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Timothy A. Kruse,Xavier University Williams College of Business
Kazunori Suzuki †,Waseda University, Graduate School of Finance, Accounting and Law
† Corresponding author.

早稲田大学ファイナンス総合研究所
http://www.waseda.jp/wnfs/labo/labo3.html

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Timothy A. Kruse
Xavier University Williams College of Business
3800 Victory Parkway
Cincinnati, OH 45207-5162, U.S.A.
kruset@xavier.edu
+1-513-745-3075

Kazunori Suzuki †
Waseda University, Graduate School of Finance, Accounting and Law,
4-1, Nihombashi 1 chome, Chuo-ku, Tokyo 103-0027, JAPAN
ksuzuki@waseda.jp
+81 3-3272-6819

Abstract
Japanese regulators have undertaken several adjustments to the rules governing the market for corporate control beginning with the 1990 introduction of mandatory bid rules (MBR) for tender offers. However, the adoption of an MBR alone did not initially contribute to an active tender offer market, nor did it adequately protect targets' minority shareholders. It required more than a decade and two important revisions to MBR for the regulators to achieve a reasonable balance between the conflicting objectives of MBR regulation. First, share based squeeze-out rules were introduced in 1999. Then, in 2006, additional new rules increased the protection of targets' minority shareholders through the requirement of additional disclosure regarding the choice of bid price, while offering the possibility of cash based squeeze-outs for the first time. We examine 612 tender offers between 1990 and 2011 for evidence relating these rule changes to the treatment of target shareholders. Over time, there have been fewer partial and/or discounted offers that expropriate minority shareholders. Moreover, there has been a steady increase in offer premiums and announcement effects for target shareholders. However, the improvements in target shareholder treatment do not come at the expense of shareholders of publicly traded bidders. Japan's experience will serve to deepen the understanding of the regulators in countries adopting an MBR.

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Abstract

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1. Introduction

The Japanese market for corporate control has experienced remarkable growth since the early 1990s. Before then, the domestic market for corporate control was rather inactive (Kester, 1991). Growth in the domestic market in particular accelerated in the late 1990s following the deregulation of the financial market and the prolonged recession which has encouraged companies to focus on their profitable businesses and divest unprofitable ones. The number of purely domestic mergers and acquisitions (M&As) among Japanese companies grew from 245 in 1989 to a maximum of 2,174 in 2006 and 1,663 in 2015.[1]

We examine these changes in the M&A market, focusing on tender offers and their impact on the price of control. Current rules regulating M&A activity begin with the adoption of a mandatory bid rule (MBR) in 1990, which requires a tender offer if the bidder wants to assume control of a publicly listed target. As we report, the initial implementation of the MBR had unintended consequences that were harmful to targets shareholders. Other significant changes in the rules governing tender offer bids (TOBs) followed, particularly regarding implementation of squeeze-out rights and enhanced disclosure. The subsequent rules sparked the large increases in M&A activity noted above.

While the first MBR was promulgated in the UK City Code and was subsequently adopted throughout Europe in a modified form, there are several important differences between the rules outlined by European Union's Company Law Directive (2004) and those outlined by the Japanese *Securities and Exchange Act* and *Financial Instruments and Exchange Act*. In a sense, the initial Japanese MBR was a hybrid of the UK City Code and the U.S. market rules. The initial design of the Japanese MBR allowed bidders and controlling shareholders of the target significant freedom in the tender offer terms, especially as compared to bidders in the U.K.

[1] According to Recof Data M&A Database.

Moreover, Japanese regulators were not as sophisticated as international investment banks and investors specializing in M&A activities in the initial growth stage in the market for corporate control. These sophisticated investors often found opportunities to exploit the regulations and infringe the wealth of targets' minority shareholders. The regulators eventually caught up and made changes to increase the protection of shareholders, but only after targets' minority shareholders started fighting back by suing their management.

In fact, there exists an ongoing debate regarding whether transfer of control transactions should be regulated by MBRs as in the EU, or left to the choice of market participants as in the U.S. (market rule). In general, Kahan (1993) and Bebchuk (1994) argue the purpose of takeover regulations is to promote tendering by efficient bidders capable of improving the targets' cash flow while discouraging offers from inefficient bidders. However, targets' free-riding minority shareholders might discourage efficient bidders by requiring an excessive premium (Grossman and Hart, 1980). An inefficient bidder might be tempted to launch a tender offer if it is possible to squeeze-out[2] minority shareholders without paying a large premium, particularly when the expected private benefits of control of the target are large. Searching for the optimal balance between potential bidders and their targets' shareholders is an important objective of regulations worldwide. We show the various changes in Japanese takeover regulations have moved towards that optimal balance over time.

We analyze this evolution of takeover rules towards an optimal balance by examining 612 tender offers made following the 1990 introduction of the MBR through 2011. In particular, we analyze the effect of the rule changes on the number of tender offers, the premium offered to the target shareholders, the type of bidder, the impact on target and bidder shareholder wealth,

[2] Squeeze outs permit acquirers to purchase minority stakes without shareholder consent once a certain ownership threshold has been reached.,

and the targets' long-term performance surrounding partial offers. That is, did the rule changes benefit bidder and target shareholders as well as foster an increase in M&A activity?

Burkart et al. (2000) present a model that demonstrates the existence of a MBR could induce bidders and block sellers to agree to a negotiated block sale, thus avoiding the necessity of a formal public tender offer and resulting in a lower premium paid and inefficient post-trade management. In Japan, we find that bidders and block sellers sometimes go further and collude with each other, using partial offers at discounted tender prices to transfer sellers' full blocks. In fact, approximately 60 percent of all tender offer bids were partial and at a discount to prevailing prices in the years immediately following the introduction of the MBR.[3] Partial tender offers at discounted prices are beneficial to bidders because they discourage potentially free-riding minority shareholders from tendering their shares, limiting the purchase to the number of shares necessary to gain control of the target.

The relative and absolute frequency of these discounted offers diminished following a revision of the *Commercial Law* in October 1999. In particular, the revised rules provided squeeze-out rights to shareholders for the first time, as long as acquirer shares were the means of payment. As a result, new bidders such as Private Equity/Venture Capital (PE/VC) funds began to emerge; in fact, the first Management Buyout (MBO) also occurred in this period. While there were zero bids from PE/VC funds prior to 1999, approximately 18 percent of all bids came from that source in later years. We show that target shareholders benefited in the form of more offers overall, but also received fewer discounted offers, fewer partial offers, and higher offer premiums.

[3] Albuquerque and Schroth (2010) point out that half of the blocks in their U.S. sample trade at a discount with an average discount of 24 percent. They argue that discounts are a common feature of block transactions in the U.S., and that discounted block trades normally have positive share price impacts.

Target shareholders further benefitted from the new *Companies Act* in May 2006 and an amendment of the *Securities and Exchange Act* in December 2006. The *Companies Act* permitted cash based squeeze-outs for the first time, making it easier for private bidders to acquire full control of their targets. The amended *Securities and Exchange Act* enhanced disclosure regarding tender offer bids, including the requirement of independent fairness opinions regarding the offer price. As a result, target shareholder benefitted from yet another increase in offer frequency, another fall in partial offers, and still higher premiums for both partial and for any-or-all offers (i.e., offers in which the bidder agrees to buy all tendered shares up to the entire float). Moreover, targets subject to MBOs received higher offer premiums. Finally, target shareholders further benefitted in the form of increased announcement abnormal returns.

We turn our attention to bidders, examining whether the increasing gains to target shareholders come at bidders' expense. Our results, while limited to the approximately half of the sample with publicly traded bidders, do not provide evidence that bidder shareholders are hurt by potential overpayment. In fact, bidder abnormal returns to the bid announcements are slightly positive and are higher still if the bidder had previously acquired a toehold. These results provide some evidence that while benefitting target shareholders, the rules changes did not simultaneously harm public bidders.

Although our empirical research focuses on Japanese tender offers, our results have global implications. In particular, this paper presents evidence that the naïve adoption of MBR is insufficient to protect the wealth of minority shareholders, and that the regulators should constantly monitor actual transactions to adjust their regulation in line with their regulatory objectives. Japan's experience should serve as a reference for global policy makers enabling

them to understand the importance of well-conceived inception of rules from the very beginning and subsequent adjustments.

From a global perspective, more countries have implemented MBRs than have not. For example, emerging markets such as China, Russia and India have adopted MBRs. However, in many cases the market for corporate control might not be active yet. As we show, Japanese regulators adopted its MBR in 1990, long before the domestic market for corporate control began its rapid development toward the end of 1990s and it took some time to fine tune the rules to properly balance target and bidder interests. Overall, the Japanese experience might help regulators in other countries fine tune their own regulations. Our research will also contribute to the discussion about the appropriateness of MBR in emerging markets such as China, where Cai (2011) argues that the MBR should be abolished. We show that the matter is not simply whether the MBR should be adopted or abolished, but how carefully MBR should be implemented.

Our results also complement those of Humphrey-Jenner (2012), who examines the impact of the EU takeover directive, which was fully implemented by May 2006. While the directive was designed to harmonize takeover regulations among member countries and avoid a 'race to the bottom,' it was criticized as being vague and that it made takeovers harder. A particular concern is the combination of a MBR with a minimum price rule. Humphrey-Jenner analyzes the impact of the directive on a variety of measures including bidder returns and measures of asset growth and concludes the directive had the adverse impacts of entrenching managers and facilitating less profitable investments.

The paper is structured as follows. Section 2 provides an overview of tender offer regulations in Japan and summarizes how the regulations might affect the level of control premium by summarizing the existing literature. Section 3 presents our hypotheses and divides

our sample periods into sub-periods according to important events of regulatory changes. Section 4 provides an overview of the data and summary statistics while sections 5 to 7 contain the results. Section 8 concludes.

2. Japanese MBR and Tender Offer Premium

2.1 History of Modification of Japanese MBR and Related Regulations

Regulations regarding the transfer of control vary across countries, typically falling into either the market rule or the equal opportunity rule, i.e., mandatory bid rule (Kahan, 1993 and Bebchuk, 1994). Japan (since 1990), the U.K., and continental European countries have all adopted MBRs. Many emerging markets such as China, Russia, and India have adopted MBRs as well. MBRs provide minority shareholders the right to participate in change-of-control transactions on the same terms as the control seller(s). In contrast, the U.S. uses the market, or private negotiation rule, which provides minority shareholders fewer specific rights in connection to change-of-control transactions. Kahan and Bebchuk argue the mandatory rule has the virtue of preventing inefficient transfers of control. However, it is also more likely to deter desirable efficient transfers of control than the market rule. Burkart et al. (2000) argue a weakness of the mandatory rule is that it encourages bidders to use negotiated (partial) block trades rather than tender offers, resulting in low levels of ownership concentration and the inefficient extraction of private benefits. Furthermore, large minority shareholders might sell their shares in a private block trade rather than engage in costly bidding wars for control.

The Japanese mandatory tender offer rule was introduced in 1990 with an amendment of the *Securities and Exchange Act* (now renamed the *Financial Instruments and Exchange Act*). The objective of the introduction of the mandatory tender offer rule was to provide minority

shareholders an equal opportunity to participate in change-of-control transactions, which previously occurred via opaque block transfer negotiations outside the bounds of the stock exchange. Since then, additional important changes of the rules have been effected. Particularly important is the revised regulation on tender offers under the *Financial Instruments and Exchange Act* which became effective on December 13, 2006, discussed below.

Considerable variation in regulatory detail exists even among countries adopting mandatory tender offer rules. We compare major elements in the tender offer regulations of Japan, the U.K., other European Union (EU) countries, and the United States in Table 1. The EU rules are based on the European Parliament Directive 2004/25/EC.

The first two points of interest concern rules governing bidding for target shares. Japan, the U.K., and the rest of the EU have "mandatory bid thresholds," which sets the maximum percentage of voting rights the bidder can amass before it is required to launch a formal tender offer to all shareholders. In Japan, the mandatory bid threshold depends on whether a bidder aims to purchase shares from just a few (10 or fewer) or many (more than 10) shareholders, but the level of threshold at 33.4 percent is similar to that of Europe. Plus, Japan allows "partial offers" for less than all shares, although the more recent *Financial Instruments and Exchange Act* limits the partial offers to no more than 66.7 percent of the shares outstanding. In contrast, the U.K. and the EU generally prohibits partial offers (with some exceptions). The U.S. does not have rules pertaining to either of these matters.

The other general point concerns the regulation of squeeze-out rights. Squeeze-out rights become important following successful tender offers as they give bidders the ability to obtain full control of their targets by forcefully purchasing any untendered shares in return for the bidders' shares or cash. Full control provides bidders' with more flexibility regarding the changes they

want to implement regarding the targets and their management. Squeeze-out rights did not exist in Japan until October 1999, when a revision of *Commercial Law* enabled squeeze-outs using the bidder's shares as the means of exchange. At this point, bidders in Japan acquired squeeze-out rights at a threshold of 66.7 percent ownership in the target company. This level is easier to achieve than the 80 to 90 percent range required of bidders in Europe. Finally, cash based squeeze-outs were permitted under the new *Companies Act* effective May 1, 2006.

Another major change in the regulation of the mandatory tender offer process and squeeze-outs became effective on December 13, 2006. This change followed complaints from minority shareholders arguing they typically were not being offered a fair premium for their shares. The targets' minority shareholders belief they were being forced to give up the prospect for future price appreciation reached its peak following the November 2006 management buyout (MBO) of Rex Holdings.[4] The regulatory revision contains a stricter application of the MBRs, closing several loopholes that allowed bidders to circumvent the mandatory offer requirement. It also required the disclosure of additional detail regarding the determination of the offer price and a fairness opinion by a third-party valuation expert. Although the December 2006 modification of regulation increased the deterrence of tender offers with low or negative control premium, Japan still allows considerable freedom to bidders regarding the offer price and the percentage of shares to be acquired, providing considerable scope for partial offers. It also allows squeeze-out rights for bidders with smaller percentage ownerships of targets than in Europe.

2.2 Evidence concerning offer premiums and bidder behavior

[4] See "Rex Holdings Shareholders File Complaint over MBO Price," Jiji Press Ticker Service, April 12, 2007. There was a significant public outcry in which minority shareholder argued the offer price was set deliberately low to benefit the bidders. The minority shareholders filed suit in early 2007 and the court eventually awarded an amount equal to an extra 68% of the initial bid price to the minority shareholders. See also "Shareholder Gripes Rising over M&As," Jiji Press Ticker Service, April 16, 2007, which discusses general shareholder dissatisfaction with the terms of several recent MBOs.

As Rossi and Volpin (2004) and Dyck and Zingales (2004) show in their international comparisons, the price of control is closely related to the shareholders' regulatory protection. They report the price of control is lower in Japan than in other countries. We argue the lower tender offer premiums offered to targets in the early part of our sample period (which corresponds to the sample period of the previous research above) is related to the relatively weak protection of minority shareholders by Japanese MBR concerning the offer price and partial offer restrictions. In fact, there are a substantial number of partial offers at below market prices designed to discourage the targets' minority shareholders from tendering their shares.

Eckbo (2009) provides a review of the extensive theoretical and empirical literature examining bidder behavior and offered takeover premiums. The research examines acquisitions of both controlling blocks and entire companies. While there are many similarities between Japanese M&A activity and that of the rest of the world, there are several important differences. Discounted TOBs are more common in Japan. In contrast, there is only one tender offer using shares as the initial means of exchange during our entire sample period.[5] Moreover, competitive bids are rare; there are only six targets receiving competitive bids in our sample period. Finally, hostile takeovers were unheard of until recently and are still relatively rare. Given these differences, much of the auction theory discussed by Eckbo does not apply to Japan. In particular, the lower probability of bidding wars reduces concerns about putting targets in play necessitating large pre-emptive bids.

Even so, there exist many common areas of investigation. Similar to the papers in the Eckbo (2009) survey, we focus on bidders' strategy in terms of target characteristics, whether the bidder should first obtain a toehold, whether the offer is partial or any-and-all, and the premium

[5] Share exchange tender offers do not receive favorable tax treatment, in the sense that capital gains are recognized at the time of the exchange even if the acquired shares are not sold.

offered, and whether the acquirer eventually executed a squeeze-out. In particular, we investigate whether changes in Japanese tender offer regulations have affected bidder behavior and target shareholder treatment along any of these lines.

Bradley (1980) is the first to analyze public tender offers while several subsequent papers investigate factors which might affect the level of tender offer premiums. Comment and Jarrell (1987) compare the premiums across any-or-all, two-tier, and partial tender offers.[6] Eckbo and Langhor (1989) report the effect of disclosure rules on tender offer premiums in France. Amoako-Adu and Smith (1993) analyze complete tender offers with partial acquisitions. Betton and Eckbo (2000) analyze the effect of toeholds on offer premiums and Betton et al. (2009) report the frequency of toeholds in control bids for U.S. public targets has declined since the early 1980s. Massari et al. (2006) analyze offer premiums in Italy where there are mandatory tender offer rules. Most recently, Baker et al. (2012) find that offer premiums are biased toward the pre-offer 52-week high. Finally, Moeller (2005) and Bargeron et al. (2008) examine completed acquisitions and report the premium paid is affected by factors such as shareholder control of a target firm (Moeller) and whether the bidder is public or private (Bargeron et al.).

3. Hypothesis Development: Evaluating the Impact of Revisions of the MBR

As noted, this paper examines the effect of regulatory changes in Japan on the form of takeover offers, offered premiums, and targets' long-term operating performance. These new rules and laws were designed to encourage economic growth including promoting efficiency enhancing M&A activity. Arikawa and Miyajima (2007) discuss several of these reforms,

[6] Strictly speaking, there are few two tier tender offers in the sense of Comment and Jarrell (1987), because a tender offer in which the bidder suggests a possibility of a follow-up merger rarely specifies the maximum number of shares to be purchased, and all tendered shares are purchased. See Inoue et al. (2015) for more discussion on the coercive nature of tender offers in Japan.

arguing the rule changes and a number of industry specific economic shocks did lead to an increase in M&A activity in the affected industries. They conclude this wave of M&A activity did increase efficiency. In contrast, we focus specifically on those rules most likely to affect bidder behavior, particularly offered bid premiums and general M&A activity.

We divide our sample period into three sub-periods by using three significant new rules. Our first period begins with the 1990 introduction of the MBR at the 33.4 percent threshold. This period, which runs through October 1999, will provide a baseline to examine the impact of further changes in the rules. As we report in Table 2, it is characterized by a higher frequency of partial tender offers and lower tender offer premiums. This outcome was most common when there was a large block holder in the target.

The introduction of the MBR also put in place an incentive structure which fostered discounted partial TOBs, particularly when the target had a large block holder. Partial offers place an upper bound on the number of shares to be purchased, and oversubscribed shares are prorated. If proration occurs, the block seller might not be able to sell its whole block. Under such circumstances, a block seller who wants to dispose of its entire stake must choose one of the following: (1) convince the bidder to launch an any-or-all offer (i.e., there is no upper limit on the number of shares to be purchased), (2) sell the remaining shares in the market after the tender offer expired, or (3) agree to tender at a below- or near-market offer price. The last strategy discourages minority shareholders from tendering their shares. However, there is a risk the announcement of a discounted (or minimal) premium will depress prices inducing other shareholders to tender anyway. In the final analysis, the block seller might have to, or may even be willing to, agree to a discounted offer if the block seller does not have sufficient bargaining power to achieve the first option, and if the block is large enough and shares are illiquid enough

to impact the market price downwards when he sells. Ultimately, bidders' gains from partial tender offers derive from losses of the targets' block sellers and minority shareholders.

The second period begins in October 1999 with the implementation of the share based squeeze-out rule. This rule gave would-be acquirers even more power in terms of dealing with hold-out shareholders as they can no longer hold the targets' shares in the hope the price will go up under the new controlling shareholder. However, the introduction of the squeeze-out rule also facilitated acquisitions by entities such as private equity firms, which would not be interested in partial acquisitions. Moreover, as Arikawa and Miyajima (2007) note, financially constrained, publicly traded companies with high valuations could now use their own shares to complete the takeovers. Overall, we predict that the introduction of the squeeze-out rule had the larger effect through its impact on the types of bidders, increasing the proportion of any-or-all tender offers.

Hypothesis 1a: The implementation of the October 1999 rule providing squeeze-out rights will attract more any-or-all tender offers, resulting in proportionally fewer partial tender offers.

Moreover, since one goal of a discounted tender offer was to achieve partial acquisitions at the expense of minority shareholders, we should also observe increased average premiums following the implementation of the rule.

Hypothesis 1b: Target shareholders benefitted through higher average premiums, particularly for any-or-all offers.

Overall, the existence of a target block holder increases the likelihood that hypotheses 1a and 1b will hold because it is more likely the bidder will be able to reach the two-thirds threshold necessary to execute the squeeze out.

The final period begins with the December 13, 2006 tightening of the MBRs, the increased disclosure/third party evaluation of the bid itself, and the ability to execute cash based squeeze-outs. In particular, the cash based squeeze-out rule will further increase the likelihood of those private equity bidders who lack publicly traded shares to use in a share based squeeze-out. However, as the regulatory revision did not include any floor on the offer price, a discounted tender offer is still possible as of today. Therefore, we again examine whether the revised regulations have had an impact on a bidder's behavior by reducing the frequency of partial offers and raising offered premiums.

Hypothesis 2a: The December 2006 revisions to the mandatory tender offer rule will result in further reductions in partial tender offers.

Furthermore, given the increased disclosure and the necessity of a third part opinion, it is likely there will be fewer coercive bids, which will benefit all target shareholders.

Hypothesis 2b: All target shareholders should benefit in the form of still higher premiums.

Despite the availability of squeeze-out rights beginning in October 1999, there still are a significant number of partial takeover offers, even if their frequency has declined over time. The frequency of these partial offers results in a substantial number of targets with publically available performance data following completion of the bids. We examine changes in unadjusted and adjusted operating performance over the entire sample and in each of the three periods. If Hypotheses 1b and 2b hold, the higher premiums may mean that a bidder became more cautious in choosing a target ex-ante, identifying those targets with greater anticipated room for improvement in operating performance, which can actually result in more improvement of the target's operating performance ex-post.

Hypothesis 3: Tender offer targets experience positive changes in operating performance surrounding the offers following the major alternations to the rules pertaining to tender offer bids.

If hypothesis 3 is not supported, then the increase in premium might indicate bidders are paying more out of the total anticipated increase in value of the target following the regulatory changes. In this case, the alterations to the rules simply transferred wealth from bidder to target shareholders.

4. Data and Descriptive Statistics

4.1. Sample and Data Sources

We collect a sample of tender offers for exchange listed companies using Bloomberg and the Nikkei NEEDS Database. Overall, we identify 619 TOBs occurring between 1990 and 2011. We exclude the only share tender offer and six tender offers with insufficient data, resulting in a final sample of 612 cash tender offers. The NEEDS and Bloomberg data providing tender offer details such as whether the offer was conditional or unconditional, partial or any-or-all, the identity of any block sellers, and whether the bidders first acquired toehold stakes is often incomplete. Therefore, we hand collect the missing information from documents submitted by the bidders to the Financial Services Authority (FSA) regulatory authority. We also collect share price and accounting data from NEEDS.

We calculate the offer premium as (tender offer price) / (market price 41 trading days before the announcement) minus one. We designate the offer as a discounted TOB if the offer premium is negative. A partial offer is one in which the bidder states in the offer announcement that there will be proration if there is an oversubscription.

4.2. Descriptive Statistics

We present descriptive statistics in Table 2. As reported in Panel A, tender offers become more common later in the sample period, peaking with 97 offers in 2007. In comparison, there were only nine offers during 1990 to 1994. The average and median offer premiums are 31.7 and 29.0 percent, respectively, which are lower than those reported in the U.S. and U.K of 40 to 50 percent (see Bradley, 1980 and Eckbo, 2009 for the U.S. and Antoniou et al., 2008 for the U.K.). However, the premiums increase to levels similar to those of other countries following the 2006 rules changes.

Overall, the results presented in Panel A support our hypotheses that the rules changes increased the likelihood of any-or-all offers and encouraged higher bid premiums. There are 223 (36.4 percent of the sample) partial offers. Offer premiums in partial offers consistently are lower than those of the entire sample. There are 108 (17.6 percent) discounted offers. Therefore, nearly half (48.4 percent) for the partial offers are discounted. This figure is similar to the proportion of discounted block trades in the U.S. as reported by Albuquerque and Schroth (2010). Both discounted and partial TOB are much more common in the earlier period (through October 1999) when 81 percent are partial and 60 percent are discounted.

The reduction in the relative frequency of partial and discounted offers beginning in 2000 is associated with substantial changes in the offer premiums. The mean and median premiums for the entire sample are frequently negative up to 1999. However, following 1999, the average premium never falls below 13.4 percent. Moreover, the offer premiums in partial offers generally increase over time as well, especially following 2006.

As we describe in section 2.1, the controversial REX Holdings MBO precipitated a significant amendment to the tender offer rules in December 2006. The stricter disclosure regarding the method the bidder used to determine the TOB offer price resulted in a change in

bidder behavior beginning with 2007. In particular, the proportion of both partial and discounted offers underwent dramatic declines. Moreover, the average offer premium increased from 16.3 percent in 2006, reaching a high of 58.1 percent in 2009.

Median toeholds range from zero to 30.7 percent, but do not have an obvious trend. In contrast, Betton et al. (2009) report a steady decrease in the use of toeholds in the U.S. over the years. The median goal in terms of shares to be acquired ranges from 41.5 to 99.5 percent of the target, consistently above 33.4 percent mandatory bid threshold. In recent years, the median total to be acquired is near or above the two-thirds point at which the bidder could undertake a squeeze-out, suggesting it might be intending to execute the squeeze-out once the initial offer is complete.

We report data describing the frequency of various bidder and target characteristics for the entire sample and in each of the three sample sub-periods in Panel B. The typical tender offer press release reports the identity of any target block shareholders agreeing to tender their shares. Overall, at least one block shareholder tenders in 60.5 percent of all offers, with the highest proportion of target block sellers in the earliest sub-period. Overall, 42.2 percent of the entire sample is distressed. A financially distressed firm is one whose after-tax earnings are negative in either of the two years prior to the tender offer.

A slight majority (53.6 percent) of the bidders are publicly traded, however the proportion falls over the sample period. This fall is the result of a new type of bidder. PE/VC funds entered the market following the implementation of squeeze-out rules in October 1999 and made approximately 18 percent of all bids after that time. Moreover, the number of tender offers

conducted as a management buyout (MBO) steadily increased following the first successful MBO in 2001.[7]

Finally, there are 15 hostile tender offers, of which only three succeeded. We define a hostile offer as one in which the incumbent management issues a recommendation not to tender. Nineteen offers fail. Failed offers are either conditional offers receiving a subscription below specified minimum number of shares or unconditional offers in which the subscription is less than half of the targeted number of shares to be acquired. All of the hostile and failed TOBs occurred in the post-1999 period.

4.3. Changes in target and bidder wealth

Next, we conduct an event study analyzing target and bidder shareholder returns from the TOBs. We calculate cumulative abnormal returns (CARs) using a market model with an estimation period of trading days -240 and -41 relative to the tender offer announcement date (day A in Table 3). Typically, the tender offer period begins the day after its announcement. The tender offer period must be at least 20 calendar days, but it is often longer. To account for the differing number of days, we realign the CARs calculation at the final day shareholders could tender their shares (day T in Table 3). This realignment enables us to examine the targets' abnormal returns from the run up to the announcements through the expiration of the tendering periods. For the targets, we examine abnormal returns at the time of the announcement, in the run up period before the announcement, and periods containing the entire tendering window.

As reported in Table 3, Panel A the mean three-day (days -1 to +1) tender offer announcement CARs is significantly positive for all tender offers at 15.13 percent, as well as for partial (8.44 percent) and any-or-all offers (18.96 percent), with the difference in means

[7] While there are endogeneity issues, it is clear MBOs are associated with higher premiums. MBO transactions have mean and median premiums of 55.6 and 44.8 percent, respectively.

significant at the 1% level. Although the reaction to discounted offers is much smaller, it is still positive. Abnormal returns during the run-up period between relative to the announcement (days -40 to -3) average 4.48 percent, suggesting the presence of rumors of the upcoming offer. The run-up is comparable to those reported in the U.S. (Jarrell and Poulsen, 1989, Schwert, 1996, Betton et al. 2008).

Average target abnormal returns for the event window beginning with run-up to the offer announcement and continuing on through two days after the conclusion of the tender offer period are large, at 32.16 percent. As with the announcement effects, abnormal returns are significantly higher surrounding any-or-all offers as compared to partial offers.

We report bidder abnormal returns for the run up period and surrounding the announcements in Panel B. These returns apply only to the 303 bidders that are publicly traded. The number of observations is less than the actual number of publicly traded bidders (328 bidders) because several bidders conducted multiple TOBs within the period of one year. We include only the first bid during each year. Overall, bidder abnormal returns are slightly negative (-2.63 percent) during the run up period and slightly positive (0.71 percent) during the three day window surrounding the announcement. However, the abnormal returns for both the partial and any-or-all offer sub-samples are insignificantly different from zero.

5. Analysis of Choice between Partial and Any-or-All Tender Offers and Offer Premiums

We begin the analysis of our hypotheses in this section. First, we perform a univariate analysis of the entire sample to identify factors affecting the choice between partial and any-or-all tender offers. We also look at differences between partial and any-or-all offers following the rules changes. Next, we perform a regression analysis of the offer type using additional target

and bidder characteristics. Because any-or-all tender offers aim to acquire all the target's shares, it is unlikely that the bidding price is set below the market share price.[8] Therefore, we might find different factors describing partial and any-or-all offers. Finally, we analyze factors likely to affect offer premiums.

5.1. Variables used

The analysis draws on the existing research on tender offers described in Section 2 to select variables likely to explain the type of offer. We report univariate results for a subset of these variables. We use the complete set as independent variables in our regression analyses as described in the following sub-section.

We use two price based measures in the univariate analysis. Offer premiums are based on the targets' price 41 days prior to the announcement. Second, we report cumulative abnormal returns using the window covering day -40 relative to the announcement through two days after the completion of the tender offer.

We report several variables concerning the tender offer characteristics. The bidders' toehold indicates the percentage stake, if any, that the bidder holds in the target at the time of the offer. Toeholds are important in attenuating the free-rider problem of incumbent shareholders (Shleifer and Vishny, 1986). Betton and Eckbo (2000) report higher bidder toeholds reduce offer premiums and target stock price run-ups.

The desired percentage of the targets' shares to be acquired is announced as part of the initial tender offer announcement. This percentage must be lower than 66.7 percent for partial offers after December 2006 (see Table 1), but could be set at any percentage before December

[8] The exception is when a bidder sets the bid price below the market price in an unconditional offer. In this case, the bidder does not actually expect to purchase all the shares, but is simply stating that he is willing to purchase them if target shareholders are willing to accept the discounted price.

2006. Furthermore, it must be greater than 66.7 percent following October 1999 if the bidder wishes to perform a squeeze-out.

The targets' market capitalization (and its natural log in regressions) is measured as 41 days before the offer. As described in section 4.2, targets are considered distressed they have negative after-tax earnings in either of the two years prior to the tender offer.

We include additional indicator variables describing the bidder and target characteristics in the regression analyses. They are (1) whether the bidder is a PE/VC fund, (2) whether there is a block seller of the target shares who has announced it will tender its shares, (3) whether the block seller is a PE/VC fund, and (4) whether the block seller is an individual. Variable (1) is chosen in reference to Bargeron et al. (2008). Variables (2) to (4) and the distressed target dummy mentioned above capture the relative bargaining power between the bidders and targets. It is probable the bidder has more bargaining power when there is a block holder, the block holder is individual, and the target firm is in financially distressed.

Finally, we include two indicator variables regarding the timing of the offer. As described in our hypotheses, we examine the effect of two important regulatory changes, one on October 1, 1999 and the other on December 13, 2006. The dummies take the value of 1 if a tender offer is announced (and conducted) after each date. Since we assign the value of 1 to both variables after December 13, 2006, the latter should capture the incremental effect over that of the former.

5.2 Univariate analysis

We report the mean and median figures for partial and any-or-all tender offers for the entire sample, respectively for the entire sample period in Table 4, Panel A. We also report test statistics comparing the two groups in the final columns. Mean premiums are 44.2 percent for any-or-all offers against only 9.6 percent for partial offers. Second, cumulative abnormal returns

over are also significantly higher for any-or-all offers (40.3 percent against 18.0 percent). These results suggest bidders must offer greater inducements to target shareholders if the bidder wishes to gain full control.

Average bidder toeholds are higher in any-or-all offers than in partial offers suggesting that the bidders acquire higher toeholds when they intend to acquire all shares of the company. However, the median toeholds are not significantly different. Targets of any-or-all and of partial tender offers are the same size in terms of their market capitalizations. Moreover, the frequency of target distress is the same. Finally, it is not surprising that any-or-all offers are for a greater percentage of the targets' shares.

We repeat our analysis for bids occurring during the early baseline period and after the October 1999 and December 2006 rules changes and report the results in panels B and D, respectively. In each period, offer premiums are higher for any-or-all offers as compared to partial offers. However, the trend in offer premiums over time varies by offer type. Offer premiums from partial offers steadily increase following each of the rules changes. However, any-or-all offer premiums increase only following the December 2006 rules changes. This result is consistent with our hypothesis 2b that the 2006 rules changes would result in higher premiums, particularly in any-or-all offers. However, it is only partially consistent with hypothesis 1b pertaining to offer premiums following October 1999. While rare (n = 7), any-or-all offers prior to 1999 have very high premiums, especially as compared to partial offers. However, given the inability to squeeze-out dissenting shareholders, bidders wishing to buy all of the shares were forced to pay higher premiums. This forced high price might explain the relative rarity of any-or-all offers during the early period.

The results pertaining to target CARs are less clear. Target CARs are significantly higher for any-or-all offers after October 1999. However, there are no obvious trends over time for each offer type. Among partial offers, target CARs are highest during the early baseline period, despite the lower offer premiums. This is consistent with the idea that target shareholders are happy with the change in control, despite the lower premium. Among any-or-all offers, target CARs are highest in the final, post December 2006 period.

Finally, there are no obvious trends in terms of toeholds, the desired percent of target shares to be acquired, or the frequency of distressed targets either over time or when comparing partial to any-or-all offers.

5.3. Regression Analysis

We further analyze the bidders' choice between partial and any-or-all offers in this subsection. We assign an indicator variable that takes the value of 1 when a tender offer is partial, and zero otherwise, and use it as a dependent variable in logistic regressions. We present the results in Table 5.[9]

In all three models, higher toeholds and desired percentages to be acquired reduce the likelihood of partial offers. The higher toeholds for any-or-all offers bidders is consistent with the idea that they hope to reduce their overall cost when acquiring the remaining target shares. Model 2 reports that while controlling for bidder toeholds and the desired percentage to be acquired, the probability of a partial offer decreases when the bidder is a PE/VC fund and increases when there is a block seller. Although the result partially supports Hypothesis 1a, other variables which would suggest weak bargaining power on the part of the block seller, i.e., a seller being individual or a target being financially distressed, are not significant. Model 3 supports our

[9] We also run models containing industry dummies in this case and in each subsequent model with no effect on the results.

hypotheses that the regulatory changes of October 1999 and December 2006 increased the likelihood of any-or-all offers. As the any-or-all offers typically are associated with much higher premiums and target CARs, the results thus far support the idea that target shareholders benefitted from both of the rules changes.

5.4 Analysis of Tender Offer Premiums

We report the results of an OLS regression analysis of our hypotheses regarding offer premiums in Table 6. In addition to the variables described earlier in this section, we include a dummy variable indicating the offer failed. As noted in Section 4.2, failed offers are either a conditional offer in which the number of tendered shares is less than the targeted minimum or an unconditional offer in which less than 50 percent of target shares are tendered.[10] Second, we include a dummy variable indicating the offer was an MBO. Finally, we include a variable that shows the ratio of tender offer price to the 52 week high of target's share price before the offer. Baker et al. (2012) report tender offer premium are biased toward the 52 week-high of target shares. Following their methodology, we obtain the 52 week high of target share price for the period up to 41 trading days prior to the tender offer announcement. We then divide the 52 week-high by target's share price by that of 41 trading days prior to the announcement and use the result as the independent variable.

Consistent with the results of Tables 2, Panel A and 4, partial offers are associated with the lower premiums for the entire sample. The coefficients of the partial offer dummy in models 2 to 3 suggest that, after controlling for other independent variables, offer premiums are lower by more than 20 percentage points. We also find that the existence of a block seller and the incidence of financial distress in the target lower offer premiums. These results are consistent

[10] Although the latter criterion is arbitrary, we have verified that changing the level does not have a significant impact on our results.

with the idea that the weak bargaining power of a block holder leads to lower premiums. In contrast, the 52 week high is not significantly related to the premium suggesting the anchoring effect documented by Baker et al. (2012) in the U.S. is not as prevalent in Japan or is absorbed by other factors.

The size of the toehold is negatively related to the offer premium in model 1 indicating bidders with an ownership position prior to the bid have better bargaining power, allowing them to offer a lower price to the target shareholders. However, the coefficient is not significant in models 2 and 3 which include the dummy variables indicating the offer was an MBO and whether the offer occurred in the later periods. Although not reported in the table, the toehold dummy remains significant if we do include the rules change dummies, but not the MBO dummy. This combination of results suggests the apparent explanatory power of toeholds is caused by MBOs, which typically have zero toeholds and higher offer premiums.

As for the offer timing dummies, both the post-October 1999 and post-December 2006 dummies are significantly positive in models 2 and 3. Therefore, after controlling for the offer type and other factors, both the introduction of squeeze-outs in 1999 and the increased disclosure arising from the implementation of the mandatory tender offer rule involving the use of independent third party valuation opinions in 2006 induced higher offer premiums for all target shareholders. We conclude that the evidence generally supports Hypotheses 1b and 2b that improving the rights of target shareholders will improve their welfare via higher offer premiums.

6. Bidder CARs

We further analyze bidder CARs in this section. As reported in Table 3, the mean bidder three day CAR is 0.71 percent, which is significantly different from zero at the 5% level.

However, there was no difference between bidders making partial and any-or-all offers. Also, in previous tables, we report evidence of bargaining power shifting towards targets. That is, any-or-all offers result in higher offer premiums and higher target CARs and offer premiums have increased over time. Given these results, we perform a multivariate analysis to examine whether higher premiums for targets are associated with decreases in wealth for shareholders of the bidders. As noted earlier, one limitation of this portion of the analysis is only public bidders have the necessary share price data. Moreover, some bidders make multiple bids in a given calendar year. We restrict our analysis to the first bid resulting in a final sample of 303 observations.

Table 7 reports the regressions of bidder CARs for days -1 to 1 relative to the bid announcements, utilizing the same independent variables utilized as earlier models. As reported in Table 7, only a limited number of variables have significant explanatory power. Bidder CARs are positively related to their toeholds at the time of the offer. Target ownership characteristics also predict bidder CARs. The CARs are higher if the target has a large block seller; however the effect is attenuated if that block seller is an individual.

Overall, several of the variables that do not explain bidder CARs are of greater interest. The announcement effects are not related to the partial offer dummy or the offered premium. Moreover, bidder CARs do not change over time. While the number of observations in this analysis represents slightly less than half of the sample, the results of Table 7 do suggest the gains to target shareholders are not coming at the expense of shareholders of the public bidders.

7. Changes in Target Operating Performance

As we report in the previous section, bidder announcement effects are not significantly correlated with either offer premiums or the dummy variables indicating the timing of the rules

changes. It is possible that paying a higher premium may result from the fact that acquirers select better targets in which there is more room for cash flow improvement after the acquisition and that paying this higher premium is not detrimental to bidder shareholders. Therefore, we are interested in analyzing the targets' operating performance in different sample sub-periods. The problem is if an any-or-all offer is successful, the target company is delisted and we cannot observe its operating performance after that time. The only sample TOBs with available data are the 188 partial offers where the target firms remain publicly listed. We examine target raw and adjusted operating performance over an eleven year period beginning five years before the tender offers. We calculate the raw return on assets (ROA) as operating income divided by total assets net of cash and equivalents. We follow Barber and Lyon (1996) in calculating adjusted ROA using an industry and performance matched company as of year -1 relative to the bids.

We report the results in Table 8. Panels A and B contain raw and adjusted ROA figures, respectively for both the yearly returns and the change in performance for three windows surrounding the offers. We report the ROA figures for all firms with available data, and for the before and after December 2006 subsamples. The yearly unadjusted ROA appears to decrease slightly following the completion of the offers for all firms and during the sub-periods. However, the change in unadjusted performance is significant for only one window in the post-December 2006 period. None of the adjusted ROA is significantly different from zero, whether it is yearly data or changes in performance for any sample group. Overall, these results suggest the bidders are not able to help improve the targets' operating returns, at least following partial offers.

We also analyze factors likely to impact the change in performance over years -2 through +2 in a multivariate framework. Overall, our potential explanatory variables are not related to the change in performance, therefore we do not report the results in a table. The one exception is the

targeted number of shares in the partial offers. Specifically, we find the mean change in adjusted ROA is 1.28 and -4.20 percent for the partial offers of greater and less than 50 percent of the targets' shares, respectively. The difference is significant at the 5 percent level. However, the 1.28 percent adjusted ROA figure for the larger offers is not significantly different from zero. While it does not apply to the entire sample, this limited result does suggest that acquiring larger stakes is beneficial for the improvement of adjusted ROA after the merger, and that any-or-all offers might also result in significant improvements in target performance. Therefore, we do not find support for Hypothesis 3, at least following partial offers.

As noted, the bidder CAR and target operating performance results apply only to those portions of the sample that have the necessary data. This data availability overlaps for partial offers made by public bidders, resulting in a total of 158 observations. While not reported in a table, offer premiums by public bidders in partial offers mimics the results for partial offers as a whole. That is, the mean premium is -9.3, 8.2, and 25.6 percent in the early, middle, and late sample periods, respectively. However, as reported in Table 7, bidders' CARs are not related to the type of offer, nor do they change over time. Also, as mentioned above, the change in adjusted target ROA does not vary by time period. However, the adjusted ROA is positively related to the size of the partial offer. While only suggestive of potential outcomes for the entire sample, aggregate results for this sample sub-section do suggest the rules changes benefitted target shareholders receiving larger partial offers via higher premiums and by fostering improved performance over time, all without harming bidder shareholders.

8. Conclusion

We examine 612 Japanese tender offers from 1990 to 2011 to present a comprehensive analysis of the discount or premium offered to target shareholders, determinants of the discount or premium, and the impact on target and bidder shareholders' wealth. Over the past 20 years, there have been several important changes in Japanese takeover regulations which have shifted the negotiating power between bidders and target shareholders. The introduction of the MBR in 1990 was designed to increase the protection of minority shareholders, enabling them to participate in a sale-of-control transaction. However, bidders and block sellers colluded to avoid the application of the MBR through the use of partial, discounted (or small premium) tender offers. The introduction of a squeeze-out rule in 1999 facilitated any-or-all offers from potential bidders and further weakened the rights of minority shareholders, depriving them of the right to remain a shareholder of the target firm. However, it also attracted a new type of bidder not interested in partial offers. The revised tender offer regulations in 2006 reflected an effort of regulators to restore the balance of power between potential bidders and minority shareholders, who believed they were being squeezed-out at unfairly low prices.

We find that the rules changes had a positive impact on the offered premiums and percentage of target shares bidders wished to acquire, reduced the frequency of partial and discounted TOBs, and improved target shareholders' wealth. The improvements in target welfare are related to the availability of squeeze-outs, which attracted the new type of bidder and to the possibility of MBOs. However, the targets' gains were not at the expense of public bidder shareholders who did not experience a decline in wealth over time.

Overall our results suggest that regulators have been seeking the appropriate balance of power between potential bidders and targets' minority shareholders, but it took a while before

the impact of certain regulatory changes was understood and for subsequent adjustments to be made. While the changes have generally served to increase minority shareholder protections, minority shareholders are increasingly becoming vocal and frequently go to the court claiming that the offer price is too low. We have also seen, however, that discounted tender offers are still possible in Japan and bidding shareholders are still able to take advantage of distressed targets, particularly those with block shareholders tendering their stakes.

There is ongoing debate globally about strengths and weaknesses of MBRs and the general regulation of takeovers, both in the EU (Humphrey-Jenner, 2012) and in emerging markets (e.g., Cai, 2011, regarding China). The Japanese example contributes to this debate by showing that the introduction of MBRs alone does not automatically benefit minority shareholders. Smart investors find ways to collude and avoid the MBR unless the MBR are carefully conceived. At the same time, our results suggest that the past regulatory changes have made it more costly for a potential bidder to acquire another company via a tender offer. The higher cost might discourage an efficient bidder, and the transfer of corporate control from an inefficient to an efficient management. Within our sample period, 2007 has seen the record number of tender offers, but the number of tender offers has been decreasing since 2009, partly because of the global financial crisis. We have to continue to monitor the long-term impact of the regulatory changes on the viability of the market for corporate control in Japan before we consider the possibility of even more regulations.

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References

Albuquerque, R., Schroth, E., 2010. Quantifying private benefits of control from a structural model of block trades. Journal of Financial Economics 96, 33-55.

Amoako-Adu, B., Smith, B., 1993. Comparative study of complete tender offers and partial acquisitions. Journal of Banking and Finance 17, 1097-1110.

Antoniou, A., Arbour, P., Zhao, H., 2008. How much is too much: Are merger premiums too high? European Financial Management 14, 268-287.

Arikawa, Y., Miyajima, H., 2007, Understanding the M&A boom in Japan. in Nakamura, M. (Ed.), Changing Corporate Governance Practices in China and Japan: Adaptations of Anglo-American Practices. Palgrave-Macmillan, Basingstoke, 153-182.

Baker, M., Pan, X., Wurgler, J., 2012. The effect reference point prices on mergers and acquisitions. Journal of Financial Economics 106, 49-71.

Barber, B., Lyon, J. 1996. Detecting Abnormal Operating Performance: The Empirical Power and Specification of Test Statistics. Journal of Financial Economics 41, 313-358.

Barclay, M., Holderness, C., 1989. Private benefits from control of public corporations. Journal of Financial Economics 25, 371-395.

Bargeron, L., Schlingemann, F., Stulz, R., Zutter, C., 2008. Why do private acquirers pay so little compared to public acquirers? Journal of Financial Economics 89, 375-390.

Bebchuk, L., 1994. Efficient and inefficient sales of corporate control. Quarterly Journal of Economics 109, 957-993.

Betton, S., Eckbo, E., 2000. Toeholds, bid jumps, and expected payoffs in takeovers. Review of Financial Studies 13, 841-882.

Betton, S., Eckbo, E., Thorburn, K., 2008. Corporate takeovers. in: Eckbo, B. (Ed.), Handbook of Corporate Finance: Empirical Corporate Finance, vol. 2, Handbooks in Finance Series. Elsevier, North-Holland, Amsterdam, 291-430 (Chapter 15).

Betton, S., Eckbo, E., Thorburn, K., 2009. Merger negotiations and the toehold puzzle, Journal of Financial Economics 91, 158-178.

Bradley, M., 1980. Interim tender offers and the market for corporate control. Journal of Business 53, 345-376.

Burkart, M., Gromb, D., Panunzi, F., 2000. Agency conflicts in public and negotiated transfers of corporate control. Journal of Finance 55, 647-677.

Cai.W, 2011. The mandatory bid in China. European Business Organization Law Review 12, 653-680.

Comment R., Jarrell, G., 1987. Two-tier and negotiated tender offers. Journal of Financial Economics 19, 283-310.

Dyck, A., Zingales, L., 2004. Private benefits of control: An international comparison. Journal of Finance 59, 537-600.

Eckbo, B., 2009. Bidding strategies and takeover premiums: A review. Journal of Corporate Finance 15, 149-178.

Eckbo, B., Langohr, H., 1989. Information disclosure, method of payment, and takeover premiums: Public and private tender offers in France. Journal of Financial Economics 24, 363-403.

Grossman, S., Hart, O., 1980. Takeover bids, the free-rider problem, and the theory of the corporation. Bell Journal of Economics 11, 42-64.

Humphrey-Jenner, M., 2012. The impact of the EU takeover directive on takeover performance and empire building. Journal of Corporate Finance 18, 254-272.

Inoue, K., Kato, H., Bremer, M., 2015. Empirical evidence of coercive tender offers in Japan. Unpublished working paper, Tokyo Institute of Technology.

Jarrell, G., Poulsen, A., 1989. Stock trading before the announcement of tender offers: Insider trading or market anticipation? Journal of Law, Economics, and Organization 5, 225-248.

Kahan, M., 1993. Sales of corporate control. Journal of Law, Economics, and Organization 9, 368-379.

Kester, W., 1991. Japanese Takeovers: The Global Contest for Corporate Control. Harvard Business School Press, Boston, MA.

Massari, M., Monge, V., Zanetti, L., 2006. Control premium in legally constrained markets for corporate control: The Italian case. Journal of Management and Governance 10, 77-110.

Moeller, T., 2005. Let's make a deal! How shareholder control impacts merger payoffs. Journal of Financial Economics 76, 167-190.

Rossi, S., Volpin, P.F., 2004. Cross-country determinants of mergers and acquisitions. Journal of Financial Economics 74, 277-304.

Schwert, G., 1996. Markup pricing in mergers and acquisitions. Journal of Financial Economics 41, 153-192.

Shleifer, A., Vishny, R.W., 1986. Large shareholders and corporate control. Journal of Political Economy 94, 461-488.

Table 1. Comparison of Mandatory Bid Rules among Various Countries

This table summarizes differences in tender offer regulations among Japan, the U.K., other countries within the European Union (following the European Parliament Directive 2004/25/EC), and the United States. Mandatory bid threshold specifies the percentage of the target's existing voting rights beyond which a bidder must launch a tender offer to acquire all the targets shares. In Japan, the threshold varies depending whether a bidder aims to purchase from a small (fewer than or equal to 10) or a large number of shareholders (more than 10). Partial offer regulation refers to whether a bidder must purchase all shares tendered. Squeeze-out right is the bidder's option to purchase the remaining untendered shares forcefully once the offer becomes successful. Bidders gained squeeze-out rights following the October 1999 revision of the *Commercial Law*. Japan's new *Companies Act* that became effective on May 1, 2006, enabled cash based squeeze-out rights as well as share squeeze-outs. The revised regulations of tender offer under the *Securities and Exchange Act* (now renamed *Financial Instruments and Exchange Act*) became effective on December 13, 2006.

	Mandatory Bid Threshold	Partial Offer	Bid Price Floor	Cash Squeeze-Out Right
Japan	**33.4% (if # of seller is small)** **5% (if # of seller is large)**	**Allowed if below 66.7% (December 13, 2006~)** Allowed (~December 12, 2006)	**None**	**Effectively above 66.7% (May 2006~)** None (~April 2006)
UK (City Code)	30%	Not allowed, but exceptions may apply.	Highest pre-bid price paid by the bidder.	90%
Other EU Countries	20% ~ 66%	Not allowed, but exceptions may apply.	"Equitable" highest pre-bid price paid by the bidder. Variation exists e.g., the average 12-month pre-bid market share price (Italy).	80% ~ 98% Some countries do not have the rule.
USA	none	none	none	90%

Table 2. Descriptive Statistics

This table presents descriptive statistics for a sample of 612 tender offers bids (TOB) occurring between 1990 and 2011. Toehold is the stake already held by the bidder at the time of the TOB. Percentage to be acquired is the announced percentage of target shares that the bidder aims to purchase. Offer Premium is calculated as (tender offer price) / (price 41 trading days before the announcement) −1. Partial and Discount are partial offers and discounted offers (meaning the offer premium is negative), respectively. Block Seller is an indicator variable equal to 1 if the bidder announces the name of a block holder who is tendering its shares. Distressed target is an indicator variable that is equal to 1 if the target's after-tax profit is negative within two fiscal years prior to the tender offer. Public Bidder, Bidder is PE/VC fund, and MBO are indicator variables equal to 1 if the bidder is a public company, the bidder is a private equity or venture capital fund, and the TOB involves a management buyout, respectively. Hostile offers are those in which the incumbent management announces its opposition to the offer. Failed bids are those where the number of tendered shares is less than the targeted minimum following conditional offers or where less than 50% of target shares are tendered following unconditional offers.

Panel A: Offer Characteristics

Year	# of TOB	Median Toehold	Median Percentage to be Acquired	Offer Premium for Entire Sample		# of Discount Offers	# of Partial Offers	Offer Premium. for Partial Offers	
				Mean	Median			Mean	Median
1990～1994	9	10.0%	51.1%	-2.8%	-5.8%	5 (55.6%)	8 (88.9%)	-2.8%	-5.8%
1996	4	6.1%	58.3%	-21.5%	-21.7%	3 (75.0%)	3 (75.0%)	-20.1%	-17.7%
1997	9	4.8%	41.5%	-2.7%	-14.1%	6 (66.7%)	8 (88.9%)	-13.6%	-14.2%
1998	10	5.7%	53.4%	4.2%	5.3%	5 (50.0%)	8 (80.0%)	-7.3%	-5.0%
1999	10	1.2%	57.1%	-6.3%	-4.9%	6 (60.0%)	7 (70.0%)	-17.7%	-5.5%
2000	11	0.0%	61.7%	21.3%	16.7%	2 (18.2%)	5 (45.5%)	6.4%	8.1%
2001	18	12.6%	51.0%	19.7%	26.0%	5 (27.8%)	10 (55.6%)	12.4%	10.1%
2002	26	30.7%	80.0%	25.3%	16.4%	8 (30.8%)	11 (42.3%)	-11.6%	-8.3%
2003	27	0.0%	66.5%	28.1%	26.1%	4 (14.8%)	12 (44.4%)	10.7%	3.8%
2004	32	24.1%	55.6%	13.4%	17.0%	9 (28.1%)	18 (56.3%)	-0.5%	0.4%
2005	47	15.0%	51.1%	17.1%	15.9%	9 (19.1%)	21 (44.7%)	9.5%	2.2%
2006	53	3.4%	54.9%	16.3%	17.0%	12 (22.6%)	25 (47.2%)	7.2%	9.0%
2007	97	5.0%	63.7%	25.6%	26.9%	11 (11.3%)	38 (39.2%)	18.4%	18.0%
2008	69	6.2%	60.0%	46.3%	37.4%	7 (10.1%)	22 (31.9%)	21.6%	19.8%
2009	77	7.9%	66.7%	58.1%	56.5%	10 (13.0%)	15 (19.5%)	32.6%	35.9%
2010	56	15.6%	99.5%	42.3%	42.7%	4 (7.1%)	8 (14.3%)	27.2%	25.8%
2011	57	0.0%	97.2%	52.1%	43.9%	2 (3.5%)	4 (7.0%)	31.3%	38.3%
TOTAL	612	4.1%	65.9%	31.7%	29.0%	108 (17.6%)	223 (36.4%)	9.6%	4.5%

Panel B: Target and Bidder Characteristics and Outcomes

	Sample Period							
	Entire sample n = 612		Early n = 41		Middle n = 210		Late n = 361	
Has block seller	369	60.5%	33	80.5%	129	61.4%	207	57.3%
Distressed Target	257	42.2%	18	43.9%	82	39.0%	157	43.5%
Public bidder	328	53.6%	25	61.0%	120	57.1%	183	50.7%
Bidder is PE/VC fund	101	16.5%	0	0.0%	39	18.6%	62	17.2%
MBO	105	17.2%	0	0.0%	24	11.4%	81	22.4%
Hostile offers	15	2.5%	0	0.0%	9	4.3%	6	1.7%
Failed Offers	19	3.1%	0	0.0%	10	4.8%	9	2.5%

Table 3. Abnormal Returns to Target and Bidding Shareholders

The table reports mean cumulative abnormal returns (CARs) earned by target and bidder shareholders for a sample of 612 tender offer bids (TOB) occurring between 1990 and 2011. Partial offers are for fewer than 100% of the targets' shares. Any-or-All offers do not place restrictions on the number of shares covered by the TOB. The estimation period for market model is between -240 trading days and -41 trading days before the tender offer announcement date. "A" in the Period column indicates that the date is counted from the announcement date, and "T" indicates that the date is counted from the last day of the tendering period. The figures in parentheses report corresponding *t*-statistics. * and ** indicate significance at the 5% and 1% levels, respectively.

Panel A: Target CARs

Period	All Tender Offers	Partial	Any-or-All
	n=612	*n*=223	*n*=389
-40A ~ -3A	**4.48%**	**6.02%**	**3.59%**
	(4.92)**	**(3.55)****	**(3.42)****
-40A ~ +2T	**32.16%**	**18.05%**	**40.26%**
	(19.42)**	**(7.16)****	**(19.53)****
-1A ~ +1A	**15.13%**	**8.44%**	**18.96%**
	(16.46)**	**(10.07)****	**(21.72)****
-2A ~ +2A	**21.72%**	**11.06%**	**27.84%**
	(24.84)**	**(9.31)****	**(25.76)****

Panel B: Bidder CARs

Period	All Tender Offers	Partial	Any-or-All
	n=303	*n*=149	*n*=154
-40A ~ -3A	**-2.63%**	-1.89%	-3.34%
	(-2.20)*	(-1.18)	(-1.88)
-1A ~ +1A	**0.71%**	0.68%	0.74%
	(1.96)*	(1.38)	(1.38)
-2A ~ +2A	0.67%	0.70%	0.63%
	(1.48)	(1.24)	(0.90)

Table 4. Comparison between Partial and Any-or-All Offers by Sub-Period

The table provides data comparing partial and any-or-all tender offer bids (TOB) for a sample of 612 TOBs occurring between 1990 and 2011. Panel A reports data for the entire sample and panels B to D report data for three sample sub-periods defined by changes in regulations governing TOBs. Partial offers are for fewer than 100% of the targets' shares. Any-or-All offers do not place restrictions on the number of shares covered by the TOB. Offer Premium is calculated as (tender offer price) / (price 41 trading days before the announcement) −1. Cumulative abnormal returns (CARs) are market based abnormal returns earned by target shareholders. Toehold is the stake already held by the bidder at the time of the TOB. Percentage to be acquired is the announced percentage of target shares that the bidder aims to purchase. Distressed targets are those whose after-tax profit is negative within two fiscal years prior to the TOB. The test statistics is to test the null that the means or the medians of the two sub-groups are equal. * and ** indicate significance at the 5% and 1% levels, respectively. We also report whether the figures are significantly different from zero for Offer premium and CAR.

Panel A: Comparison between Partial and Any-or-All Tender Offers

	Partial (n = 223)		Any-or All (n = 389)		Test statistic	
	Mean	Median	Mean	Median	t-stat.	Wilcoxon
Offer Premium	**9.6%****	**4.5%****	**44.2%****	**36.6%****	**10.89****	**11.06****
CAR (-40 of announce ~ +2 of offer end)	**18.0%****	**11.8%****	**40.3%****	**34.9%****	**6.68****	**8.08****
Toehold	15.4%	7.5%	20.9%	3.7%	**2.89****	1.48
Percentage to Be Acquired	51.4%	51.0%	77.7%	84.2%	**15.40****	**13.34****
Market Cap. of Target (in millions yen)	48,399	8,876	33,714	7,545	-1.57	1.51
# of Distressed Targets (% of sample)	104	46.6%	108	39.3%	-1.76	

Panel B: Comparison between Partial and Any-or-All Tender Offers before October 1999

	Partial (n = 34)		Any-or All (n = 7)		Test statistic	
	Mean	Median	Mean	Median	t-stat.	Wilcoxon
Offer Premium	**-11.6%****	**-9.5%****	**29.7%****	**26.5%****	**3.46****	**2.37***
CAR (-40 of announce ~ +2 of offer end)	**30.2%****	**20.9%****	**36.6%****	**40.6%****	0.31	1.13
Toehold	9.9%	0.0%	35.7%	33.8%	**3.54****	**2.91****
Percentage to Be Acquired	52.5%	51.0%	67.5%	68.3%	**2.11***	1.02
Market Cap. of Target (in millions yen)	36,541	12,060	31,551	9,809	-0.19	0.05
# of Distressed Targets (% of sample)	18	52.9%	0	0.0%	**-2.74****	

Panel C: Comparison between Partial and Any-or-All Tender Offers between October 1999 and December 2006

	Partial (n = 109)		Any-or All (n = 101)		Test statistic	
	Mean	Median	Mean	Median	t-stat.	Wilcoxon
Offer Premium	**5.2%****	**3.2%****	**30.7%****	**28.5%****	**6.07****	**6.56****
CAR (-40 of announce ~ +2 of offer end)	**11.3%****	**4.9%****	**20.2%****	**19.6%****	**2.17***	**3.21****
Toehold	16.5%	15.0%	23.6%	8.9%	**2.24***	1.22
Percentage to Be Acquired	53.0%	51.1%	72.7%	66.7%	**7.39****	**6.04****
Market Cap. of Target (in millions yen)	44,570	9,000	46,308	11,446	0.10	1.55
# of Distressed Targets (% of sample)	47	46.5%	35	32.1%	**-2.15***	

Panel D: Comparison between Partial and Any-or-All Tender Offers after December 2006

	Partial (n = 88)		Any-or All (n = 273)		Test statistic	
	Mean	Median	Mean	Median	t-stat.	Wilcoxon
Offer Premium	**22.8%****	**21.6%****	**50.0%****	**40.8%****	**5.49****	**5.53****
CAR (-40 of announce ~ +2 of offer end)	**21.1%****	**14.5%****	**48.4%****	**41.7%****	**5.43****	**6.05****
Toehold	16.1%	15.8%	19.4%	0.0%	1.16	0.34
Percentage to Be Acquired	49.3%	50.9%	80.0%	90.5%	**11.98****	**10.35****
Market Cap. of Target (in millions yen)	57,376	6,810	28,741	5,395	**-2.11***	1.59
# of Distressed Targets (% of sample)	39	44.3%	118	43.2%	-0.18	

Table 5. Logit regressions examining the choice between Partial and Any-or-All Offers

This table presents the results from logit regressions of our sample of 612 tender offer bids (TOB) occurring between 1990 and 2011. We assign an indicator dependent variable which equals 1 for a partial offer (TOB for fewer than 100% of the targets shares) and 0 for an any-or-all offer (No restrictions on the number of shares covered by the TOB). Toehold is the stake already held by the bidder at the time of the TOB. Percentage to be acquired is the announced percentage of target shares that the bidder aims to purchase. Bidder is PE/VC fund is an indicator variable equal to 1 if the bidder is a private equity or venture capital fund. Block seller exists, Block Seller is PE/VC fund, and Block seller individual are indicator variables equal to 1 if the target has a selling block shareholder, when the seller is a private equity or venture capital fund, and when the seller is an individual, respectively. Target distressed is an indicator variable equal to 1 when the target's after-tax profit is negative within two fiscal years prior to the tender offer. Post-October 1, 1999 and Post-December 13, 2006 are indicator variables describing the timing of the TOBs. * and ** indicate significance at 5% and 1% level, respectively.

Dependent Variable: Partial Offer = 1, Any-or-All Offer = 0			
Independent Variables	(1)	(2)	(3)
Constant	**2.83**	**1.74**	**3.98**
	(4.08)**	**(2.15)***	**(4.06)****
Toehold	**-5.09**	**-4.65**	**-4.58**
	(-8.34)**	**(-7.15)****	**(-6.95)****
Percentage to be acquired	**-6.74**	**-6.72**	**-6.49**
	(-10.91)**	**(-10.46)****	**(-9.80)****
Bidder is PE/VC Fund		**-0.79**	**-0.72**
		(-2.49)*	**(-2.24)***
Block seller exists		**1.03**	**0.69**
		(3.73)**	**(2.42)***
Block seller is PE/VC Fund		-0.60	-0.19
		(-1.38)	(-0.42)
Block seller is individual		-0.39	-0.27
		(-1.45)	(-0.95)
Target distressed		0.27	0.24
		(1.23)	(1.07)
Log(target market cap.)	0.07	0.12	0.07
	(1.07)	(1.72)	(0.90)
Post-October 1, 1999			**-1.37**
			(-2.77)**
Post-December 13, 2006			**-0.76**
			(-3.33)**
Number of observations	612	612	612
Pseudo R-squared	**25.6%**	**28.6%**	**32.0%**

Table 6. Regression Analysis of Tender Offer Premiums

This table presents the results of OLS regressions of offer premiums for a sample of 612 tender offer bids (TOB) occurring between 1990 and 2011. Partial offer dummy is an indicator variable equal to 1 for TOBs targeting fewer than 100% of the targets shares. Toehold is the stake already held by the bidder at the time of the TOB. Percentage to be acquired is the announced percentage of target shares that the bidder aims to purchase. Bidder is PE/VC fund is an indicator variable equal to 1 if the bidder is a private equity or venture capital fund. Block seller exists, Block Seller is PE/VC fund, and Block seller individual are indicator variables equal to 1 if the target has a selling block shareholder, when the seller is a private equity or venture capital fund, and when the seller is an individual, respectively. Target distressed is an indicator variable equal to 1 when the target's after-tax profit is negative within two fiscal years prior to the tender offer. Failed offer is an indicator variable equal to 1 when, in the case of a conditional offer, the number of tendered shares is less than the targeted minimum, and in the case of an unconditional offer, that less than 50% of target shares are tendered. Pre-announcement 52 week high is the ratio of the offer price to the 52 week high of target's share price prior to the offer. Post-October 1, 1999 and Post-December 13, 2006 are indicator variables describing the timing of the TOBs. MBO is an indicator variable equal to 1 if the TOB involves a management buyout. * and ** indicate significance at 5% and 1% level, respectively.

	Dependent Variable: Tender Offer Premium		
Independent Variables	(1)	(2)	(3)
Constant	**0.99**	**0.62**	**0.63**
	(8.28)**	**(4.62)****	**(4.65)****
Partial offer dummy	**-0.32**	**-0.23**	**-0.22**
	(-8.51)**	**(-5.95)****	**(-5.92)****
Toehold	**-0.20**	-0.13	-0.13
	(-2.22)*	(-1.53)	(-1.53)
Percentage to be acquired	0.02	0.00	0.01
	(0.32)	(-0.05)	(0.07)
Bidder is PE/VC Fund	-0.05	-0.07	-0.07
	(-1.08)	(-1.65)	(-1.66)
Block seller exists	**-0.19**	**-0.14**	**-0.14**
	(-4.61)**	**(-3.31)****	**(-3.37)****
Block seller is PE/VC Fund	0.06	0.00	0.00
	(0.94)	(0.01)	(0.04)
Block seller is individual	0.08	0.02	0.03
	(1.88)	(0.59)	(0.62)
Target distressed	**-0.11**	**-0.11**	**-0.11**
	(-3.48)**	**(-3.40)****	**(-3.44)****
Failed offer	-0.05	0.00	0.00
	(-0.52)	(-0.01)	(-0.01)
Log(target market cap.)	**-0.04**	**-0.03**	**-0.03**
	(-4.08)**	**(-3.21)****	**(-3.44)****
Pre-announcement 52 week high			0.00
			(-1.34)
Post-October 1, 1999		**0.13**	**0.13**
		(2.02)*	**(2.02)***
Post-December 13, 2006		**0.16**	**0.15**
		(4.68)**	**(4.56)****
MBO		**0.14**	**0.14**
		(2.94)**	**(2.95)****
Number of observations	612	612	612
Adjusted R-squared	**20.7%**	**25.8%**	**25.9%**

Table 7. Regression Analysis of Bidder CARs

This table presents the results of OLS regressions of bidder cumulative abnormal returns (CARs) for a sample of 612 tender offer bids (TOB) occurring between 1990 and 2011. The CARs are measured over a three day window surrounding the TOB announcements. Partial offer dummy is an indicator variable equal to 1 for TOBs targeting fewer than 100% of the targets shares. Offer Premium is calculated as (tender offer price) / (price 41 trading days before the announcement) −1. Toehold is the stake already held by the bidder at the time of the TOB. Percentage to be acquired is the announced percentage of target shares that the bidder aims to purchase. Block seller exists, Block Seller is PE/VC fund, and Block seller individual are indicator variables equal to 1 if the target has a selling block shareholder, when the seller is a private equity or venture capital fund, and when the seller is an individual, respectively. Target distressed is an indicator variable equal to 1 when the target's after-tax profit is negative within two fiscal years prior to the tender offer. Failed offer is an indicator variable equal to 1 when, in the case of a conditional offer, the number of tendered shares is less than the targeted minimum, and in the case of an unconditional offer, that less than 50% of target shares are tendered. Pre-announcement 52 week high is the ratio of the offer price to the 52 week high of target's share price prior to the offer. Post-October 1, 1999 and Post-December 13, 2006 are indicator variables describing the timing of the TOBs. * and ** indicate significance at 5% and 1% level, respectively.

	Dependent Variable: Bidder CAR -1 to +1 Day of Announcement		
Independent Variables	(1)	(2)	(3)
Constant	0.02	0.00	0.00
	(0.62)	(0.05)	(0.08)
Partial offer dummy	-0.01	0.00	0.00
	(-0.61)	(-0.49)	(-0.46)
Offer premium	-0.01	-0.01	-0.01
	(-1.15)	(-1.25)	(-1.29)
Toehold	**0.05**	**0.04**	**0.04**
	(2.11)*	**(2.01)***	**(2.02)***
Percentage to be acquired	-0.01	-0.01	-0.01
	(-0.45)	(-0.48)	(-0.42)
Block seller exists	**0.03**	**0.04**	**0.04**
	(3.53)**	**(3.60)****	**(3.59)****
Block seller is PE/VC Fund	0.01	0.01	0.01
	(0.71)	(0.56)	(0.56)
Block seller is individual	**-0.02**	**-0.02**	**-0.02**
	(-2.22)*	**(-2.24)***	**(-2.24)***
Target distressed	-0.01	-0.01	-0.01
	(-1.36)	(-1.34)	(-1.38)
Failed offer	0.05	0.05	0.05
	(1.94)	(1.89)	(1.88)
Log(market cap.)	0.00	0.00	0.00
	(0.99)	(-0.83)	(-0.88)
Pre-announcement 52 week high			0.00
			(-0.43)
Post-October 1, 1999		0.02	0.02
		(1.09)	(1.09)
Post-December 13, 2006		0.00	0.00
		(0.10)	(0.08)
Number of observations	303	303	303
Adjusted R-squared	**4.2%**	**3.9%**	**3.7%**

Table 8. Target Operating Performance Surrounding Partial Offers

This table reports yearly Return on Assets (ROA) for a sample of 612 tender offer bids (TOB) occurring between 1990 and 2011. The results apply to the targets of partial TOBs only. Panel A reports unadjusted ROA, calculated as operating income divided by total assets net of cash and equivalents. Panel B reports adjusted ROA using the Barber and Lyon (1996) methodology of identifying matching control firms. Event year 0 is the year of the TOB. * and ** indicate significance at 5% and 1% level, respectively for the change in performance entries in Panel A and for all entries in Panel B.

Panel A: Raw ROA

	Entire Sample			Before December 2006			After December 2006		
	n	Mean	Median	*n*	Mean	Median	*n*	Mean	Median
Event Year -5	188	3.70%	4.17%	116	4.32%	4.14%	72	2.71%	4.45%
Event Year -4	188	4.30%	4.27%	116	5.17%	4.27%	72	2.92%	4.31%
Event Year -3	188	4.92%	4.22%	116	3.83%	3.82%	72	6.68%	5.77%
Event Year -2	188	4.57%	3.51%	116	3.18%	2.96%	72	6.81%	4.63%
Event Year -1	188	3.82%	3.70%	116	2.92%	2.89%	72	5.27%	4.78%
Event Year 0	188	2.39%	2.96%	116	2.08%	3.03%	72	2.91%	2.90%
Event Year +1	188	2.18%	3.01%	116	2.84%	3.36%	72	1.14%	1.98%
Event Year +2	169	2.82%	3.24%	109	3.37%	3.30%	60	1.83%	2.83%
Event Year +3	157	3.16%	4.09%	100	3.34%	3.80%	57	2.85%	4.93%
Event Year +4	135	2.25%	3.35%	84	1.82%	3.03%	51	2.96%	3.65%
Event Year +5	121	1.90%	3.89%	76	1.78%	3.32%	45	2.10%	4.94%
Change Event Years -2~+2	169	-1.59%	-0.55%	109	0.36%	-0.21%	60	**-5.12%****	**-1.51%***
Change Event Years -3~+3	157	-1.51%	-0.37%	100	-0.21%	0.17%	57	-3.81%	-0.91%
Change Event Years -5~+5	121	-2.25%	-0.61%	76	-2.49%	-0.73%	45	-1.83%	-0.14%

Panel B: Adjusted ROA

	Entire Sample			Before December 2006			After December 2006		
	n	Mean	Median	*n*	Mean	Median	*n*	Mean	Median
Event Year -5	188	-0.35%	0.37%	116	-0.41%	0.75%	72	-0.25%	-0.24%
Event Year -4	188	-1.02%	0.57%	116	0.57%	0.67%	72	-3.59%	-0.23%
Event Year -3	188	-1.30%	-0.08%	116	-0.73%	0.04%	72	-2.23%	-0.52%
Event Year -2	188	-0.98%	-0.80%	116	-1.14%	-0.56%	72	-0.72%	-0.92%
Event Year -1	188	-0.43%	0.00%	116	-0.54%	-0.01%	72	-0.25%	0.00%
Event Year 0	188	-2.18%	-0.68%	116	-2.34%	-0.63%	72	-1.91%	-1.13%
Event Year +1	188	-2.44%	-1.33%	116	-2.63%	-1.41%	72	-2.15%	-1.21%
Event Year +2	169	-1.76%	-0.88%	109	-1.52%	-0.70%	60	-2.19%	-1.18%
Event Year +3	157	-1.34%	0.21%	100	-0.17%	0.28%	57	-3.41%	-0.58%
Event Year +4	135	-2.72%	-1.46%	84	-2.06%	3.03%	51	-3.81%	-1.51%
Event Year +5	121	-2.63%	0.37%	76	-1.27%	0.20%	45	-4.99%	0.43%
Change Event Years -2~+2	169	-0.55%	0.35%	109	-0.26%	0.24%	60	-1.09%	0.37%
Change Event Years -3~+3	157	-0.29%	-0.36%	100	0.03%	-0.30%	57	-0.83%	-1.36%
Change Event Years -5~+5	121	-1.01%	0.02%	76	-1.58%	-0.85%	45	-0.01%	0.02%