factor causes these results, and we believe this to be the case, given the amount of AGMS held in Japan in June. The largest differences are observed in the 5th, 6th and 7th months. Both compliance groups generally move in the same direction, be it positive or negative CARs in the same period, except in the second event period. This general trend suggests that there are additional market-wide factors affecting all firms, driving a general change in the variable depending on the period. We identify a higher effect on CAR for the compliance group in the majority of the event dates, suggesting that compliance might have an additional impact on the event-specific shocks.

Figure 8: $CAR_{0,2}$ For Each Event Window

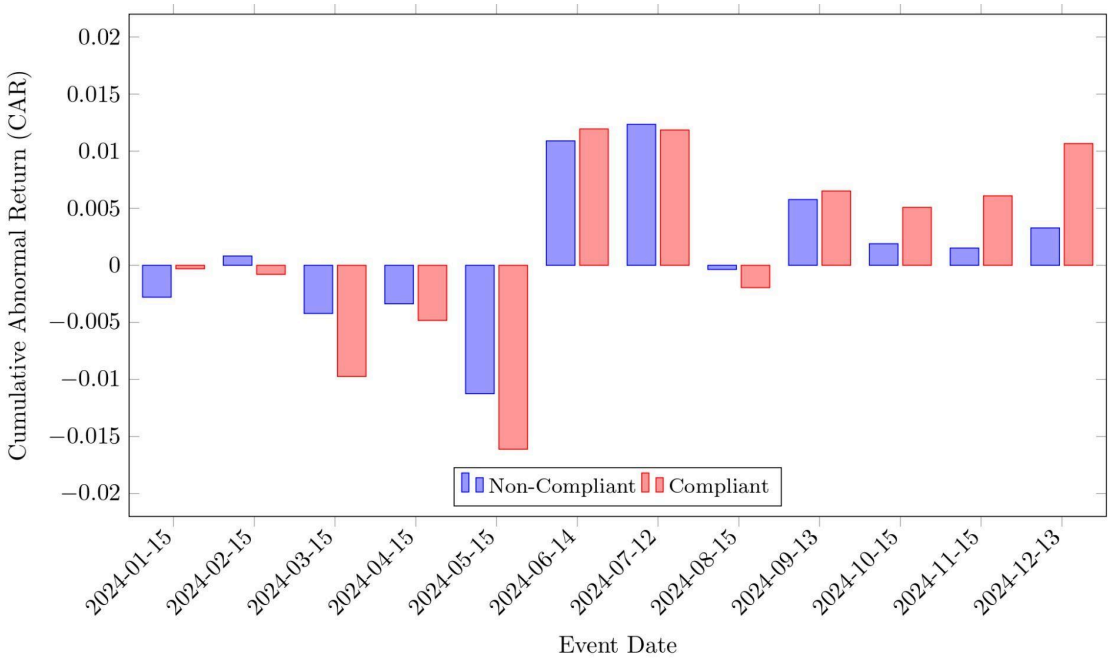


Figure 8 plots the Cumulative Abnormal Returns (CAR) over the 2 day event window for compliant and non-compliant firms across the 12 event dates. The solid red bars represent compliant firms, while the blue bars represent non-compliant firms. The x-axis shows the event dates, while the y-axis represents the CAR values.

We estimate t-statistics controlling for cross-section correlation (Kolari and Pynnönen, 2010) and find that our CAR is positive and significant at the 5% level for event date 6 (1.19%) for the compliant group, and for event date 6 (1.09%) and 9 (0.58%) for the non-compliant group (see figure 9). While we consider a CAR of above 1% over a three-day window to be economically meaningful, the similarity in abnormal returns across both groups suggests that these effects may be driven by event-specific market-wide shocks affecting all firms at a particular date. Specifically, we believe the effects could be driven by Japan's famous AGM season. Most firms have historically held their AGMS in the second half of June in Japan. In 2024, about 1600 AGMS took place in June - 650 of these on June 27th alone (Fukuda, 2024). This perhaps brings shareholder return variables into sharper focus, as management looks to be re-elected by their shareholders. Shareholder dissent has largely been rising in recent years, with rising activist events and more contested votes Exhibits 3c & d in *Appendix B*), so there is a credible reason for both managers and investors to be more aware around this time of year.

We also extend this by analysing the spread between different segments of stocks, splitting them into terciles corresponding to their rank on various firm-level controls: like

PBR, ROE, and leverage, to assess systematic deviations within groups (see figure A3 in *Appendix A*). When analysing CAR spreads between firms and segments - a simple *High - Low spread* between terciles - we see little evidence of these segment *factors* influencing returns, either statistically or visually. Graphically, all patterns look similar, even across high and low segments. This does not mean these variables did not influence CAR overall, but rather that there was no systematic deviation between the highest and lowest terciles of firms, based on indicators of firm quality, like leverage or capital efficiency, and a long-short strategy would not have been successful. The market didn't reward and punish firms so explicitly, regardless of their response to the *Initative*. Moreover, gains seen in June in a post-event window are often mirrored by pre-event losses in July (*Appendix A,* Figure A3). This could reflect fading optimism after AGM season concludes, as investors reprice their optimism of future efficiency gains[15].

Figure 9: t-statistics for Each Event Window

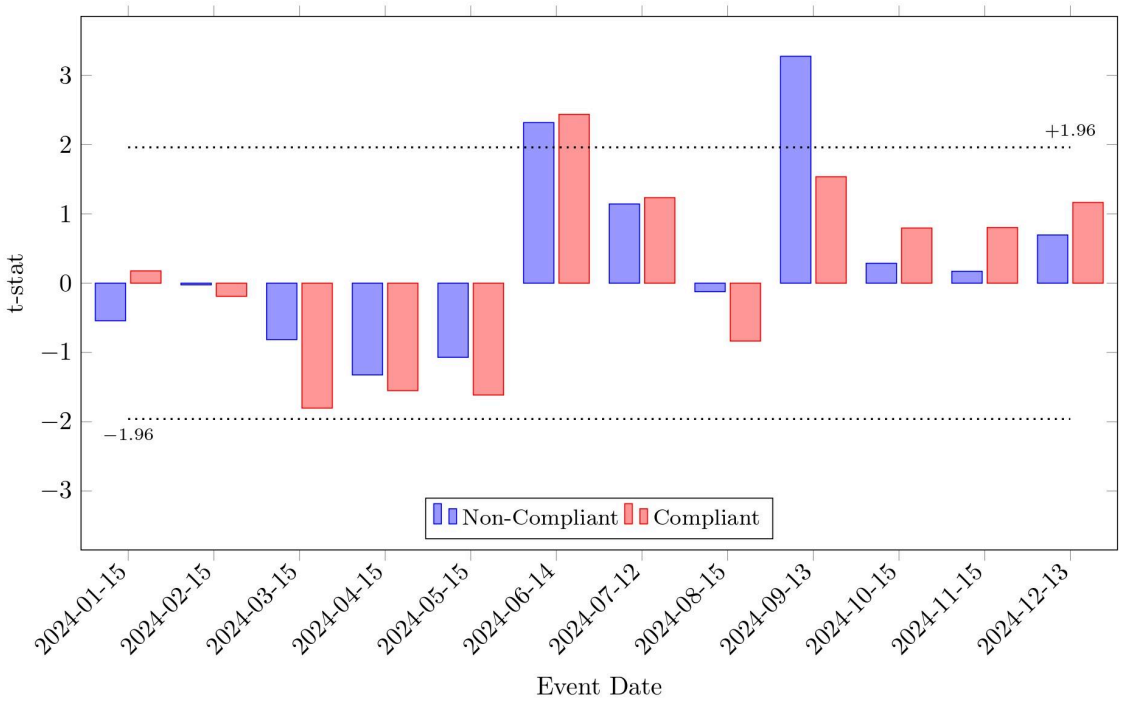


Figure 9 plots the t-statistics for compliant and non-compliant firms across the 12 event dates. The solid red bars represent compliant firms, while the blue bars represent non-compliant firms. The x-axis shows the event dates, while the y-axis represents the t-stat values. The dashed lines represent the significance threshold at ±1.96, indicating statistical significance at the 5% level. The standard errors are calculated following the method of Kolari and Pynnönen (2010).

[15] This commentary refers specifically to the difference between post-event returns in June and pre event returns in July, within the same segment groupings

To generate more robust results, we perform our main regression analysis on the difference between the compliance statuses in the upcoming section, controlling for additional factors not present in the univariate analysis.

6.3 Regression Analysis

6.3.1 Event Window (0,2)

In this section, we analyse the relationship between compliance and CAR for our main event window (0,2), using the regression model from equation (7). We estimate the regressions using a fixed effects panel model, estimated with standard errors clustered on firm and event date.[16] The results of the regression are reported in Table 1. Similar to Guest and Nerino (2020), we report the results with and without time and industry fixed effects. In each model, we observe no statistical impact of reform compliance on returns. For the full model (column 4), we find that the coefficient for opted_in is positive 0.007, suggesting that, on average, complying with the *Initiative* is associated with a 0.7% increase in CAR for the event window, holding other factors constant. Given the short time frame, we consider this to be economically meaningful. However, the results are insignificant for all models. As a results, we fail to reject the null hypothesis for H_2. This is consistent with the findings from our univariate analysis, where CAR in the shorter event window is not significantly positive.

Other firm-level controls are not explanatory over this conventional short-term event window: the much-referenced PBR has no impact on event returns on average, and size is also insignificant, so investors didn't react based on these valuation or risk-reflective metrics. ROE and leverage are supposed to represent firm quality controls, as good and bad firms could be expected to have different reactions post-publication of the List, but these are not explanatory over this window. So it appears the *Initiative* is not generating abnormal returns across the market, nor are firm characteristics driving event returns. However, to ascertain the reform's impact, we should further analyse: 1) different event windows, to account for speed of information processing, and 2) different regression specifications, specifically those with interaction terms to accurately account for the conditional impact of our key variable, *opted in* to the Initiative, on returns and firm level characteristics like the PBR, size, and ROE.

[16] In untabulated tests, due to potential concerns about too few clusters on event-date, we perform a wild cluster bootstrap-t procedure (Cameron et al. 2008), and find qualitatively similar results.

Table 1: Main Regression Results

Table 1 presents the main regression results. $CAR_{0,2}$ is the cumulative abnormal return calculated over a 2 day period starting from the event window, estimated using the market model from the estimation window. size is the log-transformed value of the market cap at the end of each month. leverage is total debt divided by total assets. momentum is the 6-month rolling sum of log returns, up to the end of the previous calendar month. price_book_ratio is the market value divided by the book value of equity. return_on_equity is earnings divided by the average book value of equity. All variables are winsorized at the 1st and 99th percentile. The table includes four model specifications: (1) Opt-in Only, (2) Opt-in Only with fixed effects, (3) Full Model, and (4) Full Model with fixed effects. The standard errors are in parentheses below the coefficient estimates. All regressions are performed with standard errors clustered at firm and event date.

Variable	(1) Opt-in Only	(2) Opt-in Only FE	(3) Full Model	(4) Full Model FE
opted_in	0.0003	0.0004	0.0010	0.0007
	(0.0010)	(0.0009)	(0.0012)	(0.0010)
size			-0.0004	-0.0000
			(0.0003)	(0.0004)
momentum			-0.0067	-0.0077
			(0.0066)	(0.0064)
leverage			0.0004	-0.0006
			(0.0018)	(0.0015)
price_book_ratio			-0.0004	-0.0005
			(0.0004)	(0.0004)
return_on_equity			0.0016	0.0016
			(0.0022)	(0.0023)
Time fixed effects				
Industry fixed effects				
R-squared	0.0000	0.0000	0.0026	0.0028
N (entities)	3154	3154	3154	3154

6.3.2 Additional event windows

In addition to the main event window (0,2), we perform the regression in equation (7) on the entire event window (-10,10), the pre-event window (-10,-1) and the post-event window (0,10) and these are reported in Table 2. Broadly, we observe more significance and stronger coefficients over these longer windows for control variables, but not for the opted-in term - this average impact remains insignificant across all windows, with similar pre-event negative drift and a post-event positive relationship. A core insight of Table 2 is our argument that the conventional event study practice of choosing 2-3 days around an announcement may perhaps be weaker when the information in question is more complex or its materiality depends on the moves of rivals: one company can become more attractive by opting into reform, but its overall improvement depends on the actions of its sector rivals, who may comply with greater detail or not at all. In Figure 7, we observe a noticeable expansion in CAR around day +8, so while a 10-day event window is not as frequently used, we must consider post-event trends as they could capture more delayed information processing in the market (e.g. Black and Khanna, 2007 observe strengthening post-event effects over 2 weeks).

The opted_in coefficient is also greatly reduced from 0.0073 to near zero, so we are confident in no broad effect of the reform. These findings suggest that the initially observed

effect of the opted_in variable likely reflects omitted-variable bias and is mitigated by including fixed effects in the regression, which controls for time-invariant firm characteristics and time-varying factors common to firms. The regression is estimated on demeaned data, where the average CAR in each individual's time period is subtracted from their CAR. As a result, the model estimates how a firm's CAR differs from the average CAR in that period.

Table 2: Regression Results for Various Event Windows

Table 2 presents regression estimates of Cumulative Abnormal Returns (CAR) over the event windows (-10,10), (-10,-1), and (0,10), estimated using the market model from the estimation window. size is the log-transformed value of the market cap at the end of each month. leverage is total debt divided by total assets. momentum is the 6-month rolling sum of log returns, up to the end of the previous calendar month. price_book_ratio is the market value divided by the book value of equity. return_on_equity is earnings divided by the average book value of equity. All variables are winsorized at the 1st and 99th percentile. Fixed effects include time and industry in the specified models. The standard errors are in parentheses below the coefficient estimate. All regressions are performed with standard errors clustered at firm and event date. Significance is denoted by *, **, and *** for the 10%, 5%, and 1% levels, respectively.

Variable	(1) CAR (-10,10)	(2) CAR FE (-10,10)	(3) CAR (-10,-1)	(4) CAR FE (-10,-1)	(5) CAR (0,10)	(6) CAR FE (0,10)
opted_in	0.0049	-0.0019	-0.0019	-0.0021	0.0073***	0.0002
	(0.0040)	(0.0015)	(0.0027)	(0.0015)	(0.0023)	(0.0014)
size	-0.0012	-0.0014	0.0001	-0.0000	-0.0013	-0.0013
	(0.0014)	(0.0016)	(0.0005)	(0.0006)	(0.0011)	(0.0013)
momentum	-0.0806***	-0.0767***	-0.0415***	-0.0435***	-0.0414***	-0.0400***
	(0.0102)	(0.0088)	(0.0088)	(0.0085)	(0.0064)	(0.0072)
leverage	-0.0069	-0.0077*	-0.0020	-0.0016	-0.0049	-0.0066*
	(0.0051)	(0.0045)	(0.0029)	(0.0032)	(0.0042)	(0.0036)
price_book_ratio	-0.0032***	-0.0033***	-0.0017**	-0.0017**	-0.0016**	-0.0016***
	(0.0012)	(0.0011)	(0.0008)	(0.0008)	(0.0007)	(0.0006)
return_on_equity	0.0038	0.0038	-0.0065	-0.0051	0.0110	0.0108
	(0.0071)	(0.0074)	(0.0054)	(0.0054)	(0.0078)	(0.0080)
Time fixed effects		✓		✓		✓
Industry fixed effects		✓		✓		✓
R-squared	0.0477	0.0461	0.0270	0.0293	0.0265	0.0256
N (entities)	3154	3154	3154	3154	3154	3154

Regarding our controls, the notable observation is that there is an inverse relationship between CAR and price book ratios, in both the pre-event sample (-10,-1) and the longer (0,10) sample. Both of these are significant at the 5% level. The pre-event results may suggest a pre-event anticipatory trade for those with low price-to-book ratios, as these companies are expected to benefit from providing capital efficiency plans relatively more. This is supported by the fact that in a split sample, it is only the firms that do not disclose plans who observe an inverse pre-event relationship with price book ratios; firms who did disclose don't see this price action (see Table A7 & A8 in *Appendix A)*. We believe this could be due to the market viewing these as 'bad firms', whose poor governance may have been well known beforehand and was likely to persist anyway. Firms who would ultimately opt in are much more likely to be in the Prime market, where they are already subject to stricter

governance criteria - so in the absence of further information, they are starting from a stronger starting point, and any expected reaction would be weaker. PBR also returns a -0.0016 coefficient in the 10-days post-event, and we also see this as further evidence of delayed information processing, perhaps because of both the amount of firms publishing or not publishing, as investors look to accurately price disclosures based on their absolute merits, and then on their relative merits, versus sector peers.

Several indicators of company risk and quality, like ROE and leverage, provide minimal significant results over multiple windows on their own: the only comment is that leverage is inversely related to CAR over a (0,10) longer window. This implies that firms with more financial risk will realise lower CAR over this window. For each 1 unit shift in Debt/Assets.[17] CAR would decrease by six basis points, but this is only supported at 90% significance levels. If true, it would surely reflect a failure of the *Initiative*, as we should expect firms with higher risk today to benefit from an action which could credibly de-risk the company over time, by improving its capital structure, and promoting longer-term debt sustainability through more prudent cost management (both on the income statement and balance sheet, as per JPX, 2023).

6.3.3 Accounting for the first event delay

To account for the unusually long lead time into January 2024, we also run a robustness set of regressions containing only the next 11 event dates, continuing the same variable and window selection (see *Appendix A,* Figure A5). This is because the first List was published 9 months after the market first learned of the *Initiative*, and several companies communicated their intention to comply in the intervening period.

In our primary (0,2) event window, the reform variable (opted_in) remains insignificant, with a negative coefficient. Other controls remain insignificant, except momentum, which is still inversely related to CAR, with a negative coefficient of -0.0142 and is significant at the 1% confidence level. This continues the theme of moderate ‘reversal’ we see, based on 6-month returns. Across all our model specifications, this is the most robust effect, and we find this an interesting observation, but the momentum and reversal phenomena occur in global markets not just Japan and often not company specific.

[17] A one unit shift meaning the ratio goes from 1 to 2, increasing 100%

In the pre-event window, the price book ratio has now lost part of its significance: the coefficient remains about the same (-0.0015), but is only significant at the 10% level. This indicates the relationship between PBRs and abnormal returns pre-event is probably more volatile than we originally thought, but still worthy of recognition. We still see evidence of PBRs influencing returns post-event in this restricted sample, with a -0.0016 coefficient and this is significant at 5%. This is largely the same as the original set of models, with all 12 events. Therefore, the original inference is still supported: that is, lower PBRs are associated with higher returns, independent of whether a firm published plans to comply, but only over longer windows. The primary variable of our study is still insignificant, even as investors have had time to assess its materiality. Other controls are insignificant over the 0,2 window. Our only observation is that leverage now has a negative relationship with CAR (-0.0073) and is significant only at 90%. There is therefore a weak indication that investors reward firms with lower financial risk and punish higher risk firms around the publication of the List. However, this longer window introduces more room for confounding effects, and quality indicators like ROE are not significant, nor is size.

Overall, the differences between original models and these robustness checks are not substantial, which helps us believe the events were treated as individual, clean events on the market. This suggests January wasn't majorly different, except it has augmented the negative impact of past returns on event window performance. So perhaps the first publication of the list was not in and of itself a majorly priced event, as removing this from the dataset should otherwise have changed our coefficients and conclusions. This is supported by Inagaki & Keohane (2024), who reported that most of the TSE's companies, and many of its biggest internationally-owned equities, didn't publish any plans; it may therefore have had a legitimacy problem. There is scope for further research here, as it's plausible investors priced the compliance of companies over the intervening 9 months individually, then overlooked it or relegated it in the significance of their own asset pricing function, and such an insight would have further behavioural finance takeaways.

Analysing interaction terms is more conclusive, as the overall indications thus far are that reform compliance does not impact CAR, even with longer windows, and measures of quality or value are, on average, not significant either.

6.3.4 Interaction tests

We also perform interaction tests to demonstrate conditional relationships between opting into the reform and three of our control variables: price book ratio (PBR), size, and return on equity (ROE). The interactions are based on the motivations of the reform - all 3 of these were explicitly referenced in the JPX (Mar 2023) announcement. The results are contained in Table 3. Before the interaction, the respective control variable is centred to allow a more straightforward interpretation of the base coefficient of opted_in, in addition to the interaction term. In this case, the base opted_in coefficient refers to the effect of opting in, for the average PBR or size firm, rather than extrapolating a datapoint to when these equal zero.

The first interaction is the test of PBR and a company's disclosure status, presented in column 1. The interaction term reflects how the marginal impact of opting in changes based on a company's price book ratio. In this case, a strongly significant coefficient of -0.002 over the primary post-event window suggests that lower PBR firms will benefit more from complying than higher PBR firms - releasing more CAR over days (0,2). This is supportive of the theoretical and practical objectives of the reforms: we expect low PBR firms to have a relatively greater impact from disclosing plans, particularly given the threat of delisting and their relatively low valuation. However, this result is independent of the opting in or PBR variable being significant on average, so the average PBR firm doesn't benefit from opting in, nor does a low PBR firm benefit by doing nothing.

We run this same specification over a (0,10) day window, in order to analyse some of the delayed reactions seen in the base model (see Table A6 in *Appendix A)*. The interpretation remains similar, with a decrease in this negative relationship (-0.0017), but the base coefficient for price book ratio becomes significant and stronger (-0.0015). This is a positive result: lower PBR firms realise higher abnormal returns over the 10 days post-event, and those who have signed up to the List get an even stronger effect. This delayed reaction is something observed in other literature, like Black & Khanna (2007), where the realised returns improved over the two weeks post-event. We observe this when analysing CARs, and now, we see the relationship strengthening between a value measure (PBR) and returns, implying that as investors take time to digest the consequences of the List, they price it more completely. In the triple interaction model, significance increases to 95%: as we had centred the data in these terms, what this means is that, for firms with an average ROE and size, complying with the *Initiative* is more beneficial for lower PBR firms than higher PBR firms, supporting the discussion above. We therefore have confidence that the reform could help improve PBRS, but not necessarily market-wide. Once investors digest the reform over a

longer period, they may see plans as material and conducive to closing the value gap between segments of Japanese equities, but not the gap versus the rest of the world.

Table 3: Interaction Tests

Table 3 presents the regression estimates of Cumulative Abnormal Returns (CAR) over the (0,2) window, analyzing how the relationship between opting in and CAR varies by firm characteristics: size, price-to-book ratio (P/B), and return on equity (ROE). size is the log-transformed value of the market cap at the end of each month. leverage is total debt divided by total assets. momentum is the 6-month rolling sum of log returns, up to the end of the previous calendar month. price_book_ratio is the market value divided by the book value of equity. return_on_equity is earnings divided by the average book value of equity. All variables are winsorized at the 1st and 99th percentile. All regressions include time and industry fixed effects. Columns 1–3 include interactions between opted_in and one of the firm characteristics. Column 4 includes all interactions. Prior to interacting, the respective control variable is centered. the The standard errors are in parentheses below the coefficient estimate. All regressions are performed with standard errors clustered at firm and event date. Significance is denoted by *, **, and *** for the 10%, 5%, and 1% levels, respectively.

Variable	(1) opted_in × P/B	(2) opted_in × size	(3) opted_in × ROE	(4) All Interactions
opted_in	0.0006	0.0006	0.0007	0.0002
	(0.0009)	(0.0010)	(0.0009)	(0.0008)
size	-0.0000	-0.0001	-0.0000	-0.0002
	(0.0004)	(0.0004)	(0.0004)	(0.0004)
momentum	-0.0079	-0.0077	-0.0077	-0.0079
	(0.0063)	(0.0064)	(0.0064)	(0.0062)
leverage	-0.0008	-0.0007	-0.0007	-0.0009
	(0.0014)	(0.0015)	(0.0015)	(0.0014)
price_book_ratio	-0.0004	-0.0005	-0.0005	-0.0003
	(0.0003)	(0.0004)	(0.0004)	(0.0003)
return_on_equity	0.0021	0.0017	0.0017	0.0022
	(0.0023)	(0.0023)	(0.0024)	(0.0024)
opted_in × price_book_ratio	-0.0020***			-0.0023***
	(0.0005)			(0.0006)
opted_in × size		0.0005*		0.0008***
		(0.0003)		(0.0003)
opted_in × return_on_equity			-0.0034	0.0074
			(0.0077)	(0.0119)
Time fixed effects	✓	✓	✓	✓
Industry fixed effects	✓	✓	✓	✓
R-squared	0.0037	0.0029	0.0029	0.0040
N (entities)	3154	3154	3154	3154

The effect seems to be driven more by firms that have complied (versus non-compliers being punished with negative returns). Our subset regressions, splitting the sample into *complied* and *non-complied* firms explicitly, supports this conclusion (see Table A7 & A8 in *Appendix A)*. The only post-event significance (over 2 days) for PBR as a variable comes amongst firms who published capital efficiency plans [-0.0028, significant at 1%], and as this wasn't reflected in the out group, we cannot say that sentiment increases or expectations of future compliance increased amongst non-complying firms after any set of announcements. This subdued optimism about the ability of this reform to convert non-complying firms into joining the List undermines the *peer pressure* and *credible threats* inherent in the JPX's design, as it doesn't mean reform will become self-fulfilling, across the market-cap and quality spectrum. This also supports our view regarding information

dissemination: it matters not when the reform is published, but when the company publishes its plans.

We also test interactions on the size variable (the log of market cap), presented in column 2 of Table 3. Similarly, we find this effect varies significantly between treatment and control groups. In this case, a weakly significant and positive coefficient suggests that larger firms will benefit more from complying with the *Initiative*, overcoming any potential estimated negative relationship between CAR and size, and these large firms would outperform the equivalent small ones in the case of disclosing plans. The logic behind this could be the enhanced legitimacy of reforms and ability to engineer change - both operational and in terms of financial variables - in bigger, more sophisticated firms. On average, size has a slightly negative coefficient and is statistically insignificant, so we cannot conclude there is an effect of firm size on event CAR - we only observe that the effect of size improves with opting in to the *Initiative*, and that large firms who comply earn more CAR than small ones.

When looking over a longer window, the interaction coefficient flips to negative and remains significant only at 90% confidence (Table A5). This would be the direction through which we expect the reform to take hold: binding smaller stocks to better capital efficiency and governance principles, so opting in helps increase CAR in smaller firms more than big ones. But, deriving a conclusion tricky: we think that, as the market prices the reform over the 10-day window, it has a chance to more accurately evaluate it, and deem it as useful in binding smaller firms to better management practices. We expect the benefits of bonding to clearer governance to be more pronounced in stocks where the risk of both agency conflict and poor capital allocation is higher (small stocks, relative to larger, more institutionally held ones). Or perhaps the sample is flawed, in that Prime market adoption is far ahead of the smaller companies in the Standard market. It may also legitimise our choice to look at longer windows, but given the power of these estimated coefficients, we cannot confidently say the reform is making smaller stocks more. We observe no pre-event trading based on this coefficient, with a beta around zero and no significance, so it is likely, across both interaction and the simple multivariate models, that the market didn't consider this especially material.

The third interaction related to the *Initiative* is ROE, displayed in column (3). We hypothesise that low ROE firms may see a relatively greater response in their share price upon disclosing capital efficiency plans, as they can rise toward sector/global averages. The inverse case of lagging peers and losing out is also possible. Neither, however, was supported

by our analysis - ROE interaction variable and the base average ROE effect are both found to be statistically insignificant in our model specification. If these firms are *of lower quality*, the *Initiative* didn't empirically reduce their forward-looking risk over a short horizon, nor over a 10-day window. As the *Initiative* specifically targets ROE enhancements in both the net income and capital base, it is disheartening not to see this coefficient have an impact on CAR, either on its own or between groups in the interaction terms. Thus, ROE doesn't appear to affect CAR, regardless of the firm's disclosure status.

Therefore, we would say there is evidence to support H_3, rejecting the null hypothesis. We observe that reform compliance leads to a more pronounced effect in low PBR firms. We must qualify that for size, the initial reaction implies a preference for quality, with a later preference to invest in smaller firms who have complied. These are weak coefficients, but both support the idea that the effect of complying is conditional with firm characteristics: it's just that the short-term shows investors don't take on small company risk, but in time may prefer it, perhaps due to the mitigation from the reform.

Overall, opting in is not significant on average over short term windows, and the interaction terms provide mixed interpretations; while the strong relationship between reducing PBR and increasing reform success (as in realised CAR) suggests Japan's troubled firms have benefitted from opting in, the positive relationship with size suggests the argument of reducing agency risk may not be overcome - but the critical decision here is on event window length, and we see an argument for longer windows given the type of information being discussed. This is also supported by poor performing firms, proxied by ROE, not benefiting in any sense (absolute value or in the interaction terms). The weak negative coefficient on leverage suggests that Furthermore, the pre-event window provides no significant results in studying these interaction terms (see Table A9 in *Appendix A)*: this would indicate that perhaps the market wasn't anticipating market adoptions beforehand, and waited until after the announcement to assess the impact of each company's action accurately.

7. Conclusion

We analyse the market impact of Japan's most recent corporate governance-enhancing reform, the *Action to Implement Management that is Conscious of Cost of Capital and Stock Price*. This reform seeks to prescriptively and threateningly promote value-creating practices in Japanese listed equities. We find that over conventional event study horizons (the event day to two days later), companies realised no abnormal returns from complying with the *Initiative*, despite all of the credible threats and potential benefits of its design, and the legitimacy of the authority in charge. We also observe the effect of compliance, on average, is insignificant across longer windows also and in a pre-event test, suggesting the market wasn't using this signal to either improve or reduce its estimate of a firm's value creation.

Instead, the impact of the reform is dependent on firm characteristics, so the *Initiative* has had some success. We conclude that the *Initiative* was more effective in improving CAR amongst low PBR stocks, but only if they opted in, over a conventional (0,2) window. Low PBR stocks were more likely to benefit from disclosing plans than those with higher valuation ratios, and this effect occurs over both long and shorter post-event windows. For the longer window, the total effect gets stronger, as over 10 days post-event, PBR becomes inversely and significantly related to CAR on its own, meaning the average firm, even without the treatment, would see this improvement based on a lower PBR. This is positive evidence of weak support for reform helping improve low PBR firms, more generally. We also see an inverse conditional effect with size over 10 days post-event, suggesting both small and low PBR firms are helped by complying. These results increase optimism that the List is helping problem-children of the exchange (small firms with poor valuations and investor relations). However, the difference in coefficients between windows is worth discussing, as it goes to the heart of event study design and information processing in markets.

This separation between coefficients, over the conventional (0,2) and (0,10), leads us to believe investors were slow to price reform, even in the case of compliance. While the *Initiative* should signal improvements in capital efficiency and help lower PBR firms to ameliorate their performance, investors were sceptical of this or needed time to parse the details, as capital efficiency plans may be more complex than a simple 'upgrade' or 'downgrade' signal. We also believe there is a relative advantage argument to this - that

investors must assess a firm's compliance against several others over time, and this takes a few days to digest. This also demonstrates that the material point of information is not the broad, exchange-wide announcement, but rather the individual disclosure points, as the announcement itself at a high level did not reward Japanese equities, and significance is only observed in the short-run when firms have complied and have low valuations.

Analysing month-specific impacts, we believe there is a time-dependent significance of abnormal returns, possibly around the increasingly significant AGM season in Japan, as management and investors may have prioritised governance/capital allocation risks, even if they then priced out June's post-event gains in the July pre-event window. Is this founded optimism, or perhaps showing the limitations of investors to price complex information consistently over time. This is another point we would like to examine further. However, we observe in public data that activism and challenges to management are rising in recent years, and this perhaps motivates them to offer more generous and detailed disclosure around the time of their re-election bids at AGM.

In summation, the *Initiative* appears very different to Japan's past attempts at market revitalisation, but so far, its impact does not. We don't see the broad market benefit, suggesting indices and market-level valuations aren't improving due to the reform. However, the conditional effect finds that a firm that publishes plans and carries a low PBR does realise abnormal returns. Over 10 days, this improvement extends to other firms that have not yet complied, but carry low PBRs. Therefore, there are green shoots of hope for the TSE in improving valuation gaps between Japanese stocks, but not versus the world necessarily.

This is supposed to be just the beginning of a journey of reform, not the final destination. It remains an open question as to whether this more prescriptive form of value enhancement can actually engineer better shareholder returns at scale.

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Appendix A: Tables & Figures

Table A1: VIF test for multicollinearity

The table below presents the Variance Inflation Factors (VIF) for selected predictor variables in the regression model. A higher VIF indicates a greater degree of multicollinearity with other variables.

VIF	Variable
3.595435	size
2.138425	price_book_ratio
2.050002	leverage
1.275717	ROE
1.176548	opted_in
1.103137	momentum

Table A2: Summary Statistics

Table A2 presents summary statistics for the variables used in the regression. $CAR_{0,2}$ is the cumulative abnormal return calculated over a 2 day period starting from the event window, estimated using the market model from the estimation window. size is the log-transformed value of the market cap at the end of each month. leverage is total debt divided by total assets. momentum is the 6-month rolling sum of log returns, up to the end of the previous calendar month. price_book_ratio is the market value divided by the book value of equity. return_on_equity is earnings divided by the average book value of equity. All variables are winsorized at the 1st and 99th percentile. The statistics are presented for the compliant observations (column 2), the non-compliant observations (column 3) and the whole sample (column 4)

Variable	**Opted_in = 1**	**Opted_in = 0**	**Whole Sample**
Observations	2160	17222	19382
$CAR_{0,2}$			
Mean	0.0008	0.0005	0.0005
Standard Deviation	0.0271	0.0316	0.0311
Median	0.0000	0.0003	0.0002
25th Percentile	-0.0130	-0.0140	-0.0139
75th Percentile	0.0135	0.0137	0.0137
size			
Mean	10.9451	9.6139	9.7622
Standard Deviation	1.7764	1.5270	1.6121
Median	10.7571	9.3165	9.4441
25th Percentile	9.6790	8.4911	8.5655
75th Percentile	12.0624	10.4092	10.6321
momentum			
Mean	0.0659	0.0217	0.0266
Standard Deviation	0.1700	0.1877	0.1863
Median	0.0634	0.0275	0.0317
25th Percentile	-0.0267	-0.0677	-0.0629
75th Percentile	0.1614	0.1231	0.1274
leverage			
Mean	0.1690	0.1985	0.1952
Standard Deviation	0.1634	0.1878	0.1855
Median	0.1278	0.1504	0.1480
25th Percentile	0.0282	0.0273	0.0275
75th Percentile	0.2595	0.3198	0.3140
price_book_ratio			
Mean	1.4483	1.7068	1.6780
Standard Deviation	1.4658	1.7120	1.6883
Median	0.9547	1.1262	1.1064
25th Percentile	0.6497	0.6669	0.6640
75th Percentile	1.6119	2.0430	1.9982
return_on_equity			
Mean	0.0805	0.0524	0.0555
Standard Deviation	0.0841	0.1510	0.1453
Median	0.0755	0.0703	0.0711
25th Percentile	0.0432	0.0267	0.0291
75th Percentile	0.1131	0.1187	0.1178

Table A3: Sample Distribution

Table A3 presents sample distribution and statistics for the sample, including the event dates, the aggregated CAR and the number of firms reporting their compliance at each event date. $CAR_{0,2}$ is the cumulative abnormal return calculated over a 2 day period starting from the event window, estimated using the market model from the estimation window. The parenthesis (1) and (0) corresponds to firms belonging to the compliant group and non-compliant group respectively. N refers to the number of observations.

Event Date	**$CAR_{0,2}$ (1)**	**$CAR_{0,2}$ (0)**	**N (1)**	**N (0)**	**Total N**
2024-01-15	-0.0003	-0.0028	1097	2057	3154
2024-02-15	-0.0008	0.0008	109	1948	2057
2024-03-15	-0.0097	-0.0042	93	1855	1948
2024-04-15	-0.0048	-0.0034	133	1722	1855
2024-05-15	-0.0161	-0.0112	89	1633	1722
2024-06-14	0.0119	0.0109	91	1542	1633
2024-07-12	0.0119	0.0123	300	1242	1542
2024-08-15	-0.0020	-0.0004	136	1106	1242
2024-09-13	0.0065	0.0058	34	1072	1106
2024-10-15	0.0051	0.0019	35	1037	1072
2024-11-15	0.0061	0.0015	23	1014	1037
2024-12-13	0.0107	0.0033	20	994	1014
Average/Sum	**0.0008**	**0.0005**	**2160**	**17222**	**19382**

Table A4: t-statistics for the Initiative Announcement

Table A4 reports the cumulative abnormal returns (CAR), standard errors (SE), and t-statistics over various event windows around the initiative announcement.

Event Window	Days	CAR	SE	T-stat
CAR (0,2)	3	0.0150	0.0168	0.8931
CAR (0,5)	6	-0.0128	0.0237	-0.5377
CAR (0,10)	11	0.0096	0.0322	0.2977
CAR (-10,-1)	10	0.0268	0.0307	0.8734

Figure A1: Standardized CAR Around the Announcement Event Window

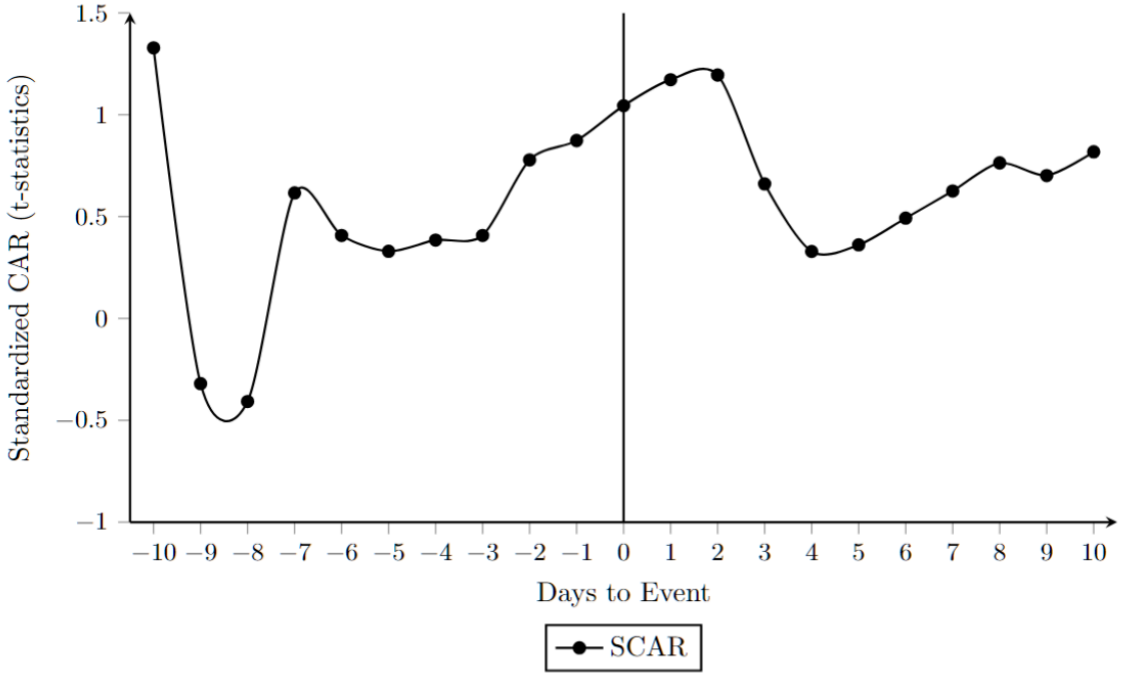


Figure A1 plots the t-statistics for the Standardized Cumulative Abnormal Returns (SCAR) for the initiative announcement around the event window –10 to +10. The plotted line represents the Standardized CAR values(t-statistics), with a vertical line at day 0 indicating the event date.

Figure A2: t-Statistic Around the Event Window

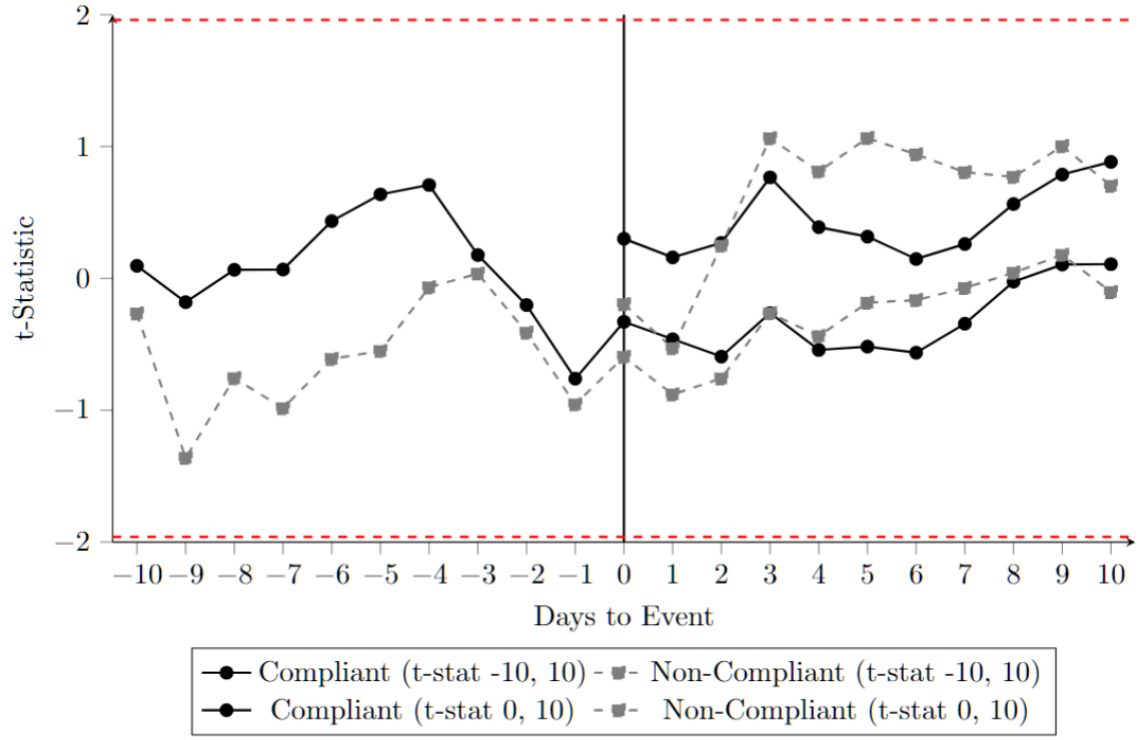


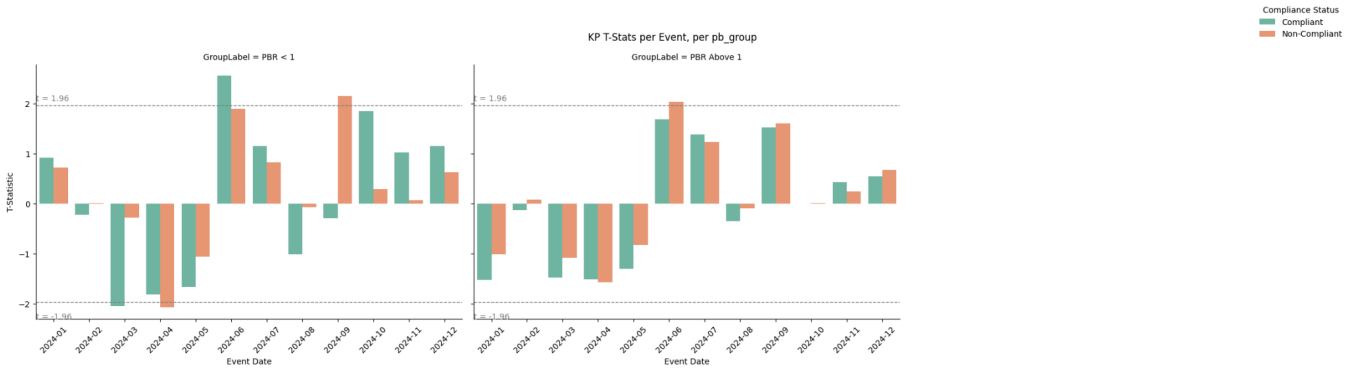
Figure A2 plots the t-statistic for compliant and non-compliant firms around the event window (-10,10). The solid black lines represent compliant firms, while the dashed gray lines represent non-compliant firms. The left set of lines shows t-statistics from -10 to +10 days, while the right set shows t-statistics from day 0 to +10 days. The vertical line at day 0 marks the event date. The dashed red lines represent the significance threshold at ±1.96, indicating statistical significance at the 5% level.

Figure A3: Segmented t stats, per event date

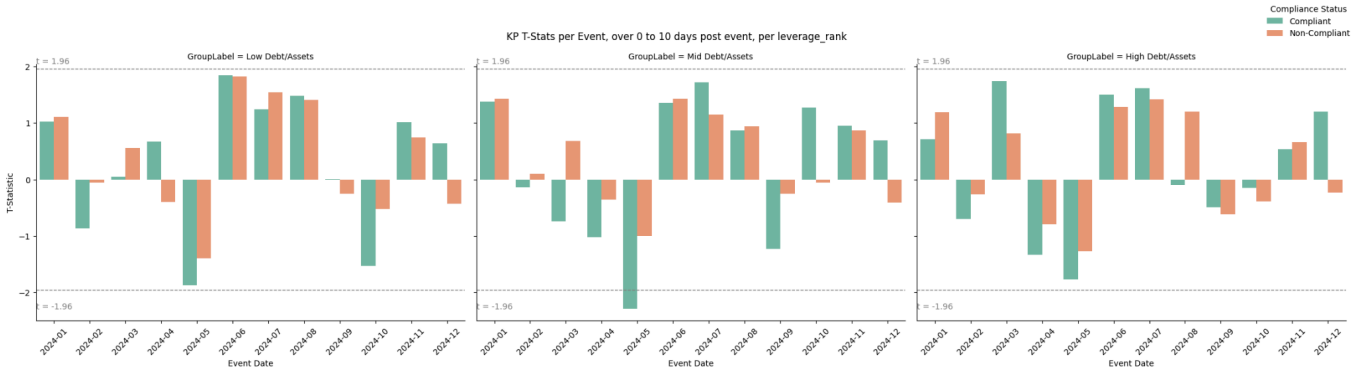
Figure A3 plots the t-statistics of CAR for various subsets of the sample, Section a) refers to the sample split into two groups for PBR values above and below 0 respectively. Section b) refers to the sample split into terciles based on ROE. Section c) refers to the sample split into terciles based on Price / Earnings (P/E). Section d) refers to the sample split into terciles based on leverage.

A3a) PBR Groups, above and below book value, for various windows

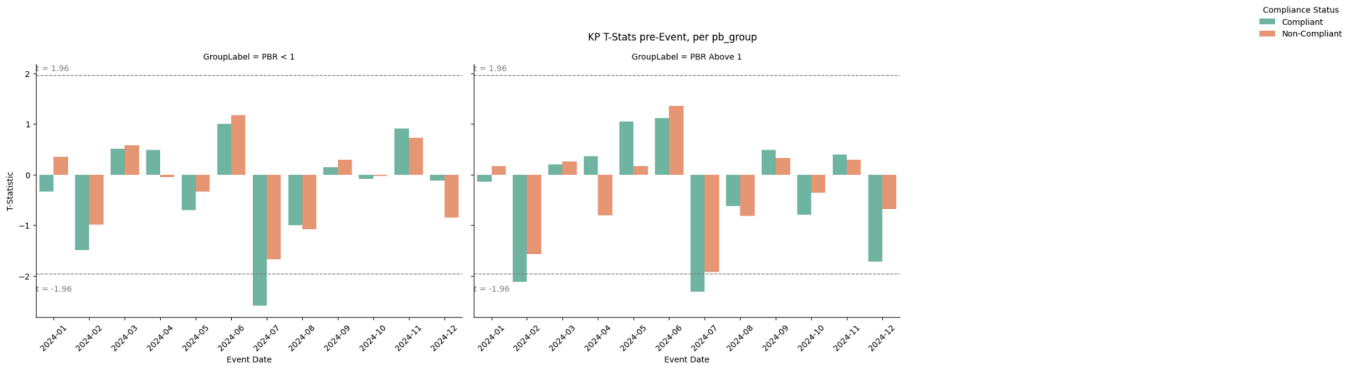
(0, 2):



(0,10):

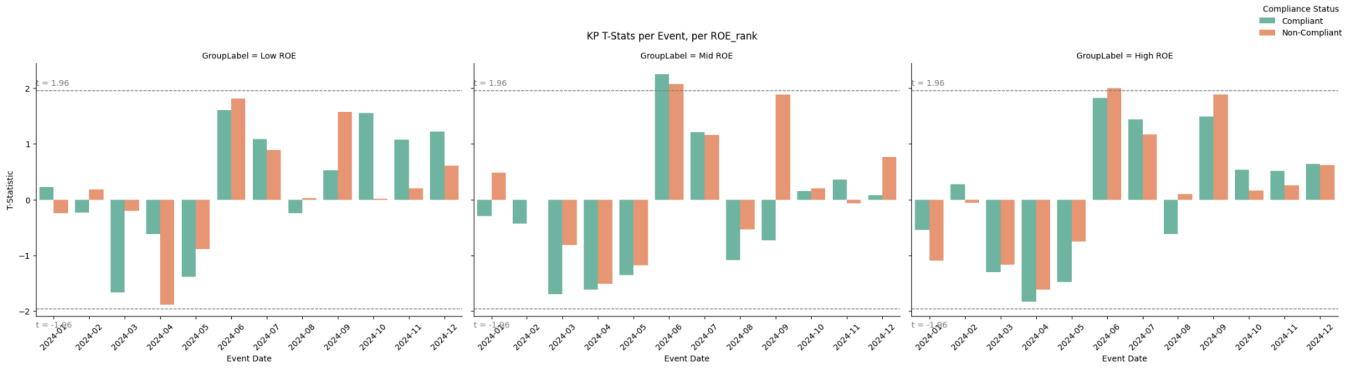


(-10,-1):

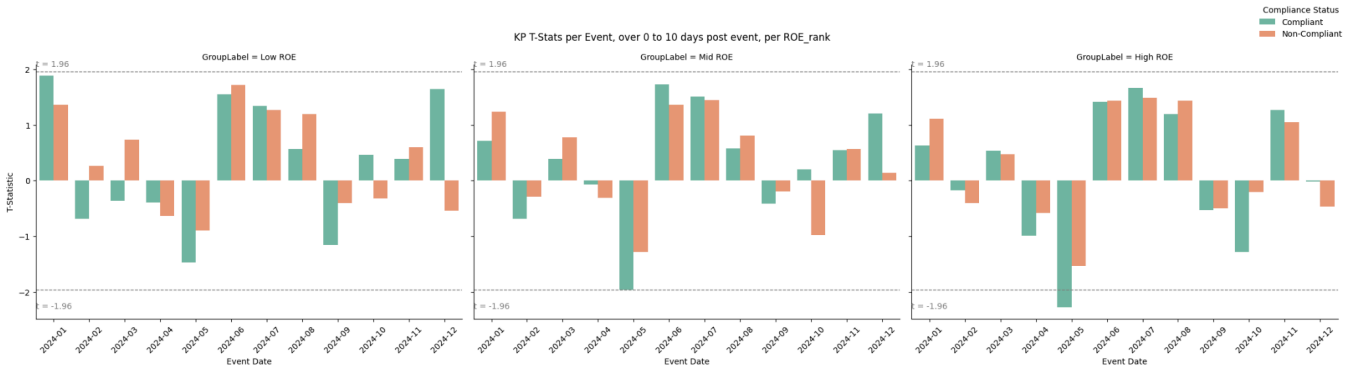


A3b) ROE: Low, Mid, High Terciles

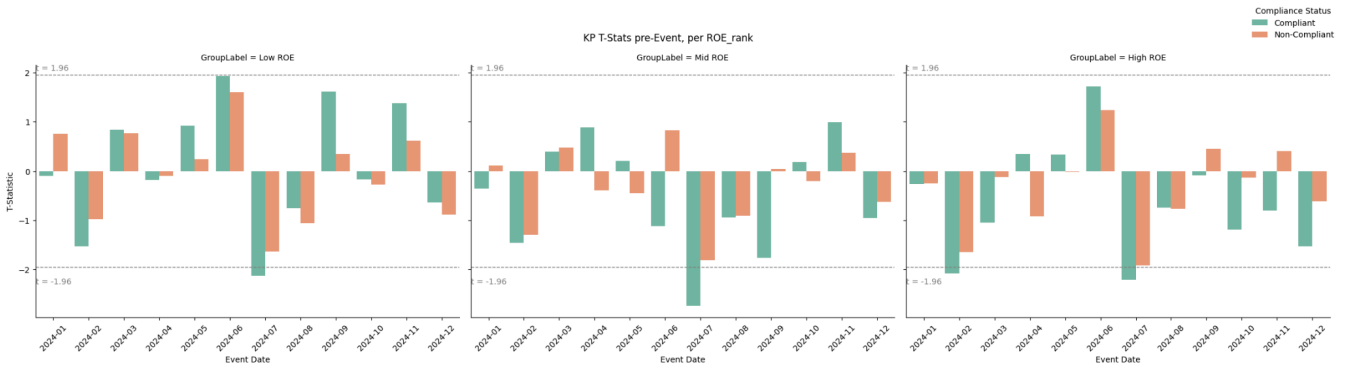
(0, 2):



(0, 10):

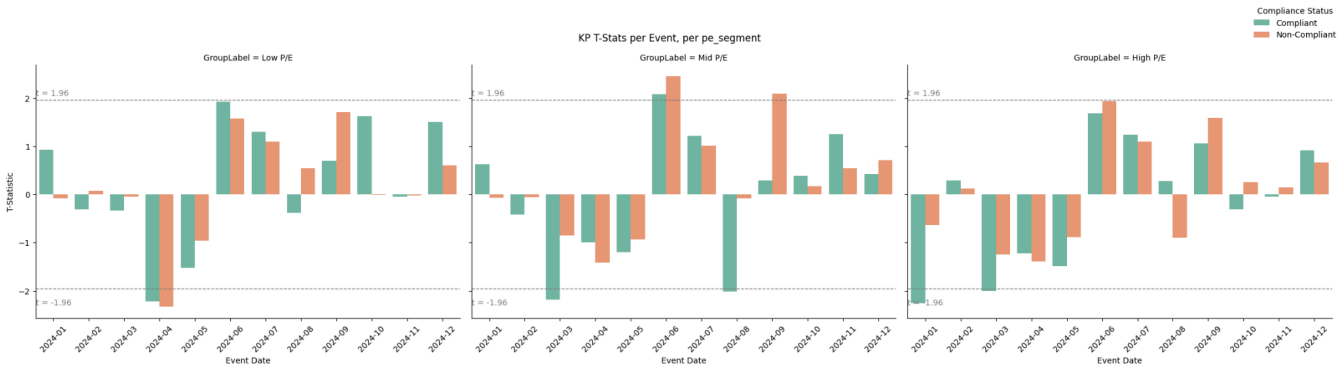


(-10,-1):

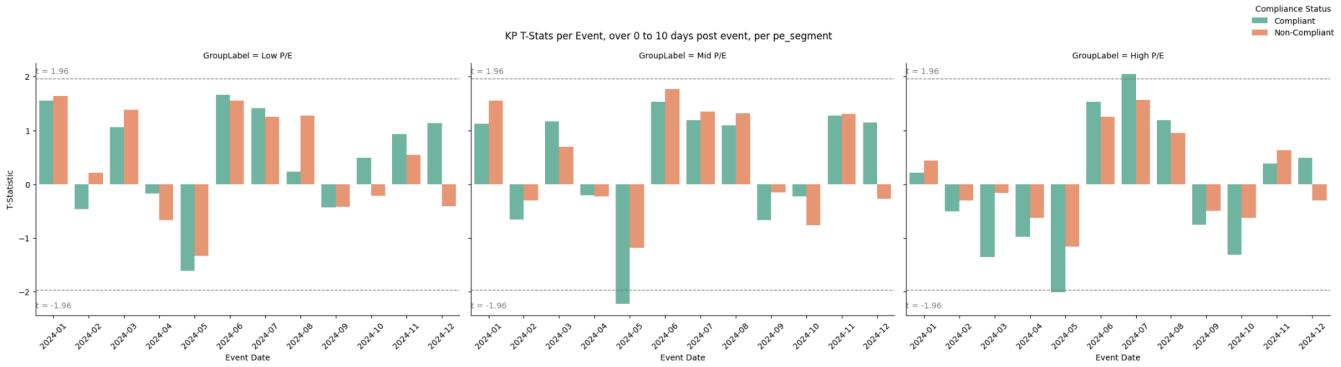


A3c) P/E Segment: Low, Mid, High Terciles

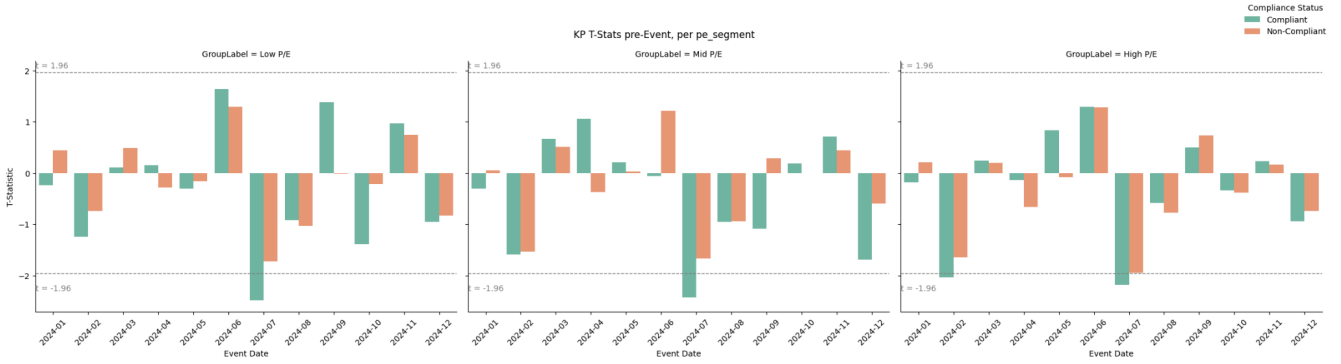
(0, 2):



(0, 10):

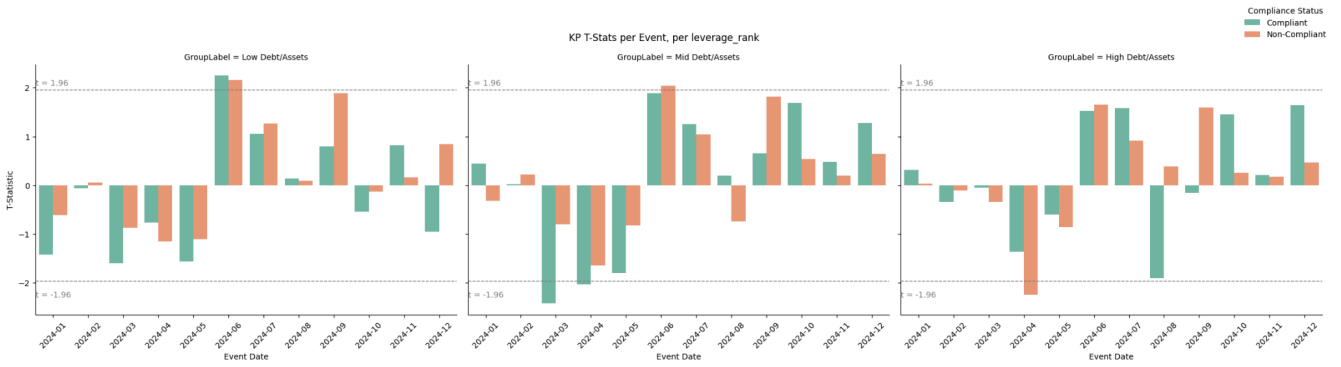


(-10,-1):

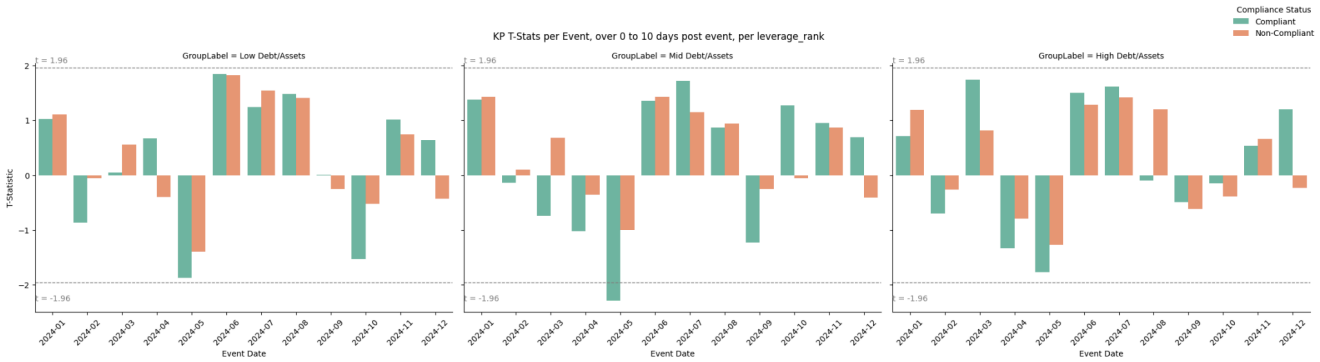


A3d) Leverage: Low, Mid, High Terciles

(0, 2):



(0, 10):


KP T-Stats per Event, over 0 to 10 days post event, per leverage_rank
Compliance Status
Compliant
Non-Compliant
GroupLabel = Low Debt/Assets
GroupLabel = Mid Debt/Assets
GroupLabel = High Debt/Assets
t = 1.96
t = -1.96
T-Statistic
Event Date

(-10,-1):

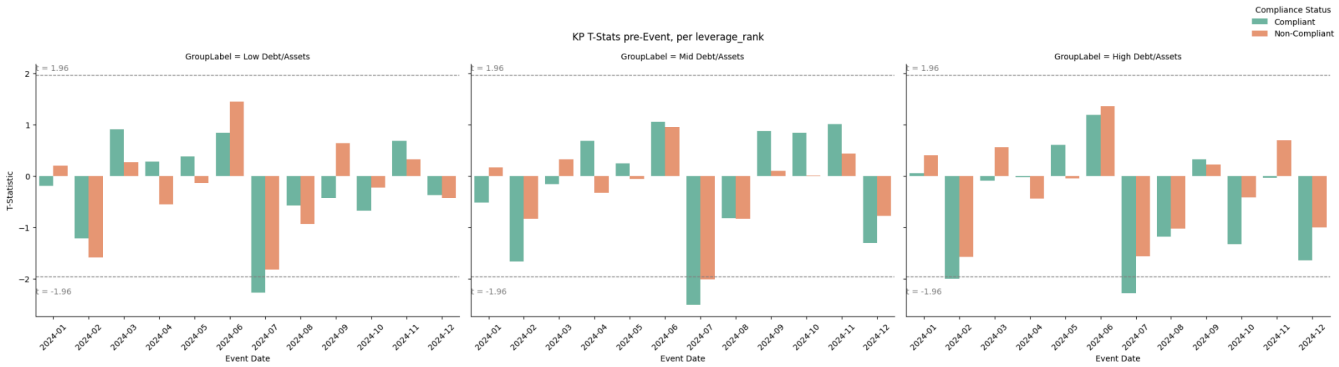

KP T-Stats pre-Event, per leverage_rank
Compliance Status
Compliant
Non-Compliant
GroupLabel = Low Debt/Assets
GroupLabel = Mid Debt/Assets
GroupLabel = High Debt/Assets
t = 1.96
t = -1.96
T-Statistic
Event Date

Table A5: Regression Results for Various Event Windows, Excluding First Event Date

Table A5 presents regression estimates of Cumulative Abnormal Returns (CAR) over the event windows (-10,-1), (0,2), and (0,10), excluding the first event date, estimated using the market model from the estimation window. size is the log-transformed value of the market cap at the end of each month. leverage is total debt divided by total assets. momentum is the 6-month rolling sum of log returns, up to the end of the previous calendar month. price_book_ratio is the market value divided by the book value of equity. return_on_equity is earnings divided by the average book value of equity. All variables are winsorized at the 1st and 99th percentile. Fixed effects include time and industry in the specified models. The standard errors are in parentheses below the coefficient estimate. All regressions are performed with standard errors clustered at firm and event date. Significance is denoted by *, **, and *** for the 10%, 5%, and 1% levels, respectively.

Variable	(1) CAR (-10,-1)	(2) CAR (0,2)	(3) CAR (0,10)
opted_in	-0.0010	-0.0008	-0.0013
	(0.0026)	(0.0007)	(0.0014)
size	0.0004	0.0003	-0.0000
	(0.0005)	(0.0004)	(0.0010)
momentum	-0.0361***	-0.0142***	-0.0453***
	(0.0069)	(0.0035)	(0.0066)
leverage	-0.0019	-0.0018	-0.0073*
	(0.0037)	(0.0013)	(0.0042)
price_book_ratio	-0.0015*	-0.0002	-0.0016**
	(0.0009)	(0.0003)	(0.0007)
return_on_equity	-0.0022	0.0019	0.0045
	(0.0052)	(0.0025)	(0.0058)
Time fixed effects	✓	✓	✓
Industry fixed effects	✓	✓	✓
R-squared	0.0189	0.0067	0.0262
N (entities)	2057	2057	2057

Table A6: Interaction Tests for Event Window (0,10)

Table A6 presents the regression estimates of Cumulative Abnormal Returns (CAR) over the (0,10) window, analyzing how the relationship between opting in and CAR varies by firm characteristics: size, price-to-book ratio (P/B), and return on equity (ROE). size is the log-transformed value of the market cap at the end of each month. leverage is total debt divided by total assets. momentum is the 6-month rolling sum of log returns, up to the end of the previous calendar month. price_book_ratio is the market value divided by the book value of equity. return_on_equity is earnings divided by the average book value of equity. All variables are winsorized at the 1st and 99th percentile. All regressions include time and industry fixed effects. Columns 1–3 include interactions between opted_in and one of the firm characteristics. Column 4 includes all interactions. Prior to interacting, the respective control variable is centered. The standard errors are in parentheses below the coefficient estimate. All regressions are performed with standard errors clustered at firm and event date. Significance is denoted by *, **, and *** for the 10%, 5%, and 1% levels, respectively.

Variable	**(1) opted_in × P/B**	**(2) opted_in × size**	**(3) opted_in × ROE**	**(4) All Interactions**
opted_in	0.0002	0.0007	0.0002	0.0003
	(0.0013)	(0.0017)	(0.0014)	(0.0016)
size	-0.0013	-0.0011	-0.0013	-0.0011
	(0.0013)	(0.0012)	(0.0013)	(0.0011)
momentum	-0.0401***	-0.0400***	-0.0400***	-0.0402***
	(0.0071)	(0.0071)	(0.0072)	(0.0071)
leverage	-0.0067*	-0.0064*	-0.0066*	-0.0065*
	(0.0036)	(0.0037)	(0.0036)	(0.0036)
price_book_ratio	-0.0015***	-0.0017***	-0.0017***	-0.0016***
	(0.0006)	(0.0006)	(0.0006)	(0.0006)
return_on_equity	0.0113	0.0104	0.0106	0.0101
	(0.0082)	(0.0077)	(0.0080)	(0.0076)
opted_in × price_book_ratio	-0.0017*			-0.0017**
	(0.0009)			(0.0007)
opted_in × size		-0.0016*		-0.0014
		(0.0009)		(0.0009)
opted_in × return_on_equity			0.0051	0.0208
			(0.0128)	(0.0143)
Time fixed effects	✓	✓	✓	✓
Industry fixed effects	✓	✓	✓	✓
R-squared	0.0258	0.0258	0.0256	0.0261
N (entities)	3154	3154	3154	3154

Table A7: Regression Results for Various Event Windows, subset opted_in = 1

Table A7 presents regression estimates of Cumulative Abnormal Returns (CAR) over the event windows (-10,-1), (0,2), and (0,10), for the subset of opted_in = 1, estimated using the market model from the estimation window. size is the log-transformed value of the market cap at the end of each month. leverage is total debt divided by total assets. momentum is the 6-month rolling sum of log returns, up to the end of the previous calendar month. price_book_ratio is the market value divided by the book value of equity. return_on_equity is earnings divided by the average book value of equity. All variables are winsorized at the 1st and 99th percentile. Fixed effects include time and industry in the specified models. The standard errors are in parentheses below the coefficient estimate. All regressions are performed with standard errors clustered at firm and event date. Significance is denoted by *, **, and *** for the 10%, 5%, and 1% levels, respectively.

Variable	**(1) CAR (-10,-1)**	**(2) CAR (0,2)**	**(3) CAR (0,10)**
size	-0.0003	0.0007	-0.0026
	(0.0006)	(0.0007)	(0.0020)
momentum	-0.0453**	-0.0007	-0.0354**
	(0.0178)	(0.0108)	(0.0145)
leverage	-0.0041	0.0036	-0.0103
	(0.0118)	(0.0055)	(0.0113)
price_book_ratio	-0.0014	-0.0027***	-0.0035***
	(0.0015)	(0.0007)	(0.0010)
return_on_equity	-0.0154	0.0091	0.0350*
	(0.0205)	(0.0117)	(0.0193)
Time fixed effects	✓	✓	✓
Industry fixed effects	✓	✓	✓
R-squared	0.0317	0.0178	0.0449
N (entities)	2160	2160	2160

Table A8: Regression Results for Various Event Windows, subset opted_in = 0

Table A8 presents regression estimates of Cumulative Abnormal Returns (CAR) over the event windows (-10,-1), (0,2), and (0,10), for the subset of opted_in = 0, estimated using the market model from the estimation window. size is the log-transformed value of the market cap at the end of each month. leverage is total debt divided by total assets. momentum is the 6-month rolling sum of log returns, up to the end of the previous calendar month. price_book_ratio is the market value divided by the book value of equity. return_on_equity is earnings divided by the average book value of equity. All variables are winsorized at the 1st and 99th percentile. Fixed effects include time and industry in the specified models. The standard errors are in parentheses below the coefficient estimate. All regressions are performed with standard errors clustered at firm and event date. Significance is denoted by *, **, and *** for the 10%, 5%, and 1% levels, respectively.

Variable	**(1) CAR (-10,-1)**	**(2) CAR (0,2)**	**(3) CAR (0,10)**
size	0.0001	-0.0002	-0.0011
	(0.0006)	(0.0004)	(0.0011)
momentum	-0.0429***	-0.0088	-0.0409***
	(0.0075)	(0.0057)	(0.0067)
leverage	-0.0009	-0.0014	-0.0059*
	(0.0035)	(0.0012)	(0.0035)
price_book_ratio	-0.0018**	-0.0003	-0.0015***
	(0.0008)	(0.0003)	(0.0006)
return_on_equity	-0.0049	0.0023	0.0103
	(0.0058)	(0.0024)	(0.0078)
Time fixed effects	✓	✓	✓
Industry fixed effects	✓	✓	✓
R-squared	0.0282	0.0031	0.0245
N (entities)	2057	2057	2057

Table A9: Interaction Tests for Event Window (-10,-1)

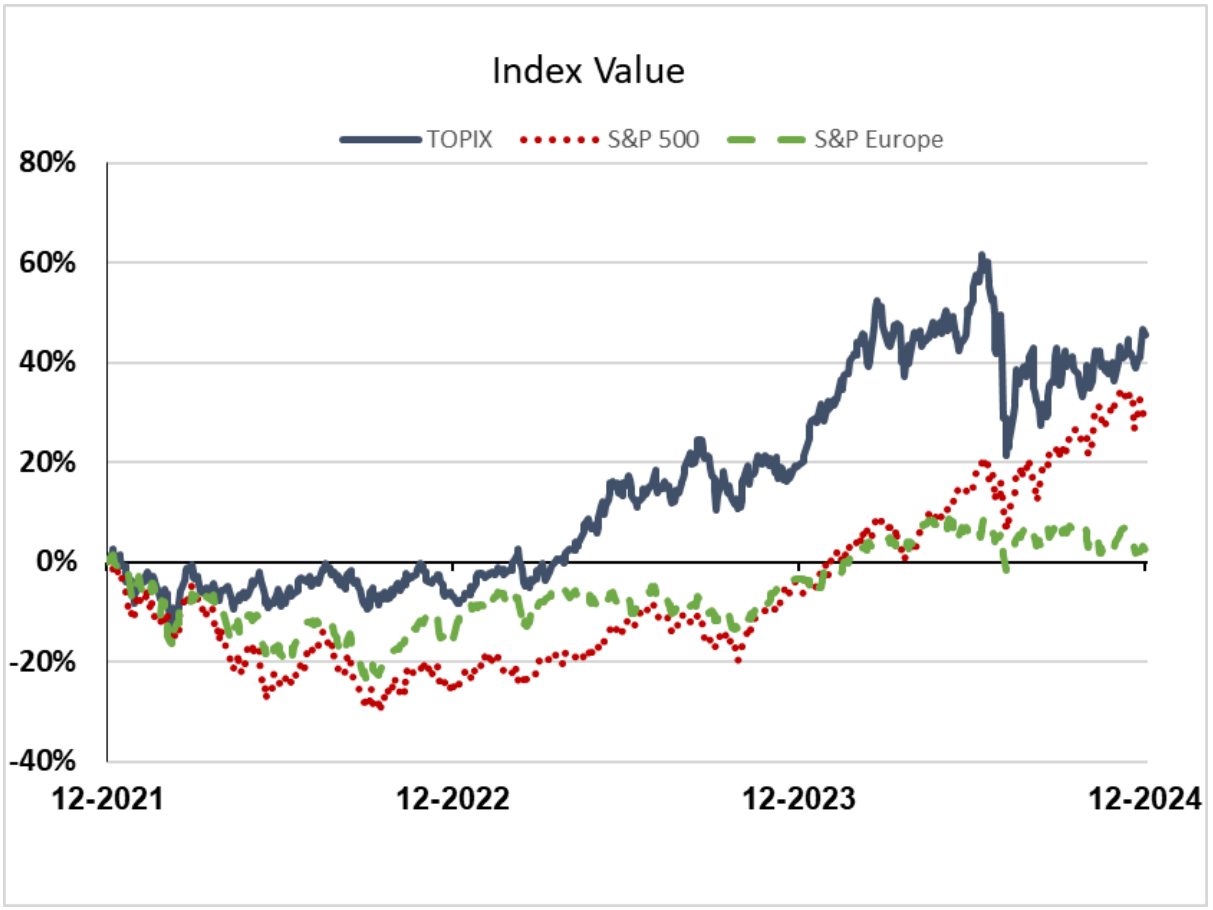
Table A9 presents the regression estimates of Cumulative Abnormal Returns (CAR) over the (-10,-1) window, analyzing how the relationship between opting in and CAR varies by firm characteristics: size, price-to-book ratio (P/B), and return on equity (ROE). size is the log-transformed value of the market cap at the end of each month. leverage is total debt divided by total assets. momentum is the 6-month rolling sum of log returns, up to the end of the previous calendar month. price_book_ratio is the market value divided by the book value of equity. return_on_equity is earnings divided by the average book value of equity. All variables are winsorized at the 1st and 99th percentile. All regressions include time and industry fixed effects. Columns 1–3 include interactions between opted_in and one of the firm characteristics. Column 4 includes all interactions. Prior to interacting, the respective control variable is centered. The standard errors are in parentheses below the coefficient estimate. All regressions are performed with standard errors clustered at firm and event date. Significance is denoted by *, **, and *** for the 10%, 5%, and 1% levels, respectively.

Variable	**(1) opted_in × size**	**(2) opted_in × P/B**	**(3) opted_in × ROE**	**(4) All Interactions**
opted_in	-0.0020	-0.0021	-0.0019	-0.0017
	(0.0015)	(0.0015)	(0.0013)	(0.0014)
size	0.0001	-0.0000	-0.0000	0.0001
	(0.0006)	(0.0006)	(0.0006)	(0.0006)
momentum	-0.0435***	-0.0434***	-0.0435***	-0.0434***
	(0.0085)	(0.0084)	(0.0085)	(0.0084)
leverage	-0.0015	-0.0015	-0.0016	-0.0014
	(0.0032)	(0.0032)	(0.0032)	(0.0032)
price_book_ratio	-0.0017**	-0.0017**	-0.0017**	-0.0017**
	(0.0008)	(0.0008)	(0.0008)	(0.0008)
return_on_equity	-0.0052	-0.0052	-0.0046	-0.0048
	(0.0054)	(0.0053)	(0.0056)	(0.0056)
opted_in × size	-0.0004			-0.0004
	(0.0008)			(0.0008)
opted_in × price_book_ratio		0.0004		0.0008
		(0.0010)		(0.0011)
opted_in × return_on_equity			-0.0119	-0.0154
			(0.0192)	(0.0215)
Time fixed effects	✓	✓	✓	✓
Industry fixed effects	✓	✓	✓	✓
R-squared	0.0293	0.0293	0.0293	0.0294
N (entities)	3154	3154	3154	3154

Appendix B: Exhibits

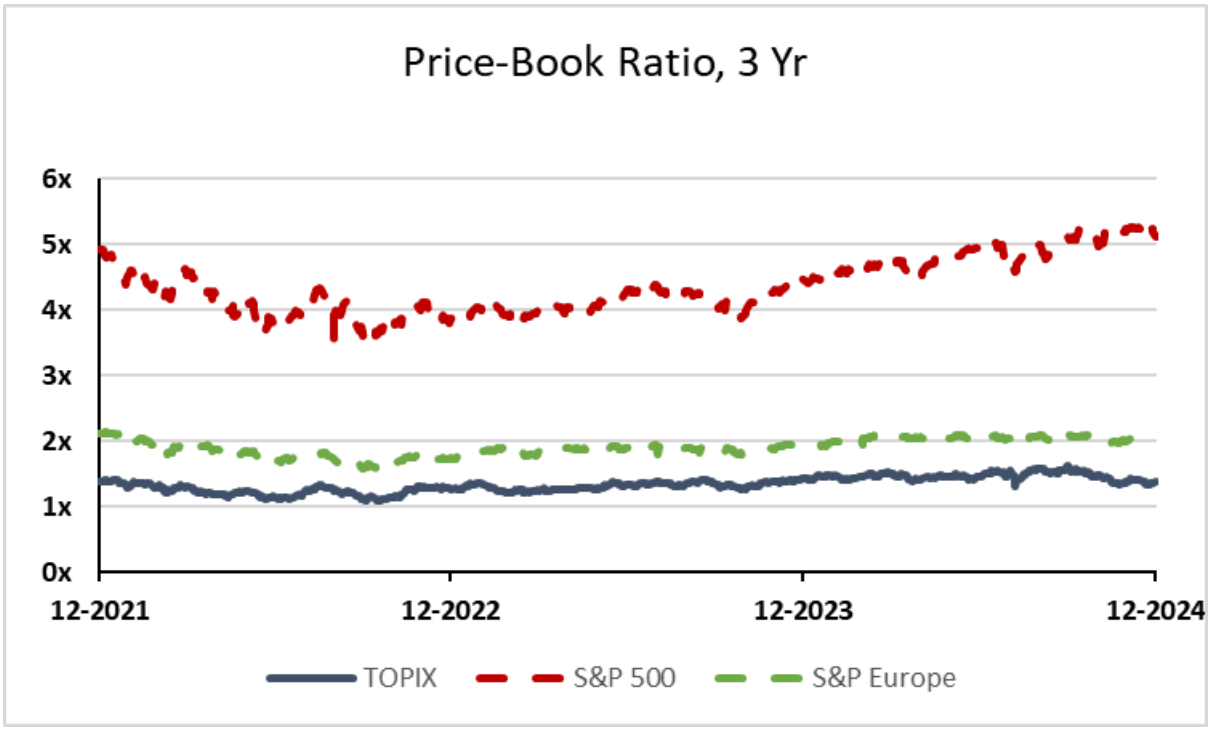
Introduction

Exhibit 1a: Index Performance, 3 years, various indices, S&P Capital IQ data (2025)

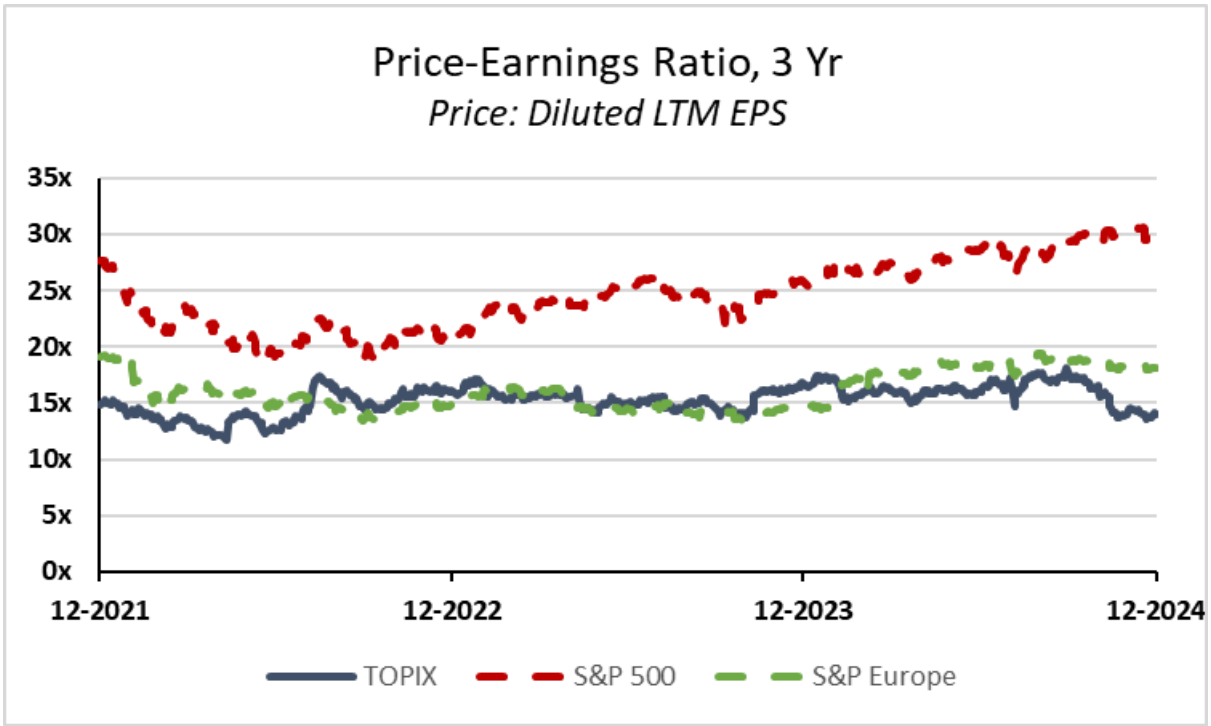


This exhibit graphs the cumulative price performance of 3 major indices: The TOPIX tracks large-cap Japanese equities, the S&P 500 tracks major US large-cap equities, and the S&P Europe tracks a cap-weighted index of European stocks

Exhibit 1b: Valuation Ratios, PBR & PER, various indices, Capital IQ, 2025

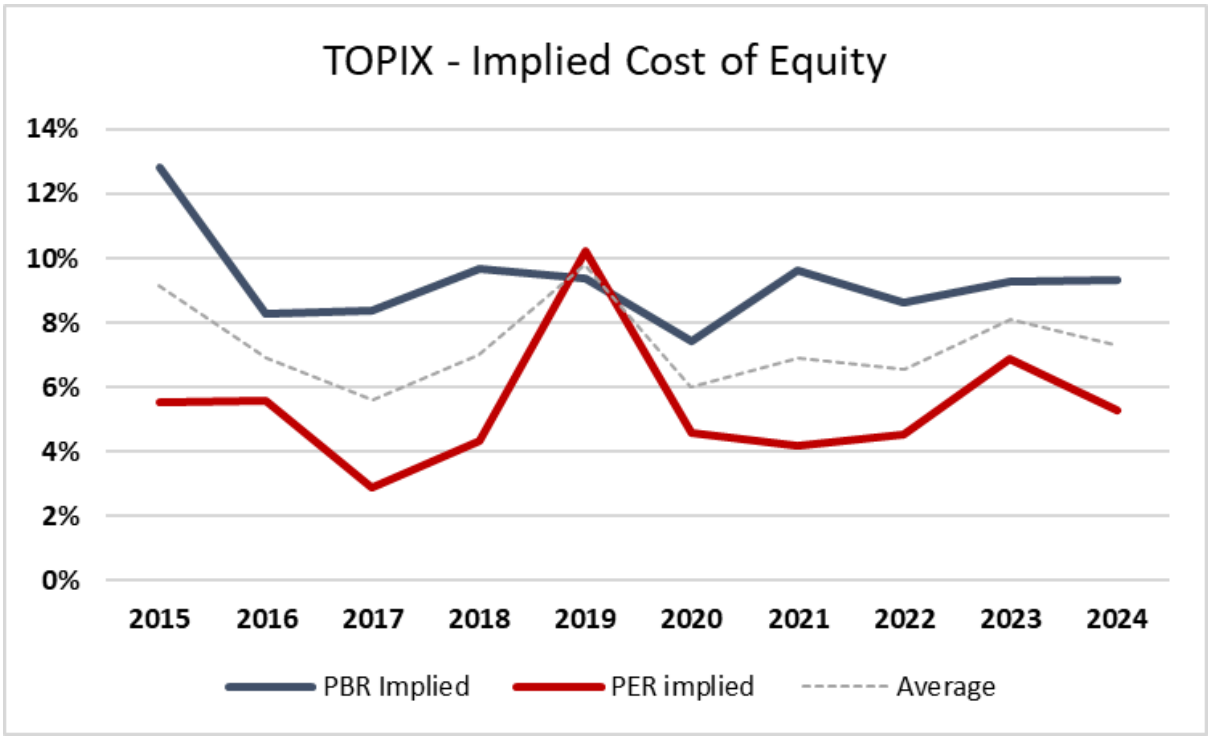


This exhibit graphs the Price-to-Book ratio of 3 major indices: The TOPIX tracks large-cap Japanese equities, the S&P 500 tracks major US large-cap equities, and the S&P Europe tracks a cap-weighted index of European stocks.



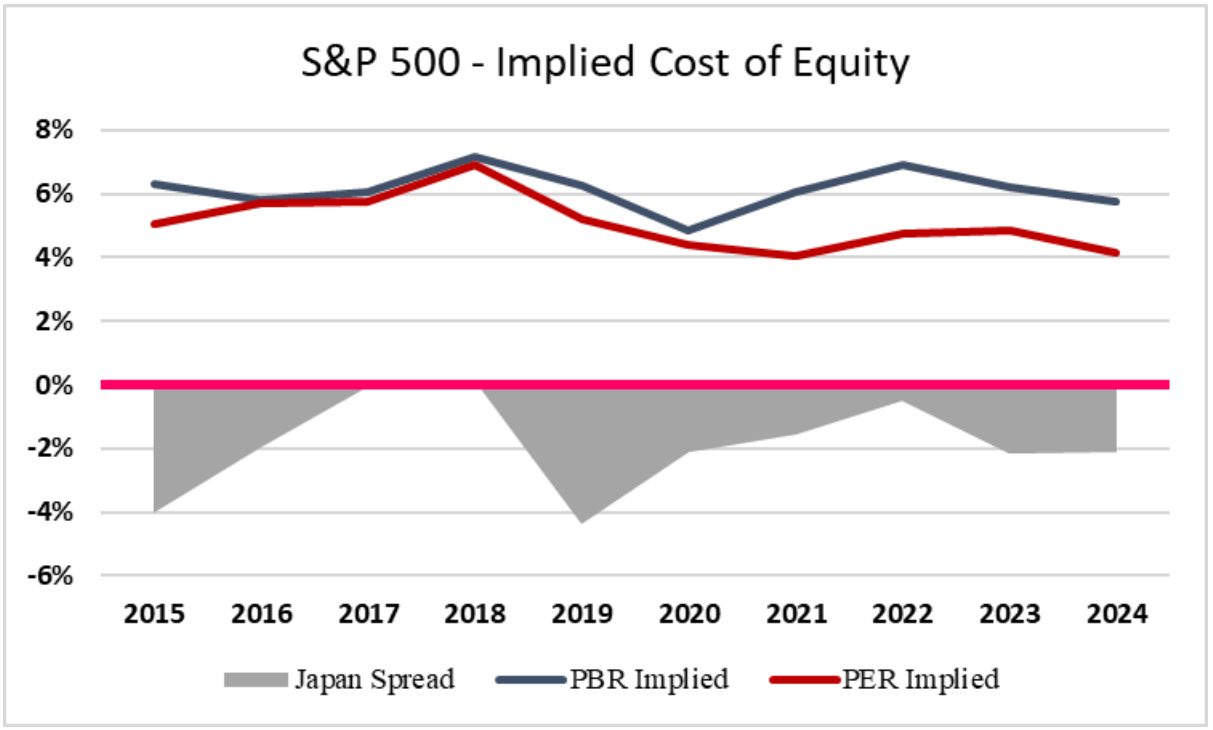
This exhibit graphs the Price-Earnings ratio of 3 major indices: The TOPIX tracks large-cap Japanese equities, the S&P 500 tracks major US large-cap equities, and the S&P Europe tracks a cap-weighted index of European stocks. In this case, the EPS is trailing LTM, diluted earnings per share as per Capital IQ data.

Exhibit 1c: Implied Cost of Capital (S&P TOPIX), author calculations, inferred from Capital IQ data, 2025



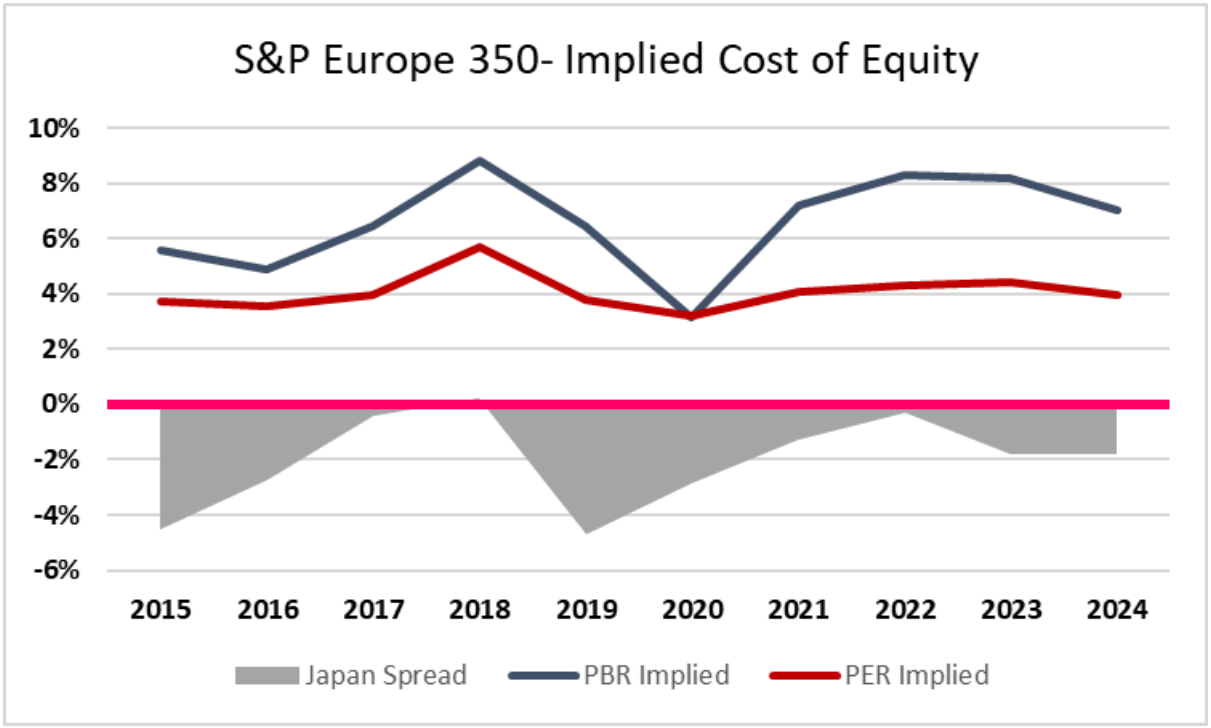
This exhibit graphs the implied cost of capital for Japanese equities, proxied using the TOPIX index. As outlined in the formulae, this is inferred using market information on ROE, nominal earnings, and the value of price book and price-earnings ratios at calendar year end (16x and 1.25x respectively), and a nominal growth estimate of 3%.

Exhibit 1d: Implied Cost of Capital (S&P 500), author calculations, inferred from Capital IQ data, 2025



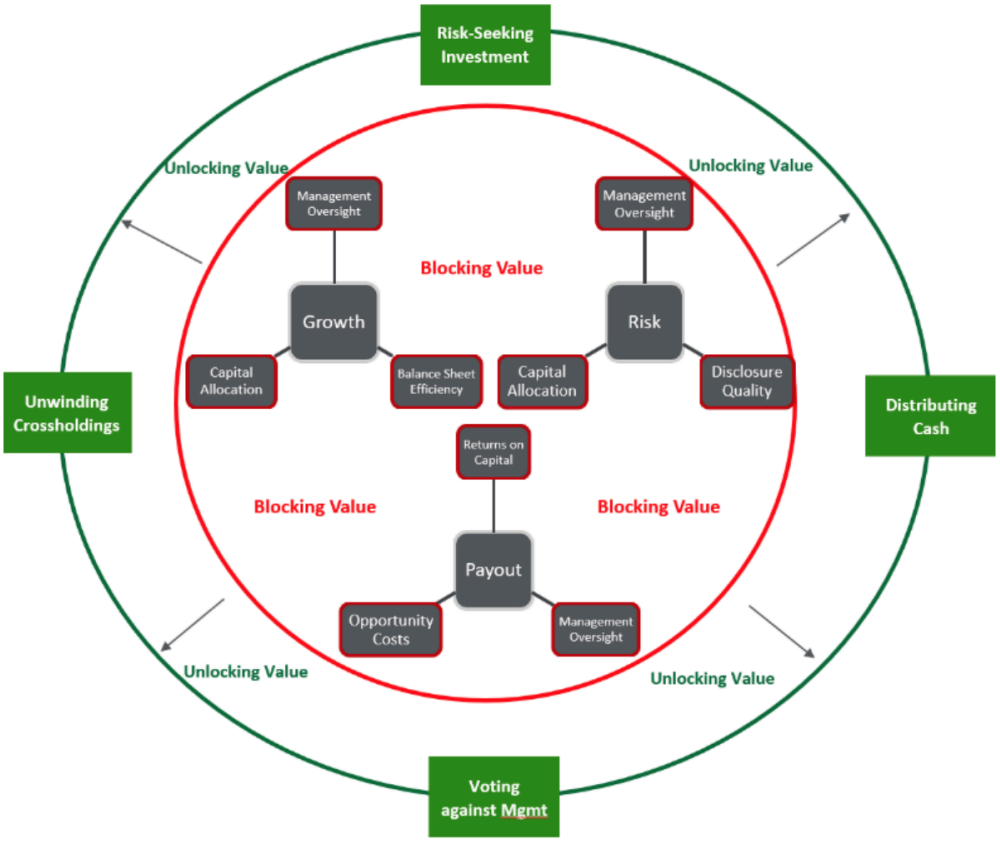
This exhibit graphs the implied cost of capital for US equities, proxied using the S&P 500 index. As outlined in the formulae, this is inferred using market information on ROE, nominal earnings, price book ratios and price earnings ratios at calendar year-end. The 'Japan Spread' refers to the difference between US and Japanese equities: The US cost of equity is ~2% lower at year-end 2024

Exhibit 1e: Implied Cost of Capital (S&P Europe), author calculations, inferred from Capital IQ data, 2025



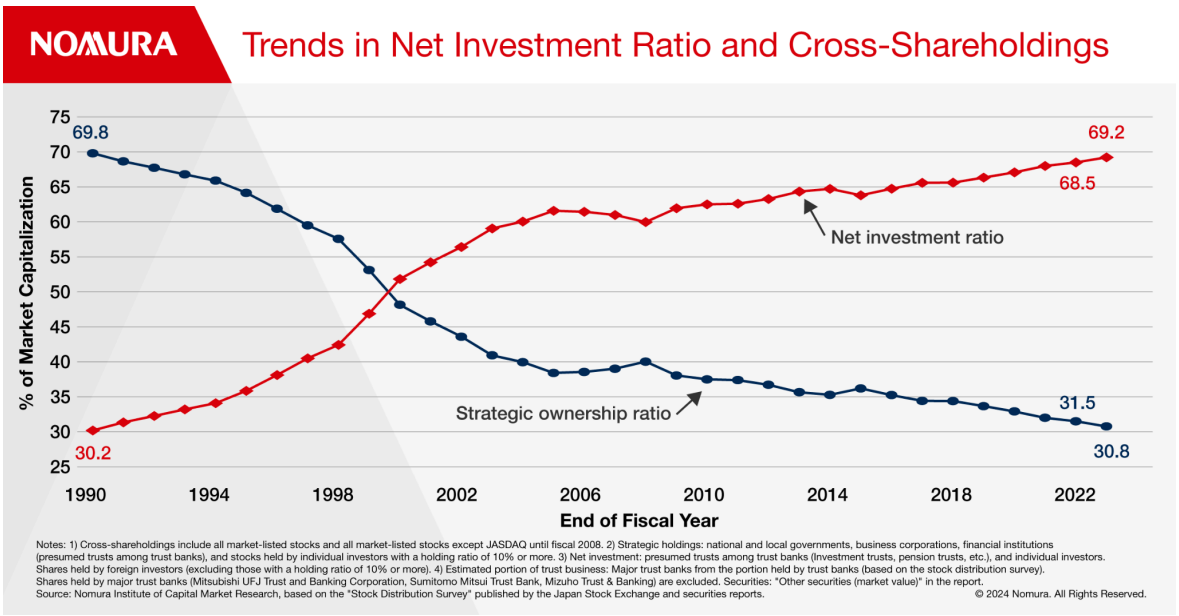
This exhibit graphs the implied cost of capital for European equities, proxied using the S&P European 350 index. As outlined in the formulae, this is inferred using market information on ROE, nominal earnings, and the value of price book and price earnings ratios at calendar year end (16x and 1.25x respectively), and a nominal growth estimate of 3%. The 'Japan Spread' refers to the difference between US and Japanese equities: The US cost of equity is ~2% lower at year-end 2024

Exhibit 2a: A visualisation of value creation



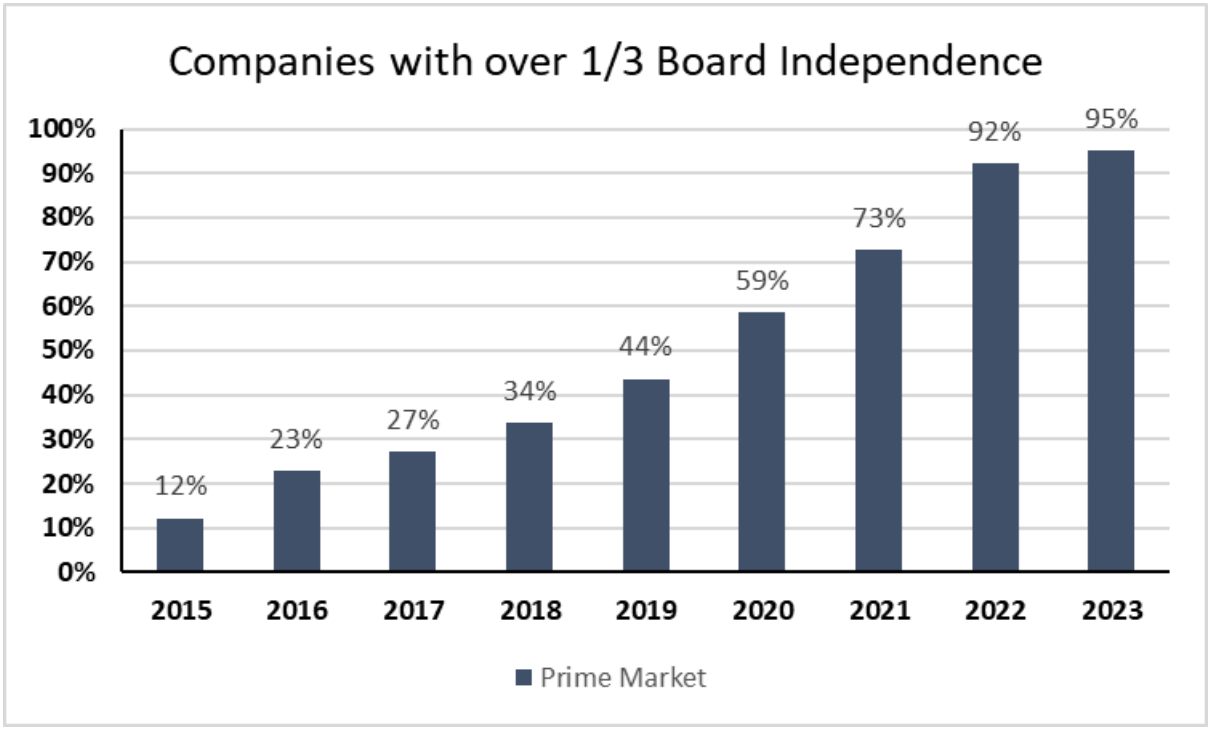
This exhibit visualises the key variables referenced in text when speaking about value creation, and the historical and ongoing barriers to this in Japan.

Exhibit 2b (Cross Shareholding stakes, Nishiyama, 2024; Nomura, 2024. This graphic was published originally in a *Nomura Connects* web post



Cross-shareholdings, or strategic investments, have historically been a major use of capital in Japan. While this is decreasing, there is still considerable scope for capital efficiency.

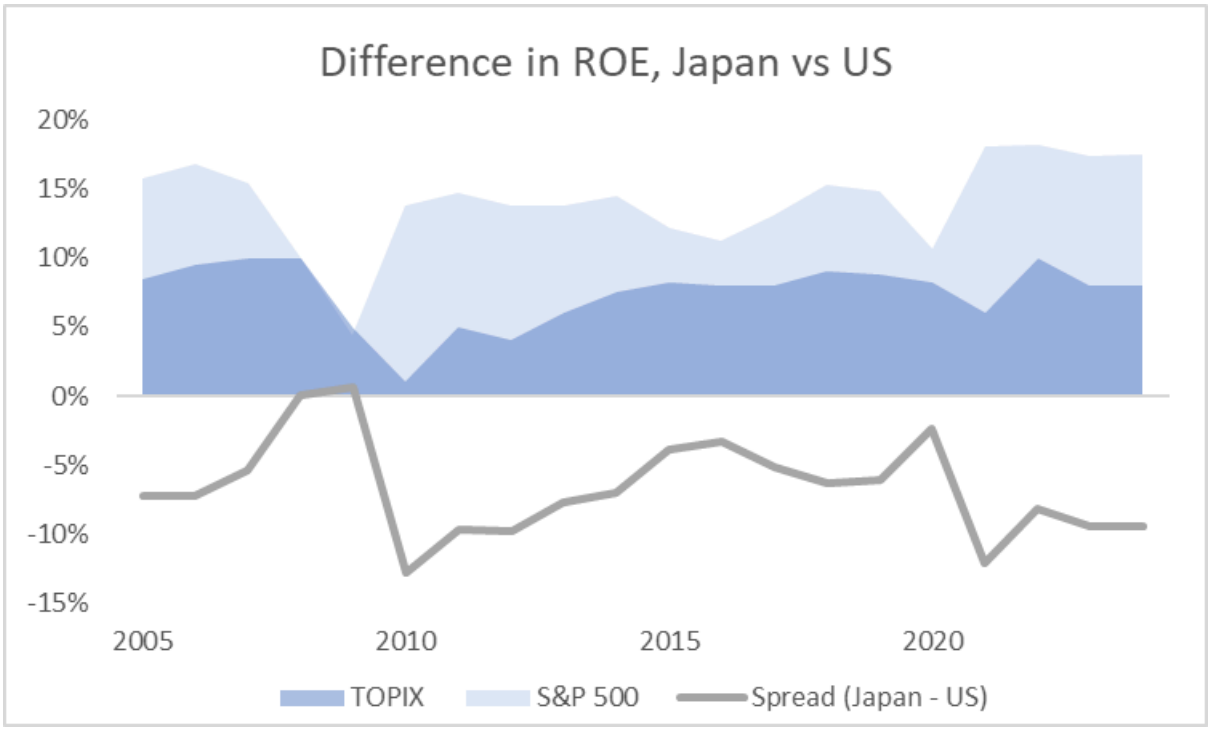
Exhibit 2c: Board Independence, TSE White Paper on Corporate Governance, 2023



Post 2015, Corporate governance metrics such as Board Independence improved markedly, with a noticeable inflection point around the year 2015.

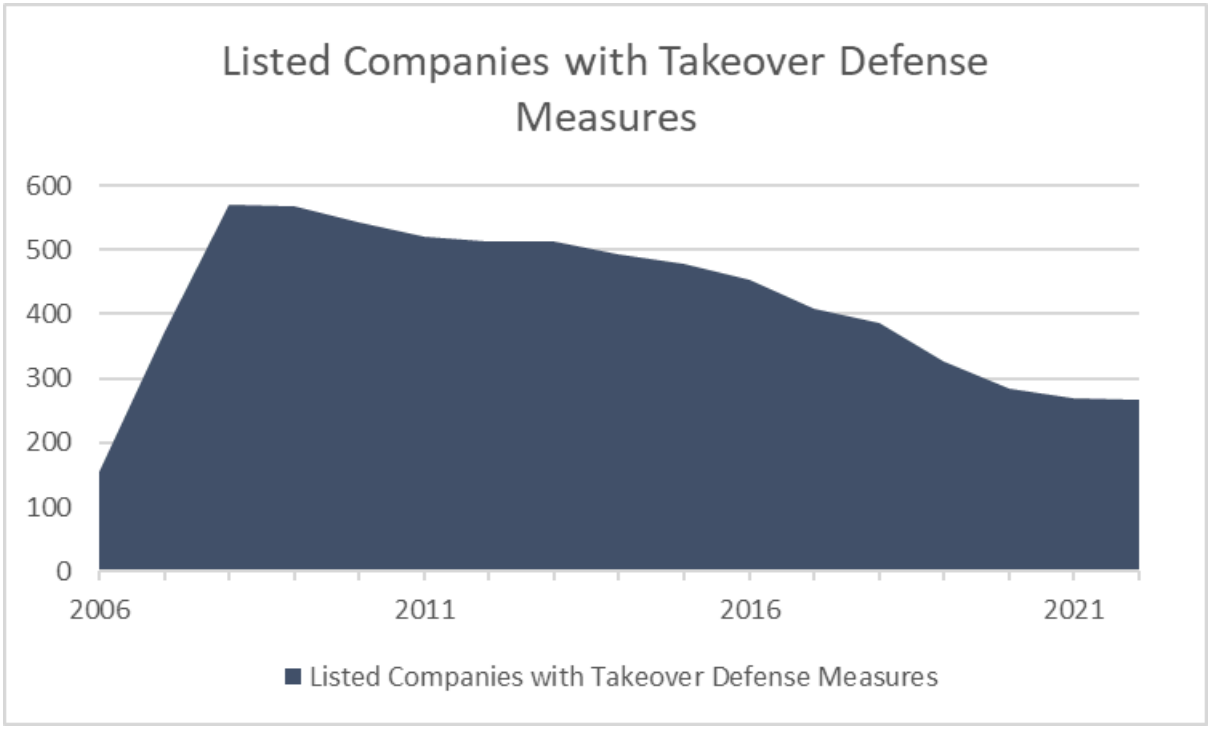
Exhibit 2d: Performance differences, Japan & US, various sources/author calculations using 2025 data. S&P Capital IQ, data retrieved 2025; Cheong& Kudo, 2024, using data from Haver & KKR, data retrieved 2025

NOTE: This longer run time series contains data from Cheong & Kudo regarding Japanese equities' performance. Their universe or weighting method appear to the S&P TOPIX dataset we have used in Section 1: Directionally, we observe the same conclusion as our data, which is inferior ROE among Japanese stocks. While there is a 2% differential in recent years (11% ROE in the S&P TOPIX as per Capital IQ, vs 9% in their data, we are content to include this graph, as it reflects Japan's persistent history of lacklustre returns on capital,



This Exhibit demonstrates that while one could conclude progress has been made in revitalising corporate performance in the wake of the CGC, we see that on a relative basis, Japan has not narrowed the gap in ROE markedly. It has actually widened since 2015 -the Spread demonstrates that Japan's major companies (TOPIX constituents) deliver 9% less ROE than the S&P500 average.

Exhibit 2e: Takeover Defences among Listed Japanese Equities, FSA/METI, 2022



Takeover defence measures have fallen broadly since the GFC, and market authorities in Japan have been pressuring firms to address minority and activist investor concerns. The pace of change, however, has moderated in recent years.

The Initiative

Exhibit 3a: Case Study Assessments of Good Compliance with the *Initiative,* excerpt from JPX, Feb 2024.

#	Page Number	Code	Name	Sector	Section	Size	Key Points										
							I. Analysis and Evaluation of Current Situation			II. Consideration and Disclosure of Initiatives				III. Dialogue with Shareholders and Investors			
							① Considering the cost of capital/equity in regard to the investor's perspective	② Multifaceted analysis and evaluation based on the investor's perspective	③ Inspection of balance sheets to ensure their efficacy	① Implementing fundamental initiatives with an awareness of the appropriate allocation of management resources	② Being aware of the need to reduce cost of capital	③ Designing a management compensation system that provides an incentive to increase corporate value over the medium to long term	④ Explanation of efforts in relation to medium- to long-term goals	① Proactive involvement of management and board	② Taking a tailored approach to shareholders and investors	③ Disclosure of dialogue and further dialogue and engagement
1	Page 4	1605	INPEX CORPORATION	Mining	Prime	TOPIX Mid400		●					●			
2	Page 6	1885	TOA CORPORATION	Construction	Prime	TOPIX Small								●		●
3	Page 8	1911	Sumitomo Forestry Co.,Ltd.	Construction	Prime	TOPIX Mid400	●	●		●		●				
4	Page 11	4099	SHIKOKU KASEI HOLDINGS CORPORATION	Chemicals	Prime	TOPIX Small			●	●						
5	Page 12	4183	Mitsui Chemicals,Inc.	Chemicals	Prime	TOPIX Mid400				●				●		●
6	Page 14	4384	RAKSUL INC.	Information & Communication	Prime	TOPIX Small						●				
7	Page 16	4704	Trend Micro Incorporated	Information & Communication	Prime	TOPIX Mid400	●									
8	Page 17	4886	ASKA Pharmaceutical Holdings Co.,Ltd.	Pharmaceutical	Prime	TOPIX Small		●		●				●		
9	Page 19	5019	Idemitsu Kosan Co.,Ltd.	Oil and Coal Products	Prime	TOPIX Mid400	●				●		●	●		
10	Page 22	5406	Kobe Steel,Ltd.	Iron and Steel	Prime	TOPIX Mid400										●
11	Page 24	5805	SWCC Corporation	Nonferrous Metals	Prime	TOPIX Small		●		●						
12	Page 26	5901	Toyo Seikan Group Holdings,Ltd.	Metal Products	Prime	TOPIX Mid400		●		●						
13	Page 29	6246	Techno Smart Corp.	Machinery	Standard	-	●	●	●	●						
14	Page 31	6361	EBARA CORPORATION	Machinery	Prime	TOPIX Mid400		●			●		●			
15	Page 33	7186	Concordia Financial Group,Ltd.	Banks	Prime	TOPIX Mid400	●	●			●		●			

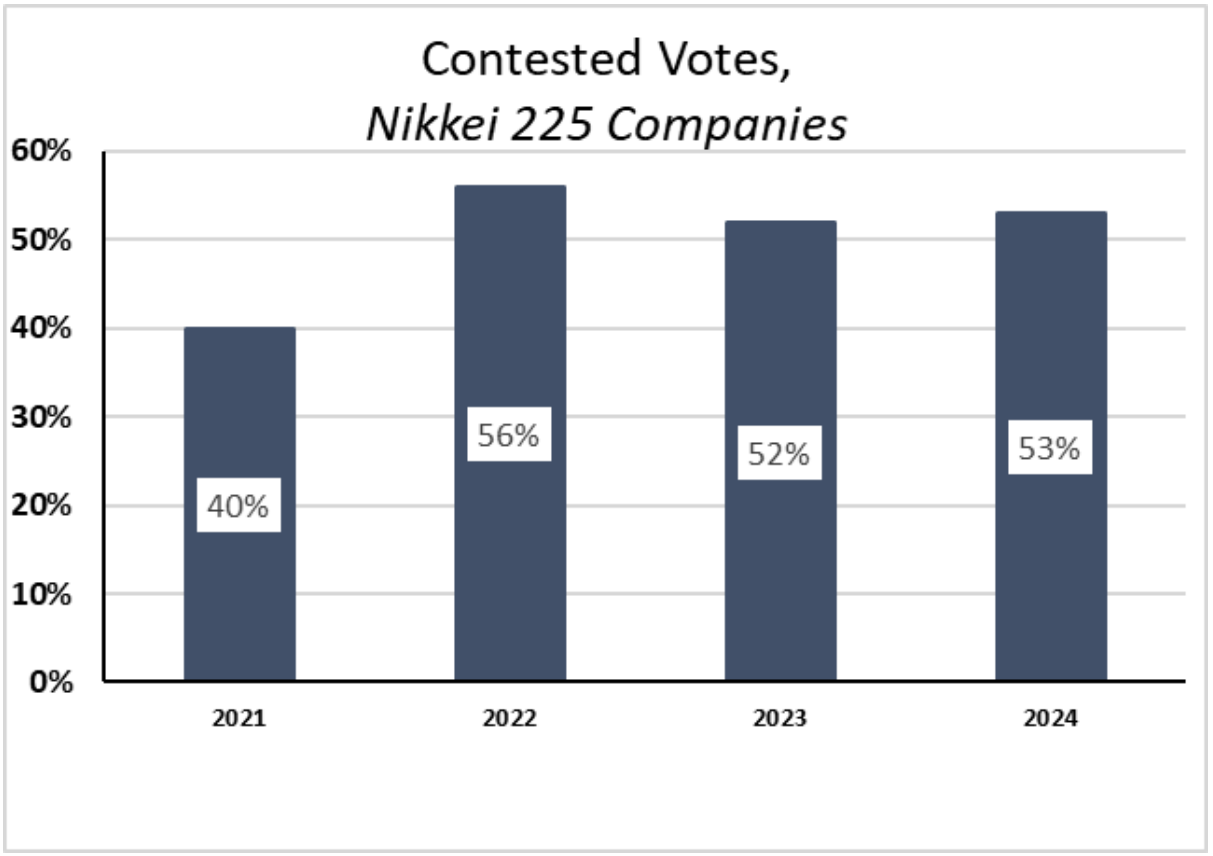
This is an excerpt from the Feb. 2024 release Case Studies, a follow up to the release entitled, "Considering The Investor's Point of View in regard to Management Conscious of Cost of Capital and Stock Price, Key Points and Examples". It serves as a guideline for companies who had not yet reported their response to the Initiative to help them comply in an effective manner

Exhibit 3b: Recorded activist events in TSE-listed companies, CLSA, 2024, and reproduced in Badger, 2024



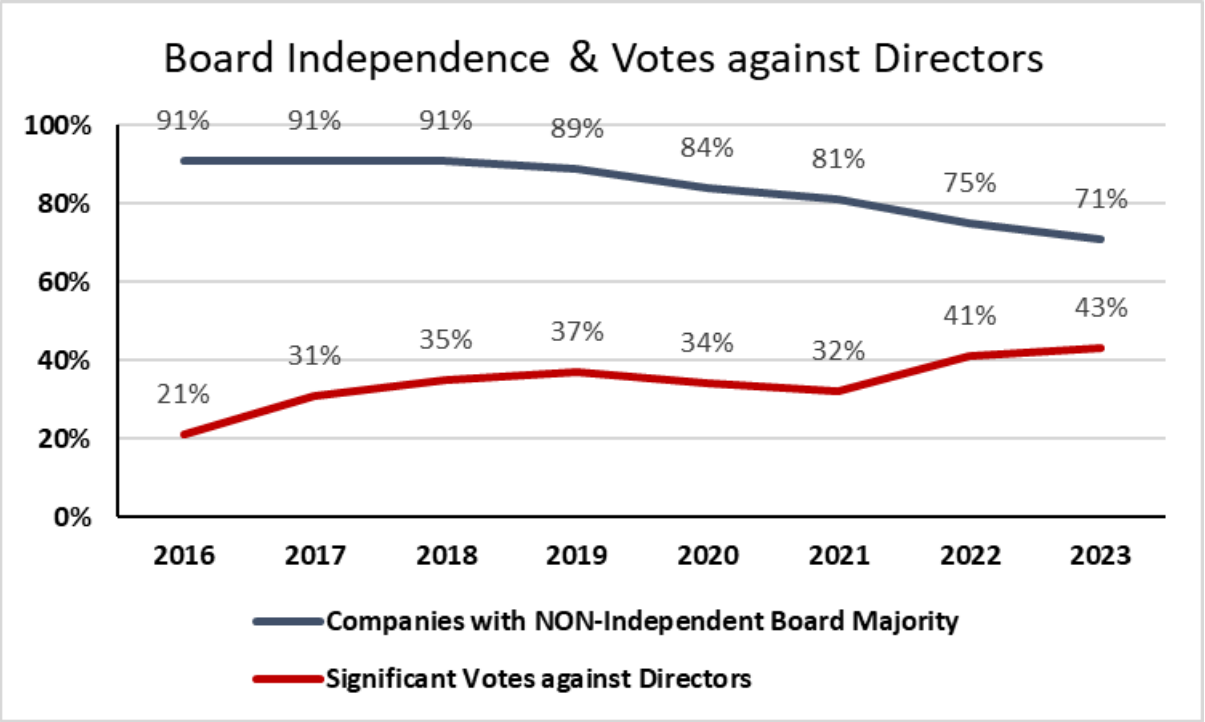
Supported by the Corporate Governance Code, investor guidelines, and more pro-market and pro-shareholder reforms, activist events have been rising in recent years in Japan. This suggests shareholders are getting more power in deciding corporate tim and capital allocation.

Exhibit 3c: Contested votes in major Japanese companies, Georgeson, 2024



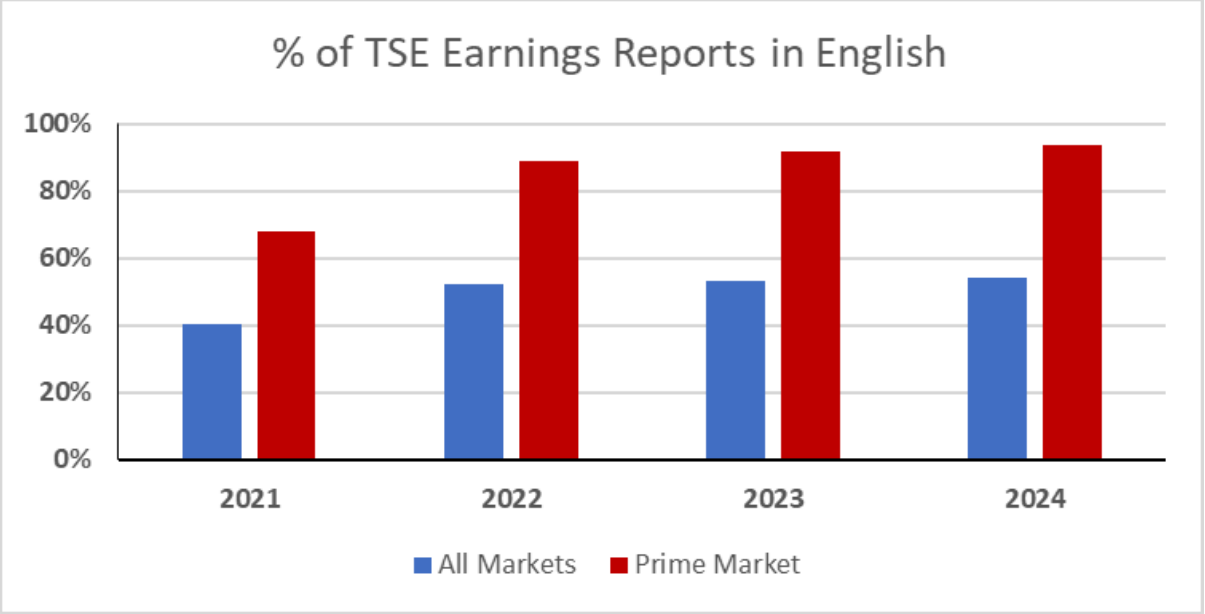
Just as activism increases and shareholders become more powerful, their capacity to significantly contest corporate actions increases. In this Exhibit, a contested vote is one in which at least 10% of shareholders vote against the proposal. This means that at least half of companies have had at least one contested vote at their AGM in 2022, 2022, and 2024.

Exhibit 3d: Nishimura & Porter, 2024, using MSCI ratings data on the MSCI Japan Universe



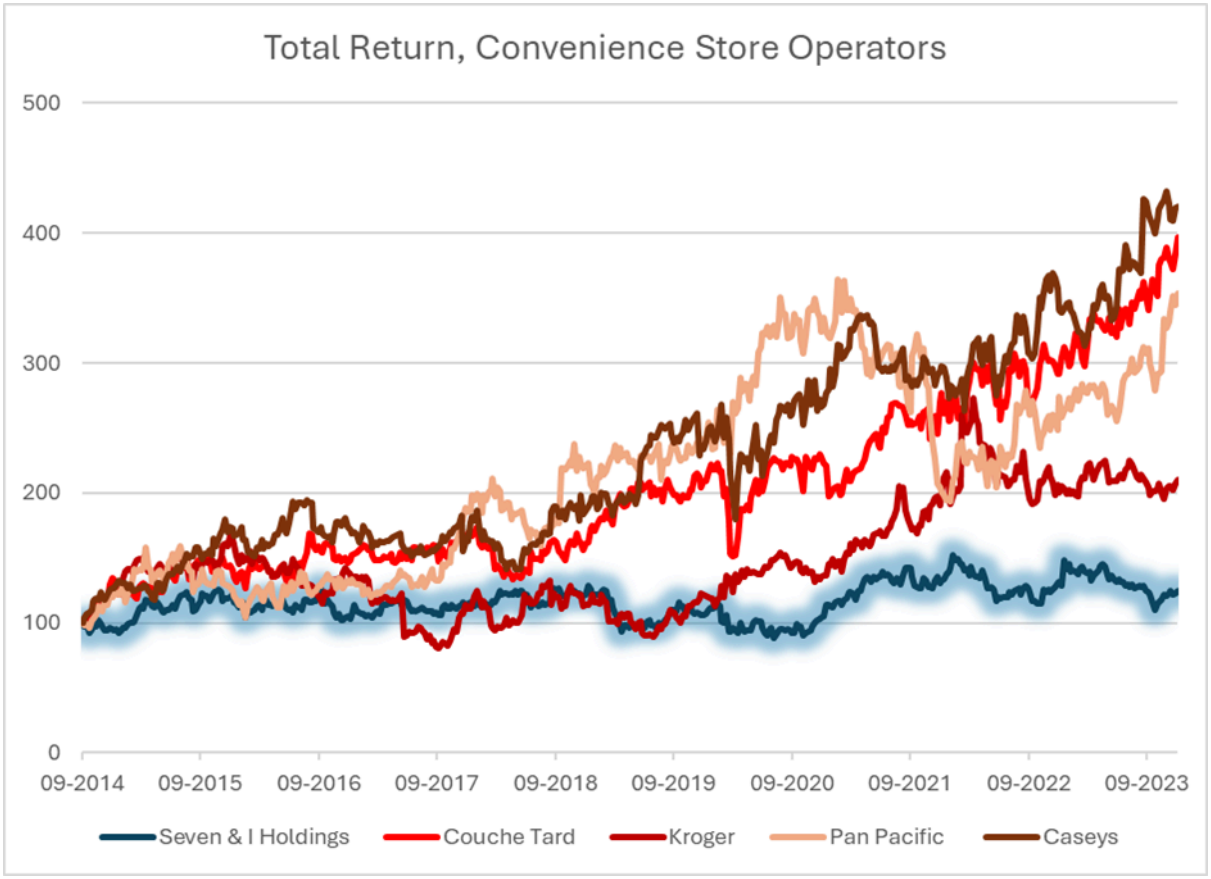
We observe that the amount of significant votes against directors has risen at the same time that insular boards stacked with insiders has decreased. A significant vote is any vote receiving 10% dissent, meaning 10% or more of the investors contest a director's reappointment at the AGM. Considering it takes 50% to actually prevent reappointment, this doesn't necessarily herald changes.

Exhibit 3e: Companies issuing earnings reports in English, TSE (ii), 2025



Market reform is multifaceted, and a big part of attracting more investors means reducing the effort and agency risk that comes from parsing company reports. The TSE is pushing companies to publish more reports in English, both regarding earnings releases and their capital efficiency plans

Exhibit App.1: Total Return Performance, Seven & i Holdings vs. Convenience Store Peers, FactSet, 2024



The convenience store operator Seven & i Holdings has mounted stern resistance to a hostile bid from Alimentation Couche-Tard, a Canadian store chain, proposing non-core asset sales, corporate streamlining on its core retail business (as 7-Eleven stores play roles in everyday transactions and other industries also) and even raised the suggestion it was a nationally sensitive asset and deserving of protected status from foreign investors. This anti-shareholder action comes even as the firm has underdelivered against global peers for years.

Appendix C: Case Study Discussion: Toshiba Corporation & CGC Compliance

Patrick (2015) and Watanabe (2021) reference the Toshiba accounting scandal and its associated fallout, and this provides an example of how Code signatories need not necessarily behave consistently with the spirit of the rules. This brief account demonstrates the concept of superficial compliance quite clearly, even in a globally recognised champion of industry.

Over 5 years to up to 2014, Toshiba falsified accounts to inflate Group operating profit by over 10%, despite having four outside directors on its Board - this was unsurprising, as Toshiba had been seen as a leader in adopting more pro-shareholder governance systems such as the Committee-style model used in the US. This preceded the 2015 Code, of course, and so reminds us how good governance is about function, not form. Apparently, Toshiba's executive leadership set excessively aggressive targets that middle managers ultimately could not realise and couldn't feel safe challenging. Despite moving away from a *kansayaku* model, internal checks and balances were inadequate. Toshiba had also complied with the reforms outlined in the CGC of 2015. They were seen as a paragon of implementing western-style governance in Japan; they had subcommittees on their Board for nominations and auditing, and had also introduced independent directors, as mandated, but this didn't ensure oversight. Toshiba was found to have colluded with government officials (from METI) to manipulate the election of certain representatives at the company's AGM in 2020, and to blunt activist shareholders' efforts to implement changes to the company management. It is up to investors and the public to hold management accountable on this idea; Toshiba had asked their audit committee to conduct a review of the handling of the AGM in July 2020, who concluded no malpractice had occurred. This, as we know, was untrue. The discovery of this collusion was only made possible by an activist investor, Effissimo, who suspected the Board and management of prioritizing internal interests and cronyism, rather than focus on value creation. They forced revisions to the nominated directors, and convened an EGM, which ultimately led to the dismissal of the audit committee members who had signed off on the cover-up of the AGM. As Watanabe (2021) concludes, it is a compelling case of how formalising corporate governance doesn't ensure value creation or even better practices. This *implementation gap* as we referred to in the main text is well-established, and Bhagat & Black (1998) identified the non-correlation for governance and returns, in instances where

good principles were defied by bad practice. Cultural norms, cronyistic hiring, and a general disinterest in minority shareholders, whose motivation for the investment is usually strictly profit, all lead to managerial preferences diverging from the good of the company. To implement the meaningful change, there has to be action which challenges the institutional norms, and these are especially stubborn in Japan (Buchanan et al., 2019)

Other cases in literature, such as Fujitec as studied by Kustner & Waterstraat (2023), point to a situation where superficial compliance with a Code does not provide the actual changes to reduce risk and prioritise shareholders; cultural factors and institutional dynamics established over decades cannot be undone by statute and surveys, but require market pressure, threats to executive job security, and institutional investors adding their voices to the Board through nominations and compromise can be more effective - the 2023 *Initiative* intends to be a more proactive attempt to embrace such ideas. Only when the investor and public scrutiny come can the Board management actually be robustly held to account. Further TSE/FSA initiatives, such as a related revision to the Stewardship Code in 2017, enabled greater activist interest from shareholders (Watanabe, 2024), and promoted more active dialogue between companies and investors - the idea being that a long-term owner needed to vocalise threats to this long-term value creation - and we've seen this manifest, possibly with several other investors friendly reforms, with an increase in shareholder activism and more receptive company management. The number of defensive measures taken by companies has clearly declined over the last decade, and the number of meaningful votes issued against managers during the packed June AGM season has risen meaningfully. Rising activism in Japan is potentially portentous of greater economic activity, as the *three arrow*s policy intends, in the long term. More immediately, it should improve shareholder returns by providing negative feedback to management who underperform shareholder expectations and lobbying for capital distributions.

Activism has often been led by foreign investors, and this opens up potential barriers to continuation going forward. For instance, when the company targeted is of national significance, many stakeholders can become chafed at the suggestion of increased foreign ownership - the ongoing case of Canada's Alimentation Couche-Tard, and its pursuit of Seven&I Holdings, is just one developing story at the time of writing on Japan's receptiveness to outside investment (Lewis & Keohane, 2024; see *Exhibit App.1*). The company has bolstered its defenses to prevent this inbound acquisition, many of which are

actually reflective of favourable governance tilts: selling non-core assets, appointing a foreign CEO, and generally looking for divestments to boost the share price and reduce the conglomerate discount.