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Managing Ownership by Management[1]

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Abstract

This paper describes a previously undocumented internal market for corporate control. It is utilized in Japan where purchases and sales of blocks of shares are organized by the management of firms themselves. The paper records how Japanese companies have undertaken repurchases that are held in treasury stock and subsequently placed with other companies. Japanese management has a long history of engaging in such practices and the cross-shareholdings that resulted were defensive in nature and value destructive. However, they have recently taken on a very different form: in contrast to traditional cross-shareholdings, they are now inter-corporate holdings that are strategic and on average value enhancing. The change has resulted from the growing presence of international institutional investors and improved corporate governance. It suggests that, when subject to external market discipline, internal management of ownership can be used to promote value enhancing outcomes. This raises the question of whether there is a greater degree of managerial influence on ownership elsewhere than is currently recognized. We discuss this in the context of dominant forms of dispersed and family ownership observed around the world.

Keywords: Internal market for corporate control, ownership, value creation, institutional investors
JEL classification: G32, G35, K22

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1. Introduction

Corporate governance in Japan is traditionally regarded as weak. Bebchuk et al. (2000) and La Porta et al. (1998) emphasized the high degree of managerial entrenchment in Japan in the form of widespread cross-shareholdings, and Miyajima and Kuroki (2007) and Ikeda et al. (2018) documented the negative relationship between cross-shareholdings and corporate performance.

Ownership of Japanese firms has historically been dominated by insider shareholders - not the family and state ownership that prevail in most insider systems around the world - but ownership by banks, insurance firms and other corporations.[1] It is therefore not just an insider system in the sense of ownership of share blocks by dominant shareholders, but an "internal" system of control by the management of banks, insurance firms and other companies. In the context of conventional concepts of corporate governance, this would be regarded as a particularly poor form of corporate control, at least from the perspective of outsider shareholders and corporate performance more generally.[2]

The reforms of the second decade of this century in Japan under the Premiership of Abe sought to rebalance Japan from being an internal to an outsider capital market, reining in the power of management and replacing it with control by the stock market and international institutional investors as observed elsewhere, especially in the UK and US. This was motivated by the perceived poor performance of the Japanese corporate sector since the banking crisis of the 1990's, as reflected in lackluster growth and anemic investment and innovation. An injection of greater outsider control was felt to be essential to address these deficiencies.

Associated with the distinctive nature of corporate governance in Japan is a form of corporate control that has not previously been documented and is the subject of this paper. We term it an "internal market for corporate control" to distinguish it from the external hostile takeover and hedge fund activist markets in the UK and US, and the insider markets in blocks of shares in countries with concentrated ownership, for example in Continental Europe and many Asian countries.

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[1] Ownership by banks and insurance companies has been observed elsewhere, for example in Germany in the 20th century, but not on the scale of Japan during the banking era (see Franks and Mayer, 2001).

[2] As a recent illustration of this, an article in the Financial Times on 20 January 2021 entitled "Japan Inc faces potential forced sell-off of cross-shareholdings" stated that "although cross-holdings have been in decline since a 1990's peak, companies justify them as necessary to "maintain business relationships" - infuriating fund managers who view such webs as a recipe for complacency, low returns on equity and poor governance."

The distinction between the conventional external market and the internal market is that the former bypasses, or has the potential to bypass, the management of target firms by appeal to "outsider", dispersed shareholders. Corporate control also bypasses management in insider markets where blocks of shares are traded directly between dominant, mainly family, owners. What is striking about the Japanese internal market is that it is organized by management in a form of management of corporate ownership run by management itself.

This is striking because markets for corporate control are conventionally viewed as an antidote to the otherwise abusive control that executives of companies can exercise, particularly in the presence of weak independent, non-executive boards of directors. Capital markets are seen as a fallback to correct failing board governance. But if capital market transactions in corporate ownership are organized by management itself, that is hardly likely to be a recipe for remedying defective management.

How has this position arisen in Japan? A brief history of corporate governance provides the background. In the post-WW2 period, a system of insider control based on bank ownership of corporations emerged in Japanese firms in response to the dissolution of family zaibatsu-owned companies. Bank ownership was associated with the high growth era in Japan in the 1970's and 1980's. However, the conflicts and contradictions in a creditor owned corporate sector were revealed in the banking crisis of the early 1990's and the subsequent dissolution of bank ownership at the end of the 1990's and the beginning of the 2000's (Franks, Mayer and Miyajima, 2014).

Alongside bank ownership, a less well documented feature of post-WW2 Japanese corporate ownership was the establishment of corporate "cross-shareholdings." These were organized by management through stock market stabilization programs of two organizations - the Japan Joint Securities Company (JJSC) and the Japan Securities Holding Union (JSHU) - funded by Japanese financial institutions in the middle of 1960's.[3] Unlike bank holdings, these corporate cross-shareholdings persisted into the first decade of this century.

The persistence of cross-holdings is often attributed to an attempt on the part of corporate Japan to protect itself against external interference by outside, especially foreign, investors caused by the dissolution of bank holdings. In place of the protection afforded by bank ownership, Japanese companies sought to protect each other. This would be expected to

[3] Franks, Mayer and Miyajima (2014, pp.2611-2619).

result in precisely the complacent, inefficient, and self-interested conduct that has been observed in Japan.

In the face of poor economic performance and the lost decade, the cross-shareholdings were partially unwound but they remained the subject of persistent criticism and contributed to the corporate governance reforms initiated in Japan in 2014 (Miyajima and Saito, 2021). As a result, they were subsequently unwound still further. However, in their place a system of "intercorporate holdings" emerged by which companies owned substantial blocks of shares in other companies in place of the small reciprocal cross-shareholdings. The main way in which this occurred was through a combination of share repurchases most often from insiders, retention in the form of treasury stock and their subsequent placements with other companies. This is the internal market for corporate control described in this paper.

What this paper suggests is that there is a significant difference between cross-shareholdings and more recent intercorporate holdings. The former were reciprocal holdings of shares in companies where individual holdings were individually small but cumulatively amounted to large concentrations, often motivated by a defense against takeovers or other changes in corporate control. In contrast, the intercorporate holdings involve significant single blocks of shares of one company in another that are held primarily for strategic reasons. While the cross-shareholdings might therefore legitimately be regarded as value diminishing from the perspective of outside shareholders, that is not so obviously the case of the strategic intercorporate holdings that replaced them. That proposition is the subject of investigation of this paper.

The paper examines this hypothesis by looking in detail at the internal market for corporate control. It documents the three stages that are involved in its creation - share repurchases frequently from insiders, accumulation of treasury stock, and their placement with other corporations, including strategic partners. It then evaluates the response of outside dispersed shareholders using stock price reactions to the different stages and the overall impact on outside shareholders of what we term "block transfers", namely the transfers of blocks of shares from one group of shareholders to another and in the process the preservation or increase of control by insider, corporate shareholders.

The paper examines how the stock market reacts to the different stages of block transfers and provides the first analysis of stock market responses to these control changes.

There are two contrasting predictions of how it might respond. The first is the Barclay and Holderness (1989), Dyck and Zingales (2004) private benefit (entrenchment) view that management repurchases shares from insiders who wish to dispose of their blocks and places them with other insiders as a way of preserving the private interests of management or other insiders, at the expense of outside shareholders. The market would be expected to respond negatively to this self-interest.

The alternative hypothesis is the Klein et al. (1978), Aghion and Tirole (1994) view that block holders act as a commitment device to which the market responds positively because the new block holders, often strategic in nature, are expected to improve the performance of firms in which they invest. In essence, the first hypothesis sees the internal market as undermining the discipline of external investors and markets for corporate control, and the second as complementary to an external market, promoting the long-term success of the company.

Our results are more consistent with the latter than the former interpretation in recording positive share price reactions to the repurchase, retention and subsequent placing of share blocks with other companies. What the paper suggests is that it is important to distinguish between the repurchase of shares and their placing with insiders to avoid unfriendly changes in control, and placements that have a strategic and therefore potentially value enhancing motivation.

More significantly, the Japanese internal market for corporate control points to a different type of ownership and determination of corporate control from those of the dispersed shareholding systems of the UK and US. Instead of control being allocated to the highest priced bidder in an external market, block shareholders are selected by management. The paper documents how block transfers allow companies to organize their shareholdings through a combination of stock repurchase, treasury stock and private placement from treasury stock.[4]

It records how repurchases of blocks of shares are organized through quasi-private transactions that assist management in arranging transfers of blocks internally rather than through negotiations or sales in outside markets. It demonstrates how outside owners, in

[4] While treasury stock is the primary source of private placements, it is not the only one. They also come from authorized share capital, demonstrating that block transfers via treasury stock are not the only way in which block ownership can be preserved and promoted.

particular foreign shareholders and activist funds influence this process, especially in encouraging management to cancel purchased shares. However, much remains in treasury stock as an inventory of the company's own shares and the paper documents the large growth in treasury stock that has occurred in Japanese firms during the 21st century.

The treasury stock is used in three ways - to raise cash in a traditional sale of the shares in the open market; to place a block of shares in a private transaction with an investor; or to acquire shares in the takeover or merger of another company. We find that private placements are particularly closely associated with repurchases of shares in quasi-private transactions, while takeovers and mergers are associated with repurchases of shares in the open market, suggesting the preservation of blocks repurchased in quasi-private transactions and the use of open market repurchases in more conventional mergers and acquisitions.

Blocks of shares are predominantly placed with corporate investors. We demonstrate that, in the absence of the observed repurchases of shares in quasi-private transactions and the sale of blocks of shares in private placements, the dispersion of ownership of Japanese companies would have increased substantially. More significantly, this block transfer process - taking blocks of shares into the company, retaining them in treasury stock and placing them with strategic corporate investors - is value enhancing for outside shareholders. In other words, the internal management of corporate ownership by management itself is beneficial for shareholders, particularly where the shares are ultimately placed with companies for the purpose of creating joint ventures.

The results demonstrate that outside shareholders are not disadvantaged by the internal market and earn positive abnormal returns in the process. The process is significantly different from open market repurchases and sales of shares in the UK and US which are predominantly undertaken for cash flow and market timing reasons. The share price reactions are more modest in Japanese block transfers than in the large stock market reactions to open-market transactions.

What explains the changes in behavior of Japanese companies over recent decades? First, there was the emergence of foreign shareholders and shareholder activism in the 21st century Japan which stimulated a parallel and complementary external market for corporate control alongside the internal market documented in this paper and, second, there was the onset of Abenomics and the associated corporate governance reforms. We believe that complementarity between external and internal markets for corporate control may be an

important factor in explaining the emergence, and superior performance, of strategically motivated intercorporate relative to cross-shareholdings.

To our knowledge, we believe that this is one of the first papers to study the management of corporate ownership by management itself and the potential for block transfers to be used by management to exercise control through influencing the ownership of its own stock. To the extent that this occurs elsewhere, it is usually seen as a takeover defense tactic in, for example, poison pills in the US, where management use their own company's shares to fend off hostile acquirors. However, the case of Japan raises the intriguing possibility, which we explore in the final section of the paper, that management in other countries might also employ block transfers as ways of influencing the composition of their share ownership for the benefit of their shareholders.[5]

This paper is arranged as follows. The next section describes the data and the organization of the internal market for corporate control in Japan. Section 3 illustrates several cases of companies using stock repurchases as ways of internally managing their ownership. Section 4 sets out the conceptual framework and related literature. Section 5 reports the empirical results on the determinants of stock repurchases, holdings in treasury stocks and sales of shares. Section 6 examines the impact of block transfers on the ownership of Japanese firms and Section 7 records share price reactions to disposals of shares and block transfers. Section 8 concludes the paper and suggests that the internal market for corporate control in Japan may have important implications for our understanding of other capital markets.

2. Stock repurchases in Japan

2.1. Deregulation on stock repurchase

Stock repurchases are a recent phenomenon in Japan. According to the Company Law of 1899, Japanese companies were forbidden from engaging in stock repurchases. Only in 1994 were Japanese firms permitted to repurchase their shares (see Hatakeda and Isagawa, 2004) and, even then, the amended law only allowed firms to repurchase shares for the provision of stock options, or for the purposes of a merger. Furthermore, the repurchased shares had to be canceled rather than resold or retained as treasury stock.

[5] Allen and Phillips (2000) and Mathews (2006) report cases in the US where ownership has been used to forge strategic alliances.

In 2001 an amendment to the company law for the first time allowed firms to repurchase shares and dispose of them without restriction. One motive for the amendment was the unwinding of cross-shareholdings of banks and other companies, which appeared to be accompanied by an undervaluation of share prices. By liberalizing stock repurchases, the government hoped to mitigate the undervaluation.[6] Kobayashai and Irome (2012) state that "the 2001 reform was intended to establish counter measures against hostile buyouts and also to cope with the decline of stock prices."

As shown in Figure 1, the change in law had a significant effect on the level of stock repurchases. Annual repurchases jumped from 0.1-0.2% of outstanding equity before the amendment to 0.5% in 2001 and to more than 1% around the financial crisis of 2008. They increased after 2014 when the Japanese government initiated a series of corporate governance reforms but, nevertheless, as Figure 1 records, remained below that in the United States.

== Figure 1 about here ==

2.2. Declining insider ownership

Around the period when stock repurchases were permitted in 2001, the ownership structure of Japanese firms experienced substantial changes. Figure 2 shows the time-series of insider and outsider holdings based on data from the *Share Ownership Survey*, which covers all Japanese domestic stock exchanges. Following Franks et al. (2014), we define inside shareholders - "insiders" - as the aggregate of banks (including own accounts of trust banks), insurance companies, and corporations.[7] Frequently, such shareholders maintain long-term business ties with companies they invest in and are presumed to receive private benefits of control as well as financial returns on their share stakes. Outsider shareholders include foreigners, individuals,

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[6] In order to mitigate the market impact of banks' sales of stocks, parallel with the liberalization of stock repurchases, the government established the Bank Equity Purchase Corporation (price maintenance organization) in 2001, which together with Bank of Japan, began to buy stock directly from banks. A condition of its purchases was that firms had to have a minimum BBB bond rating, see Miyajima and Kuroki (2007).

[7] The definition of insider ownership by TSE does not include family ownership and managerial/employee ownership; instead, they are categorized as individuals and included as outsiders. As a result, insider (outsider) ownership in Figure 2 is below (above) our estimates in the subsequent analysis. We estimate individual insiders at 2.2% in 2007 based on the TSE listed firms in the first section.

mutual funds, and pension trusts, which only derive financial returns rather than private benefits. Figure 2 shows the ratios of holdings by insiders and outsiders based on stock market values of their holdings.

== Figure 2 about here ==

The insider-dominated ownership structure, which had shown remarkable stability until the mid-1990's, changed radically after the 1997 banking crisis. Banks sold their holdings to rebuild capital they needed to cover the write-offs of non-performing loans. Subsequently, the government enacted a law restricting bank shareholdings, and the proportion of shares held by banks, which formed the core of the cross-ownership structure, declined sharply from 15.6% of total market capitalization in 1992 to 4.6% in 2006.[8] Insurance companies also reduced their stock holdings due to declines in their solvency ratios. However, the proportion of shares held by corporations remained stable at more than 20%.

In parallel with declining shareholdings of banks and insurance firms, ownership by institutional investors, and in particular foreign investors, increased sharply. The latter's share of the stock market increased from 6.3% in 1992 to 27.8% in 2006, with the largest increase occurring in 1999 and 2003-6. Although their share was stable from 2008 to 2012, at between 26.3% and 28.0%, after "Abenomics" was launched in 2013, the share of foreign shareholders increased once again to around 30%. The New Corporate Governance Code required listed firms to explain or disclose the reason for their shareholdings in other companies. As a result, a further dissolution of cross-shareholdings occurred mainly among corporations, though more slowly than in the early 2000's.[9]

Increasing outsider ownership has been accompanied by a rise in shareholder activism in Japan. The number of activist funds with a stake of more than five percent increased from 32 in 1999 to 189 in 2007. Some funds such as Steel Partners and The Children's Investment Fund (TCI) demanded large changes in payout policy and restructuring of the companies in which they invested. As a result, 408 Japanese firms introduced takeover defenses in 2008. However, after the Financial Crisis, activist funds withdrew from the Japanese market, partly

[8] For reasons for the rapid decline of bank shareholdings, see Miyajima and Kuroki (2007).

[9] See Miyajima and Saito (2021).

because of the stock market collapse, and the poor response of firms to the demands of the activists (see Becht et al., 2017). This was reversed after the Japanese government introduced corporate governance reforms from 2013, [10] and institutional investor engagement was encouraged by a new Stewardship Code, which required institutions to engage with firms in which they invested. Under the series of the governance reforms, the number of activist funds with a stake of more than five percent increased again from 80 in 2012 to 140 in 2017 (Becht et al., 2021).

2.3. Description of data on Japanese stock repurchases

In Table 1, we describe our data on repurchases for 1,772 Japanese firms (Tokyo Stock Exchange, 1st section, excluding financial industries) for the period 2001 to 2018. Stock repurchases are calculated as a proportion of the shares outstanding. The size of cumulative repurchases over the eighteen-year period averages almost 9.2% (median 5.9%). However, 29.8% of the sample of companies did not engage in any stock repurchases so there is significant skewness in the distribution of repurchases. For example, companies at the 75th percentile accumulated repurchases of 13.0% of shares outstanding, whereas 143 companies had aggregate stock repurchases exceeding 20%.

== Table 1 about here ==

Panel A of Table 2 and Figure 3 show that the size of annual stock repurchases is 0.54% on average. However, there is considerable variation across companies in the amounts repurchased. The figure and panel A of the table show that the annual percentage of canceled stocks was 0.20%, or roughly one third of repurchased shares. The size of cancellations is relatively small in the pre-financial crisis period at 0.14%, rising to 0.19% post-financial crisis, and 0.3% over the post governance reforms (2014-18). As a result, in the last five years more than one half of repurchased shares were canceled.

Figure 3 shows that the share of treasury stock over the entire time series increased

[10] Financial Times (2020) "Investors should note that Japan is dismantling some old defences" (https://www.ft.com/content/fed216f5-83a9-4909-b062-4a62fb4e9915).

from 0.5% in 2001 to almost 4% in 2018 as a proportion of total shares outstanding.[11]

== Table 2 and Figure 3 about here ==

2.4. How share repurchases are undertaken and related regulation

Share repurchases can be initiated by a shareholders' meeting or by a resolution of the board of directors, provided that the repurchases are permitted by the company's articles of association; in the latter case there is no requirement to seek further shareholder approval. The repurchased shares may be canceled or retained by the company as treasury stock for future use. If they are sold, they can be placed with new or existing shareholders, or sold by public offering. In cases where the shares are placed at a particularly advantageous price to the purchaser (see Holderness, 2018), then shareholder approval must be obtained with a minimum majority of 66% of the votes cast in a special resolution; the price cannot be more than 10% below the average price over the previous six-months, or one day before the board decision.

Panel A of Table 3 shows the frequency of repurchases made by different methods: (i) open market purchases of shares using an auction, (ii) repurchases using ToSTNeT (Tokyo Stock Exchange Trading Network System) where the price is fixed at the closing price of the previous day's trading and the buyer(s) is usually known to the company in advance, (iii) tender offers where the price is fixed through a tender by the buyer, (iv) privately negotiated transactions, and, (v) mixed forms, where a combination of (i) to (iv) is employed. The time series shows that the frequency of repurchases made using open market transactions barely increased from 48.5 to 52.3 percent between 2001-2008, and 2014-18, while repurchases using ToSTNeT declined from 40.9 to 32.4 percent.

== Table 3 about here ==

ToSTNeT, which is the prime method by which a company can preserve control of a block sale, is an off-auction procedure, where the buyer pre-announces that it will purchase a

[11] As a result, the proportion of firms where the treasury stock exceeds the stake held by the single largest shareholder is 9% of all firms in 2018. For example, treasury stock held by Toyota Motor and FANUC exceeded the percentage held by the largest shareholder from 2004 to 2007 and from 2004 to 2014, respectively.

fixed number of shares on a pre-determined day to be transacted at the previous day's closing price (under rules set by TSE, known as ToSTNeT-2/3). These announcements are triggered by an investor notifying the company that it wishes to sell a block of shares, and the company announcing its wish to purchase a block of shares of pre-determined size and inviting other investors to participate. While in theory participation is open to any shareholder, only 16 hours on average elapse between the announcement and the transaction. As a result, investors and other block holders have very little time to consider participation, and rarely do.

Furthermore, in Japan tender offers are not limited to repurchases from outsiders but can also include insiders (a parent firm and families) and are usually accompanied by substantial discounts. Out of 121 tender offers, 89 cases occur with a discount averaging 9.3% (difference between the offer price and the average share price over one month before the transaction).[12] In the US tender offers are usually made to outside shareholders at a significant premium (Vermaelen, 1984; Anderson and Dyl, 2004).

Panel B of Table 3 summarizes the importance of each method of repurchase. The frequency of auctions is high at 53.6% for the whole period, although it is 49.3% as a proportion of all shares repurchased. The equivalent figure for auctions (open market) in the US is around 90% (Banyi et al., 2008), suggesting that market-based mechanisms are overwhelmingly dominant there. The proportion of all shares repurchased through ToSTNeT is 38.3%, and for tender offers, 10.3%. We categorize both cases of ToSTNeT and tender offers as "quasi-private transactions", using the definition of Peyer and Vermaelen (2005) who suggest that the essential characteristic of a private transaction is that the initiation of a trade usually comes from the seller rather than the purchaser.

In Panel C, we describe methods of disposing of treasury stock: public offerings (sales in the secondary market), private placements which include placements to other corporations, employee share ownership schemes, stock options and restricted shares, and payments as part of medium of exchange in mergers and acquisitions. Although stock options are the most common by frequency, the value of each disposal is small, and only amounts to 0.7% of shares outstanding for each disposal. Unlike the US, public offerings and M&A payments using

[12] Almost of all tender offers with a discount are purchased from insiders (business corporations or families). For example, Natori Co. made three tender offers at a discount to the asset management companies of founding families between 2012 and 2014.

repurchased shares are infrequent, while private placements are frequent, representing more than half of disposals.

In Panel D, we compare the size and frequency of equity issuance by firms that made share repurchases with those that have never made a repurchase. This comparison provides evidence on the extent to which, in both absolute and relative terms, share issues are associated with share repurchases. In the first panel of the table, we find that repurchasing firms make far more shares issues than non-repurchasing firms, and the issues are of a similar size. For example, in the 2001-2008 period there were 120 issues by repurchasing firms compared with only 21 by non-repurchasing firms. Of the 120 issues by repurchasing companies, 35 were made from treasury stock and 85 were made from authorized share capital. Those made from authorized share capital were always larger, for example, 9.95% of issued capital versus 5.13% in the period 2001-2008.

In Panel E, we break down the disposition of the private placements and M&A. Private placements to insiders are higher in two of the sub periods but in every sub period they are on average around five times larger by value than placements to outsiders; they are also larger than issues made as part of M&A transactions. The placements to insiders are consistent with control motivated transactions.

In summary, the data analysis points to the importance of share repurchases in Japan and in particular the significance of repurchases that take the form of quasi-private transactions. It records the growing size of treasury stock, and the association of treasury stock with private placements rather than public offerings. Finally, private placements are predominantly to insiders. Together the data point to the association of private repurchases and private placements, linked together by treasury stock, with the transfer of blocks of shares from one owner to another managed by the company itself. This is what we describe as the internal market for corporate control and we turn now to describe four case studies of how this market has operated in practice.

3. Case studies of companies using stock repurchases as a control device

3.1. Ezaki Glico: A company that was subject to an activist engagement

Ezaki Glico Co. is a leading confectionery firm. In 2009 it purchased an 11% stake through ToSTNeT from Steel Partners, an aggressive US activist fund. From 2006, Steel Partners built

a substantial stake in Glico, reaching 15% in 2008, and made shareholder proposals to increase dividends and stock repurchases, whilst advocating the appointment of independent outside directors. In response to engagement failures both at Glico and at Bull-dog Sauce Ltd, and the financial crisis, Steel Partners withdrew from the Japanese market. As a result, through repurchases Glico accumulated a stake of 21.6% in treasury stock, while at the same time foreign shareholdings decreased from 18.2% in 2008 to 3.8% by 2009, entirely explained by the Steel Partners' sale. Glico retained the stake until 2014 when they disposed of 11.9% to Nomura Securities Co. who then resold it to small investors. These transactions allowed the transfer of shares from an aggressive outside shareholder to small dispersed outside shareholders.

Glico is a typical case of negotiated repurchases from block outsiders using ToSTNeT and reselling them to dispersed outside shareholders.

3.2. Suzuki: A company with strategic alliance partners

Suzuki Co. made substantial stock repurchases as a response to a block sale by large shareholders. Suzuki made five stock repurchases totaling 22.6% of its capitalization and resold them (through intermediaries) to individual corporate shareholders. The largest repurchase took place in March 2006, when Suzuki purchased a stake of 17.0% from GM who sold its entire stake of 20% through ToSTNeT; GM's sale was triggered by its own financial distress. Suzuki immediately resold the shares through private placement to its business partners including leading iron and steel firms, JFE, Nippon Steel and three banks including Mizuho Bank. The rest of the stock was kept in treasury, reaching 19.9% in 2009. In 2011, it sold most of its treasury stock to Volkswagen through private placement, when it concluded a comprehensive business partnership.

Suzuki is a good example of a negotiated repurchase from insider block holders and its resale to other insiders (business partners) by private placement.

3.3. Nintendo: A company that repurchased stock from its founding owner

Nintendo Co. is the world's biggest maker of video-game machines. They made five stock repurchases together amounting to 16.4% of their common stock. The company repurchased a block of shares from the founding family and the shares were resold to a strategic partner

through a private placement. On February 4, 2014, Nintendo completed a 114 billion-yen ($1.1 billion) stock repurchase from members of the founding Yamauchi family, constituting 7.4 percent of its outstanding stock through ToSTNeT. The sellers were heirs to former Chief Executive Officer Hiroshi Yamauchi, who owned about 10 percent of the company's shares before his death in September.[13]

On 17 March 2015 Nintendo distributed 1,759,400 shares from its treasury at 12,497 yen per share through a private placement to an internet company DeNA raising 22 billion yen. The shares were sold at a 10% discount to the market price.[14] Nintendo used the 22 billion yen to purchase 10 percent of DeNA's common stock on 2 April 2015, declaring it necessary for both firms to form an alliance with each other through cross-shareholdings, to retain a stable and trusted relationship.

Nintendo is an example of where a block of shares is purchased from a (family) insider wishing to cash out followed by a sale to a strategic corporate partner in private transactions.

3.4. Toyota: A company with rapidly increasing foreign ownership

Toyota Motor Co. experienced large changes in ownership moving from an insider to an outsider-dominated company during the last 20 years. In 1997, the major shareholders of Toyota were banks and insurance companies, with "insider" ownership totaling at least 53.2%,[15] while foreign ownership was only 8.8%. By 2006, foreign ownership had increased to 27.2%, together with 8.8% held by domestic institutional investors, while insider ownership almost halved to 29.1%. During this transformation, Toyota began a program of stock repurchases starting in 2000, with most of the repurchased shares retained as treasury stock.

Since then, Toyota has made accumulated repurchases totaling 15.9% (of which 9.2% was purchased through ToSTNeT and 6.2% through auctions) and by 2007 it held more than 10 percent of its shares as treasury stock. Cancellations of treasury stock totaled 5.4%, and 1.8% of treasury stock were used on four occasions to buy minority interests in listed

[13] Other than this transaction, 3.4% was repurchased through ToSTNeT, while the remaining 5.6% was repurchased by auction.

[14] Japan Securities Business Association requirements permit listed firms to issue new shares at a maximum 10% price discount.

[15] Insider ownership is estimated by adding the percentage share held by banks, insurance firms, other corporations, families, managerial ownership and ESOs for the largest 30 shareholders list.

subsidiaries. However, treasury stock has never fallen much below 7 percent of shares outstanding. Toyota justified the scale of its repurchases to "create … financial flexibility". But analysts regarded the real motivation as being to retain managerial discretion in the event of an unfriendly intervention by an outside investor. Currently foreign shareholdings total more than 45% of shares outstanding.

Toyota is an example of a company that negotiated repurchases.

4. Hypotheses and literature

This paper is related to the literature on different forms of ownership and corporate control around the world, especially how markets in corporate control and insider capital markets operate in different countries. Two forms of markets in corporate control have been widely documented.[16] The first is the external market for corporate control, closely associated with the dispersed, outsider dominated ownership systems of the UK and US.[17] Initially external markets took the form of takeover markets, especially hostile takeovers, but more recently they have involved hedge fund activism in which financial institutions temporarily purchase blocks of shares in target companies.

The second form is the insider control market in the purchase and sale of blocks of shares in family-owned firms in Continental Europe and Asia.[18] In contrast to the Anglo-American markets, these are negotiated deals between holders of large blocks of shares.

This paper describes the evolution of a third form which is an internal market for corporate control that is neither an outsider market nor an internal capital market in the traditional financial sense. It is internally run by management not to allocate finance within firms, but to influence ownership. It is the opposite of an internal capital market which allocates finance in a firm with a given ownership structure, namely it is the determination of ownership of a firm with a given level of financial resources.

All these markets raise similar questions regarding in whose interests they operate. Do they function for the benefit of investors of target or acquiring firms or, for the benefit of

[16] Aminadav and Papaioannou (2020), Franks and Mayer (2017), and La Porta et al. (1999).

[17] Black (1998) and Brav et al. (2008).

[18] Claessens et al. (2000) for Asia, Faccio and Lang (2002) for continental Europe, Khanna and Yafeh (2007) for emerging economies.

management? Do they operate for the benefit of block holders - families and banks - or outside shareholders in countries with concentrated ownership? Do they promote management, block holder or outside shareholder interests in internal capital markets in Asian pyramidal groups and 20th century bank-controlled companies in Japan? Particularly relevant to this paper, does the internal market for corporate control in 21st century Japan benefit management, corporate holders of blocks of shares or outside shareholders?

We examine the last question in the context of block transfers – the transfer of shares from one group of shareholders to another in 21st century Japan organized by management through stock repurchases, their accumulation as treasury stock and subsequent sale. We take as our null hypothesis that a combination of the emergence of outside institutional shareholders, especially hedge fund activists, and the Japanese political leadership strengthened the governance of Japanese firms and succeeded in reorienting the capital markets of Japan from managerial entrenchment to shareholder value.

On this basis we would expect to observe that:

- The determinant of stock repurchases resembles that of Anglo-American markets, where dispersed shareholders and external markets for corporate control are prevalent.[19]
- Since quasi-private transactions involve repurchases of share blocks, they are more likely undertaken for control than financial reasons and conversely, open market transactions are more likely motivated by financial considerations.
- Outside shareholders and hedge fund activists encourage companies to cancel repurchased shares rather that retain them in treasury stock.
- Sales of treasury stock through private placement are associated with an increase in insider ownership.
- Sale of treasury stock through private placement are predominantly used for value preserving or enhancing activities, particularly for purchases by strategic corporate investors.[20]

[19] See Dittmar (2000), Brav et al. (2005), and Skinner (2008).

[20] See Allen and Phillips (2000), Mathew (2006), Fee et al. (2006).

- The greatest value enhancement is observed in open market repurchases from outside shareholders and their subsequent placement with strategic investors.
- The most negative share value responses are found in quasi-private repurchases and subsequent open market sales.

In the next section, we report tests and results of our hypotheses by looking at determinants of (i) stock repurchases, (ii) the extent to which they are canceled or placed in treasury stock, and (iii) the eventual sale and disposition of treasury stock. In section 6, we look at the changes in ownership that are associated with block transfers, and in section 7 at the stock market reaction to each of the phases of repurchase, cancellation or holdings in treasury stock, and their sale and disposition.

5. Empirical results

5.1. Stock repurchases

We test the extent to which repurchases are motivated by management's attempts to deter unwelcome changes in control as well as financial considerations. The estimation model is as follows:

$$REP_{it} = \alpha + \beta_1 CF_{it} + \beta_2 CH_{it-1} + \beta_3 MB_{it-1} + \beta_4 RET_{it-1} + \beta_5 LEV_{it-1} + \beta_6 DIV_{it} + \beta_7 SIZE_{it-1} + \beta_8 FOR_{it-1} + \beta_9 ACTIVIST_{it-1} + \beta_{10} DINS_{it} + \eta_i + \theta_t + \varepsilon_{it} \qquad (1)$$

where the dependent variable, *REP*, is defined as the market value of repurchased shares divided by their market value as at the beginning of the year.[21]

Ownership variables include the level of foreign ownership, *FOR*, in the year prior to repurchase to establish whether foreign ownership is related to stock repurchases. *ACTIVIST* is a dummy variable which equals 1 if there is an activist shareholder at the beginning of the year with a stake greater than 5 percent, and zero otherwise. *DINS* is the change in the percentage of shares held by corporate insiders (scaled by shares outstanding minus treasury stock at the beginning of the year). We define insider shareholdings as the sum of shareholdings

[21] Subsequent results are not changed significantly by using the number of repurchased shares in place of their market value.

by banks, insurance companies, other corporations, families, and managerial and employee ownership.

We would expect the level of foreign holdings and activist stakes to be positively related to stock repurchases for two very different reasons. First, the threat of unwelcome interventions by foreign shareholders and activists may encourage management to seek protective share blocks by repurchasing shares and selling them to supportive shareholders. Second, foreign investors and activists may push for repurchases (and their cancellation) as value-enhancing cash distributions. These may give rise to very different stock market reactions - the first negative and the second positive.

We also include financial variables: (i) proxies for financial slack such as *CF* (cash flow/assets), and *CH* (cash holdings/assets), which are expected to be positively related to repurchases, (ii) proxies for firm valuation, *MB* (market-book ratio) and *RET* (stock returns), both of which are expected to be inversely related to repurchases, because low valuations and low shareholder returns are more likely to lead to shareholder agitation for repurchases and cancellation; (iii) proxies for target leverage, *LEV* (debt/assets), which is expected to be negatively related to repurchases, since companies with higher leverage have less cash to use for stock repurchases; and (iv) dividend payouts, *DIV* (dividend/EBITDA), where a positive coefficient would suggest that stock repurchases are regarded as complementary to dividends. We also include other control variables including *SIZE* (the log of assets). We use a Tobit model as more than half of the sample did not make any repurchases during the period.

The results are summarized in Table 4. They provide significant confirmation of the relevance of both ownership and financial variables. In column 1 we find that firms with a higher level of foreign ownership make more repurchases. A one standard deviation (11.6%) higher level of foreign ownership is associated with a 0.29% (11.6%*0.022) increase in repurchases, *REP.* The sign for firms with an activist shareholder is positive suggesting that activists are associated with larger repurchases. We also find a negative coefficient for insider ownership, *DINS*, suggesting that companies respond to declines in insider ownership by increasing share repurchases.

Columns 2 and 3 of Table 4 show that for both foreign ownership and activism, the coefficient for the post governance reform period is larger than for the pre-reform period, suggesting that the influence of foreign shareholders and activists increased post reform.

Coefficients for cash (see Column 1) suggest that firms with more cash are associated with larger repurchases, and the coefficient is significant at the one percent level. Similarly, firms with higher leverage are correlated with smaller repurchases, and the coefficient is also significant. As in the US, the size of repurchases is affected by the financial conditions of companies.

== Table 4 about here ==

There are two interpretations of these results: first, that higher levels of foreign ownership are perceived by firms to be a threat to management control, prompting repurchases to reduce outsider ownership and increase insider shareholders, and second, that foreign investors and activist shareholders force firms to repurchase for financial, i.e., free cash flow, reasons.

To examine control and financial explanations for share repurchases, we explore the determinants of the choice of methods for repurchases. In Table 5 the dependent variable is the proportion of all repurchases made through ToSTNeT. Financial determinants are mixed: the coefficients for cash flow is not significant while the sign for cash holdings is negative suggesting that low cash holdings are associated with a higher proportion of quasi private transactions; in contrast, the coefficient on leverage is negative and very significant suggesting that low leverage is associated with a higher proportion of quasi-private repurchases. A financial motivated story for the choice of method of stock repurchases would have predicted that high levels of cash (low levels of leverage) would be associated with more open market operations.

== Table 5 about here ==

The coefficient on foreign institutional shareholders (*FOR*) is negative and significant suggesting that lower levels of repurchases through ToSTNeT are associated with higher foreign shareholdings. This is consistent with foreign shareholders encouraging firms to make open market rather quasi-private repurchases. The table also shows that a higher proportion of repurchases through ToSTNeT is associated with a greater exposure of companies to external

interventions, i.e., less insider ownership - with a negative coefficient on *DINS* - and more hedge fund activism - a positive coefficient on the presence of activists (*ACTIVIST*). Thus, management is more likely to repurchase blocks of shares offered to it if they feel threatened by hostile changes of control.

What emerges from the evidence is that quasi private transactions are more likely to be used when there are external threats from activists and other foreign shareholders, but even then financial considerations remain important. This provides support for managerial control considerations for quasi private transactions but also demonstrates the significance of financial pressure from foreign investors.

5.2. Determinants of cancellations

In this section, we consider what determines a firm's choice to cancel or retain repurchased stock in treasury. Table 2 reported that about 37% of repurchased shares were canceled in the same year as the repurchase was made, with the rest being retained as treasury stock.

Outside shareholders and activist funds would be expected to prefer treasury stock to be canceled to reduce the risk of wasting cash. Management may wish to retain treasury stock because it may be issued at the company's discretion, for example, to protect against interventions by activist shareholders or a hostile bidder, through a sale of treasury stock to a friendly third party.

Our control hypothesis would predict that shares repurchased from insiders through ToSTNeT, and other quasi-private channels, are less likely to be canceled because the motivation for the repurchase is the sale by an insider and the wish to replace one set of insiders with another. To test the hypothesis, we estimate the determinants of cancellations using the same model as in equation (1).

Here, the dependent variable is the annual proportion of all repurchases that are canceled. The independent variables are the same as in equation (1) but adding the level of treasury stock *TSR* (number of shares of treasury stock divided by shares outstanding) as a control variable. In this cancellation decision, a control theory predicts that high foreign ownership and activism are associated with low levels of cancellations, because management wishes to retain discretion particularly for future private placement with insiders. The competing hypothesis is that pressure from institutional investors and activists would be expected to lead to a high level of

cancellations to restrict management's discretion to avoid value reducing actions. We would expect that the coefficient on ToSTNeT and tender offers would be smaller than the coefficient on open market transactions, suggesting that shares privately purchased are less likely to be canceled and more likely to be retained to preserve insider ownership.

The results are reported in Table 6. The sign of the coefficients on *TSR* (treasury stock ratio) is positive and significant as expected, implying that repurchased stock is more likely to be canceled when the level of treasury stock, as a proportion of issued capital, is high.

== Table 6 about here ==

The coefficient on Open/Mcap is significantly positive with a value of 24.2, while the coefficient of ToSTNeT, and tender offer is positive and significant although with a much smaller coefficient of 7.7 and 6.7 respectively. This suggests that a ToSTNeT (tender offer) repurchase is associated with a 16.5 (17.5) smaller cancellation ratio than those associated with repurchases undertaken through open market operations. Since most stock repurchases through ToSTNeT are bought from insiders, this is consistent with firms seeking to retain shares repurchased from insiders in treasury to maintain discretion to place them with insiders or to raise cash without requiring shareholder approval.

FOR is significantly positive, so that cancellation is high where there is high foreign ownership. The same result holds for *ACTIVIST* as the coefficient is positive, although it is highly significant in the pre-reform and smaller and less significant in the post reform period. These results are consistent with companies canceling shares in response to pressure from activists and foreign shareholders. But where blocks of shares are repurchased from insiders then they are less likely to be canceled than when made through open market transactions. This is consistent with a control hypothesis.

5.3. Disposal of treasury stock

Lastly, we consider how the company disposes of its treasury stock. As described above in Panel C of Table 3, treasury stock can be used for public offerings (share sales in the secondary market), private placements (selling to a friendly third party, including stock options in employment ownership schemes), or as the medium of exchange in an acquisition. In the US,

treasury stock is mainly used for financial reasons, to decrease leverage, or to raise cash through sales in the secondary market and for M&A payments.

There are many cases where firms dispose of their treasury stock through private placements. According to Panel E of the table, these account for nearly half of disposals (709 cases out of 1,364). If we exclude the less important cases of stock options or restricted stocks (incentive programs), of the remaining 388 cases, 321 cases are private placements to other insiders (corporations, banks, and families). This is consistent with the view that an important proportion of treasury stock is used for control purposes. Treasury stock is also used for M&A purposes, largely, to purchase shares of listed and unlisted subsidiaries.[22] The main conclusion is that treasury stock is not used to increase dispersion of ownership, as reported by Golbe and Nyman (2013), but rather for control purposes.

To further test the control motivated theory for stock repurchases, we estimate the choice of disposal by the following multinomial model.[23] In Table 7, the dependent variable is a category variable, which takes the value one when the public offerings (sales in the secondary market or M&A payments) were made using treasury stock, and the value two when the sale was made through private placements (model 1). Model 2 further decomposes the public offering into sales in the secondary market and M&A payments and, the private offerings are further decomposed into those made to insiders and those for incentive programs. The independent variables are the same as in equation (1), except that we add *CAN*, the cancellation ratio.

Our main variable of interest is ToSTNeT/Mcap (or Open /Mcap), which is calculated

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[22] Among 204 cases with more than 1% of stock disposal through M&A, 107 (128) cases are acquisitions where the toeholds exceed 50 (30) %. An illustrative case is TBS Holdings Inc. (parent firm), which acquired BS-TBS Inc. (its subsidiary firm) in 2014 by using their treasury stocks of 6.5% of shares outstanding. TBS Holdings, which held 51.9% of shares in BS-TBS as the largest shareholder before the deal, swapped its treasury stocks for the rest of minority shareholders, with the second to tenth largest shareholders of BS-TBS accounting for 45.9%, all held by business corporations. Moreover, the treasury stock of TBS Holdings included repurchased shares from a hostile acquirer (Rakuten, Inc.) through a private negotiation in 2011. In other words, this M&A transaction involves the transfer of shares from an unfriendly outsider shareholder to insiders.

[23] We also estimate Logit model where the dependent variable which takes the value of one (public) if the treasury stock is used for a public offering (sales in the secondary market) or M&A payments, and two (private) if it is used for a private placement or ESO.

by dividing the amount of repurchased shares acquired through ToSTNeT by the market capitalization and then accumulating this over the past three years.[24] Our prediction is that where repurchases are made through ToSTNeT (open market), the treasury stock will be resold through private (public) issues, which is consistent with the hypothesis that firms purchase from insiders then resell to other insiders.

Results in Table 7 show that the share of open market transactions is positively correlated with public issues (column 1), and the coefficient is statistically significant at the 1 percent level. ToSTNeT is positively correlated with private issues (column 2) and is also statistically significant at the 1 percent level. The implication is that repurchases using ToSTNeT are used to manage ownership, that is for control purchases. When we decompose public issues into sales in the secondary market (column 3) or M&A payments (column 4) and private issues into "to insiders" (column 5) and "for incentive programs" (column 6), only M&A and "to insiders" is significantly positive.

The result suggests that there is no clear relationship between the treasury stock repurchased through open market transactions and their public disposal implying that the open market transactions were not motivated by the financial needs. Second, M&A payments were systematically chosen when treasury stock came from open market transactions. Third, most importantly, a firm that made stock repurchases through ToSTNeT is less likely to use its treasury stock for disposal to outside investors and more likely to resell to insiders or to retain the stock as treasury stock, demonstrating a close association between ToSTNeT and private issues to insiders. This suggests that either the company wishes to maintain insider ownership or more subtly the company finds it convenient to use such stock for strategic reasons. Why it prefers this channel and not simply issuance from authorized share capital is a question that we address below. But for now, we simply note that treasury stock provides the company with the flexibility to place shares for ownership and control reasons.

== Table 7 about here ==

Pulling together the three sets of results we see clear evidence of the influence of

[24] Instead of ToSTNeT/Mcap, we introduced quasi private transaction (ToSTNeT + Tender offer)/Mcap as an explanatory variable, the result is the same.

ownership on repurchase decisions and choice of method of repurchase through quasi-private transactions as against open market purchases. We find strong evidence of an influence of ownership on cancellation decisions with foreign owners and activists encouraging cancellations, except where shares were repurchased through quasi-private transactions and, finally, we find clear evidence of an association between quasi-private transactions and the subsequent placing of shares to insiders as against public issues. In other words, outside owners bear a significant influence on the internal market for corporate control, and the internal market is primarily reflected in a link between quasi-private share repurchases and private placements of shares, where that link comes through treasury stock. In contrast the link between open market repurchases and public issues is largely severed through cancellations.

6. Impact on ownership structure

This section examines the impact of stock repurchases on the ownership structure of firms. There are three potential effects of stock repurchases on the pattern of ownership:

(1) The direct effect of reducing outsider ownership by repurchasing stock from outsiders for example through open market purchases or insider ownership through ToSTNeT;
(2) The cancellation of shares or retention as treasury stock; and
(3) The sale of treasury stock to insiders through private placement or to outsiders through secondary market issues.

We would expect to observe the largest increase in insider ownership where outsider shares are purchased from dispersed investors through open market transactions and then resold to insiders through private placements. We would expect the smallest increase where insider shares are purchased through ToSTNeT and resold to outsiders through secondary market issues. Where repurchases are canceled the effects on ownership will lie between these bounds.

Figure 2 shows how ownership of our sample of firms changed over the entire time period from 2001 to 2018. It is clear that insider ownership has rapidly declined, while outsider ownership has increased. However, this figure does not inform us of how ownership would have been different in the absence of repurchases. Where repurchases came from insiders who (in the absence of repurchases) would have sold their shares on the open market, then outsider ownership would have increased much more than was observed in practice. We therefore need to establish the counterfactual: how much would outsider ownership have increased if stock

repurchases from insiders had not occurred?

The case of Toyota illustrates this. Insider ownership of Toyota was 38.9% in (the financial year) 2000, while outsider ownership was 26.4% implying a difference of 12.5%. During the 14 years from 2000 to 2014, Toyota repurchased 9.6% from insiders (mainly banks and insurance firms). If Toyota had not made any stock repurchases, other things being equal, insider ownership of Toyota would have decreased to 29.3% (i.e. 38.9-9.6), while outsider ownership would have increased to 36.0% (i.e. 26.4+9.6), a difference of 6.7%. In the absence of ToSTNeT stock repurchases, the difference between insider and outsider ownership would therefore have been 5.8% (i.e. 12.5-6.7) less than was actually observed. This illustrates how ToSTNeT stock repurchases prevented insider ownership from decreasing more than what was observed. It is against this counterfactual of what would have happened if stock repurchases from insiders had not occurred that we should evaluate their impact on ownership.

Figure 4 shows in the lower black line that outsider ownership in our sample of firms increased by just 7% from 53% to 60% over the 18 years from 2000. In the absence of stock repurchases, outsider ownership of the sample would have increased from 53% to 70% (the difference between the black and upper grey dotted line), an increase of 17%. Stock repurchases therefore potentially contributed significantly, by about 10 percent, to the continued presence of insider ownership in Japan. It also shows that half of the counterfactual increase in outsider ownership was achieved through repurchases from insiders. The upper grey dotted line is composed of the effect of the open market purchases (the difference between the black and grey dash line) and that of quasi-private transactions (the difference between the grey dashed and dotted line). The figure shows that in the absence of open market purchases, outsider ownership would have increased from 53% to 65%. Furthermore, in the absence of quasi-private transactions (purchases from insiders), outsider ownership would have increased from 65% to 70%. So, two-thirds of the increase in outsider ownership of 17% would have occurred ((counterfactual increase = 17% minus actual increase = 7%) / 17%) was avoided through repurchases of shares.

== Figure 4 about here ==

Table 8 reports a regression summarizing the impact of repurchases on changes in

ownership over the 17 years period. It shows that the yearly change of outsider ownership is negatively related to open market repurchases while those using ToSTNeT and tender offers are negatively correlated with changes in insider ownership. This result reflects the fact that these transactions are associated with the sales of corporate insiders and therefore automatically reduce insider ownership. If any such repurchases are either canceled or sold to outside shareholders there will be a decline in insider ownership; only if all the repurchased shares are sold to insiders will there be no change in insider ownership. Moreover, public offerings are positively correlated with changes of outsider ownership, while private placements are positively correlated with changes of insider ownership.[25]

== Table 8 about here ==

Stock repurchases were therefore associated with significantly smaller declines in insider ownership than would otherwise have occurred. Quasi-private transactions are predominantly associated with avoidance of dispersion of insider blocks of shares, while open market repurchases are related to changes in outsider ownership.

7. Share price reactions to stock repurchase program

So far, we have documented that the choice of stock repurchases, cancellations and disposal of treasury stock among Japanese firms are motivated in large part by control considerations. In this section, we use an event study methodology to examine how the market reacts to stock repurchases when they are motivated by control changes compared with those motivated by the distribution of excess cash to shareholders.

7.1. Share price reactions to stock repurchases and cancellations

To understand the impact of stock repurchases, it is important to consider the whole program of repurchases. A company announces a program of repurchases, in what we refer to as stage I. We estimate excess returns around this announcement date. These returns should capture the

[25] Using actual data on ownership, this does not of course reflect the counterfactual increase in outsider ownership and decrease in insider ownership that would have occurred in the absence of ToSTNeT repurchases, as discussed above.

market's expectation of how the funds will be used, that is for control enhancing reasons or as a distribution of excess cash to shareholders.

After the announcement, the stock will be canceled, retained as treasury stock or resold. We call this stage II. There may be additional excess returns during the second phase as the motives for the company become clearer. The length of the announcement window is 5 days, -1 to +3, where day 0 is the announcement. We conjecture that for the group of repurchases motivated by control changes, the repurchase program will have smaller or negative excess returns than those repurchases classified as motivated by returning excess cash to shareholders, where we might expect the latter to produce positive excess returns.

For stages I and II, we estimate cumulative abnormal returns for announcements of stock repurchases using the TSE 1st section firms. Panel A of Table 9 reports the market response to the announcement. The mean CARs for the announcement of repurchase is 1.7 (median 1.2) percent.[26] We also estimate the CARs for companies that follow (within a year) the repurchase with a cancellation announcement (Panel B), showing that cancellations are associated with 0.6 percent CARs on average (median 0.5 percent). The combined announcement effects are 2.3 percent (median 1.7 percent).

== Table 9 about here ==

In Panel A, we also report announcement CARs for different repurchase methods. CARs for open market transactions are 2.6 (median 2.1) percent, compared with 0.6 (median 0.4) percent for ToSTNeT. Dividing the sample period into pre-financial crisis (2001-2008) and post-reform period (2014-18), the CARs for the post reform period, 2014-18, are larger than those for the pre-financial crisis period, 1.9 percent compared with 1.2 percent, respectively.[27]

Regression results (unreported) confirm the results in this table. The results show that the market is less positive about quasi-private transactions (i.e. ToSTNeT) than open market

[26] The 1.7% in Japan is lower than the 3.54% in the US (Ikenbery et al., 1995) and EU (Andriosopolus and Lasfer, 2015).

[27] We also estimated CARs in the pre-announcement period from day -20 to -2. The results show that the mean CARs for open market is significantly negative (-1.5%), while ToSTNeT is not different from zero (0.3%). This is consistent with a view that open market transactions are motivated by undervaluation, but ToSTNeT transactions are not.

transactions, possibly because the former are motivated more by control concerns. In addition, if repurchases are canceled the stock market response is larger than without cancellation.

7.2. Share price reaction to share issuance

The third stage of repurchase is the disposal of treasury stock. In Table 10 panel A, we report announcement CARs for different methods of disposals of stock repurchases. The mean CARs for public offerings are -7.5 percent (median -6.8%). Panel B provides the CARs of the seasoned equity offerings regardless of whether the firm repurchases its stock or not. Their CARs are almost the same size as in public offerings.

== Table 10 about here ==

This suggests that positive wealth effects of announcements of stock repurchase programs were largely offset by announcements of accompanying sales in secondary markets. For example, Foster Electric Co. made stock repurchases in four different time periods mostly through the auction method, accounting for 17.8 percent of its shares outstanding. Total announcement CARs for these repurchases were 27.2%. However, subsequently they also made stock sales twice in the secondary market, amounting to 14.7 percent of shares outstanding and the combined announcement CARs of the two sales of shares were estimated at -14.9%. Thus, more than half of the initial wealth effects of repurchases were offset by the announcement effects of the public offerings.

In contrast, CARs for sales made by private placement are positive. Panel C divides the private placement into two types, (i) to insiders (other corporations, banks, and families) and (ii) for use in executive/employment incentive programs. CARs of private placements to insiders is 0.7 percent, while that for use in executive remuneration is virtually zero at 0.08 percent. This is contrary to the managerial entrenchment hypothesis which would have predicted that CARs for private placement would be negative if insiders were motivated by private benefits of control.

7.3. Motivations of private placements

The results in the previous section show that the market response to private placements is

slightly positive on average and much larger than those in public offerings. However, there are some private placements where the market reacted negatively. For example, Toei Ltd. was involved in a private placement of repurchased shares through cross-shareholdings; the cumulative CARs for the three disposals was negative at -6.2%. In other cases, the market reaction is positive, for example, in the strategic alliance created by disposals of treasury stock by Nintendo when taking a stake in DeNA. The announcement CARs are 25.7% for Nintendo and 39.4% for DeNA, respectively.

We divided private placements using treasury stock of more than 1% of issued stock into three categories and compared their market reactions with that of private placements made from authorized share capital. We test following three propositions:

(1) Private placements purchased by multiple investors, or where the purchasing shareholder had an existing shareholding: We conjecture that they are made for entrenchment reasons.

(2) Private placements made for financial needs: We use less than 1.5 interest coverage ratio, ICR, or an operating loss as a proxy for financial needs.

(3) Private placements made for strategic alliance including joint investment projects, R&D and joint ventures.

Panel A of Table 11 shows the category of purchaser in private placement both from treasury stock and authorized shares. It is worth noting that private placements are mainly purchased by corporations, not by asset managers or other institutional shareholders. Panel B shows the results. First, the market response for multiple purchasers is lower than the single purchaser, as is the case where there is an existing cross-shareholding. Those results are the same for placements from treasury stock and authorized share capital.

== Table 11 about here ==

Second, although the market response to share placements in the case of issuers facing financial distress is positive in both types of placements, the number of cases associated with financial distress is small (12 out of 127) for private placements from treasury stock. In contrast, financial distress is a much more important motivation in private placements from authorized shares. This reinforces our view that private placements from treasury stock are mainly used

for strategic or synergetic purposes, rather than for liquidity reasons.

Finally, private placements with joint ventures are associated with high CARs, 3.15 percent over the 5 days (-1 to +3) and 7.4 percent over 122 days (-1 to 120) (unreported), suggesting value enhancement.

7.4. Total effect of block transfers

In this sub-section we report the abnormal returns for all stages of block transfers, including cases where the repurchased shares are canceled and other cases where they are held as Treasury stock and subsequently disposed of.

In Panel A of Table 12 we show that where the repurchases of stock from insiders through ToSTNeT/tender offers, are held in treasury and subsequently disposed of in the public market, stock market reactions are on average particularly negative with CARs of -6.8 percent. Thus, block transfers consisting of purchases of stock from insiders and their disposition to outsiders resulted in the worst stock market response. However, since the quasi-private transactions through ToSTNeT of stock repurchases is usually associated with the private disposals (Table 7), these cases of public disposal are relatively rare.

More frequent is the case where the repurchases of stock are either from outsiders through open market transactions, or from insiders through ToSTNeT/tender offers, and subsequently disposed of (from Treasury) to multiple purchasers through private placements. We interpret this as motivated by entrenchment. In the former case, the CARs are 2.7% and in the latter case they are 0.7%. In both, concentrations of (outsider) ownership structure decline or remain unchanged since one large block seller is replaced by another or multiple block buyers.

== Table 12 about here ==

Another common case is one where the repurchased stock is made from outsider shareholders through open market transactions, with subsequent private placements; this is associated with large positive CARs. When the private placement is made to a single purchaser for what is interpreted as strategic reasons the accumulated CARs are 5.8%. In this case, insider ownership is increased, and CARs are very positive.

The lower part of Table 12 shows results for cases where companies issue equity not from treasury stock but from authorized share capital. It records that the results in the lower half of the table are very similar to the corresponding ones in the upper half suggesting that market responses to block transfers that involve two distinct phases of repurchases, cancellations and sales of equity are equivalent to those that involve holding shares in treasury stock. In other words, the use of treasury stock is not a necessary part of the process and the results on block transfers reported in this paper. This is particularly relevant to other countries where treasury stock is not typically employed to the same extent as in Japan.

Table 13 provides evidence on how the results in Japan compare with US studies of CARs associated with stock repurchases, private placements and seasoned equity issues. It shows that the mean CARs of stock repurchases in Japan of 2.6% over the entire period of the study are very similar to the average of those reported in international studies of stock repurchases. Average private placement CARs of around 2% across the international studies are higher than the average of 0.4% across all private placements in this study in Japan but they are somewhat lower than the 3% for those associated with joint ventures.

== Table 13 about here ==

But the most striking difference is in relation to seasoned issues. The average CARs of -2.4% in international studies are much less negative than the -7% in seasoned new issues from treasury stock observed in Japan (Table 10, panel B). In contrast, block transfers that end in placements for joint projects/venture purposes in Japan have somewhat higher CARs at around 5.8% than the average of 4.5% in combined international studies of open market repurchases and private placements. However, the CARs of -4.8% for seasoned equity offerings from treasury stock observed in our study are strikingly lower than the approximately zero CARs observed internationally.

Repurchased blocks placed with other companies in Japan are associated with very positive returns, but where they are sold in the public markets they are associated with very negative returns. Quite contrary to what would have been predicted by an entrenchment hypothesis, the stock market reacts positively to the retention or enhancement of blocks, particularly where they are associated with corporate strategic investors. But equally striking

is the extent to which seasoned equity issues and public issues from treasury stock provoke a much more negative share price reaction than that observed internationally. The internal capital market of Japan is therefore one in which not only is the internal market for corporate control well regarded by outside shareholders but also external equity financing for other purposes is decidedly unwelcome.

8. Conclusion

What is striking about this paper is the consistent evidence it provides of how a combination of repurchases, treasury stock and private placements together comprise an internal market for corporate control which is used to manage the ownership of Japanese firms. They are associated with the preservation of blocks of shares and their transfer from sellers to corporate investors in three stages: quasi-private purchases, accumulation of treasury stock, and private placements. The resulting block transfers are reflected in levels of concentration of ownership and stock price reactions to repurchases and disposals of treasury stock.

This stands in marked contrast to repurchases and sales of stock in the UK and US which are associated with cash flows to and from shareholders largely through open market repurchases and sales. They are therefore predominantly a funding and investment vehicle in the UK and US as against a corporate control mechanism in Japan. One manifestation of this is the much larger negative share price returns to open market sales of shares in Japan than in the US making this an expensive form of cash raising.

What is the explanation and significance of these results? One explanation is that Japan is much more of an internal capital market than the UK or US in two respects. The first is the traditional internal market, which involves allocating and reallocating resources within corporations and the corporate sector. In Japan's internal capital markets, resort to external financing is a particularly negative signal of the capacity of the corporate sector to manage its financial affairs without requiring external funding.

A second respect in which Japan has an internal market is in terms of corporate control. Not only do funds flow between firms in the corporate sector, so too do blocks of controlling shareholdings. This can be negative if it is used as an entrenchment device by management, as in cross-shareholdings, but positive if it is a source of value creating strategic engagement. In contrast, the UK and US have external markets both in terms of financing and control. Where

surplus cash is accumulated it is expected to be distributed as dividends or stock repurchases, and the market for corporate control is an external one, consisting predominantly of takeovers and hedge fund activism.

However, the paper also suggests a potential complementarity between internal and external markets. In the case of Japan, the internal capital market was seen to be a source of corporate inefficiency and inertia. An external market was regarded as a way of reviving it, and the move from its use as an entrenchment vehicle in cross-shareholdings to a value creation device through strategic ownership may reflect growing pressures from outside investors.

The evidence from Japan has relevance for other capital markets. The share price reactions reported for ownership changes through treasury stock are found to be equivalent to those that occur where repurchases are canceled and new stock is issued through authorized share capital. Furthermore, the share price reactions to placements of shares in Japan are in line with those in the UK and US.

The question this raises is whether equivalent forms of managing ownership are observed in other markets and whether the role of management in managing ownership is more widespread than currently understood. To date, the external market in corporate control that is observed in the UK and US has been viewed as the norm. This paper raises the question of whether there has been excessive significance attached to relatively infrequent external market driven transactions disciplining and replacing unsuccessful management as against the more prevalent internal markets of successful management managing ownership for the benefit of the company and its investors.

For example, families are generally regarded as being the ultimate determinant of changes of controlling family blocks of shares in the most dominant form of ownership observed around the world, namely family ownership. However, it is also true, that control cannot be successfully exercised without the support of the management whom families wish to retain. In some family companies, management controls the process by which shareholders, often family members, sell their stakes back to the company only for them to be reissued at management's discretion.[28]

In dispersed ownership systems there are well documented examples of management

[28] For example, a family-owned UK company, Clarke's Shoes bought back the shares of family members that wished to dispose of them rather than allowing them to sell their shares directly in the market.

influencing changes in ownership. For example, in spin-offs the same assets are split between two companies where existing shareholders are given ownership rights to both. Management is often influential in taking companies private and then subsequently relisting them. In each case these transactions are subject to shareholder approval but management initiates and manages the transaction.

In ownership changes which are dependent on existing management, it would be surprising if management did not retain significance influence. In the UK shareholders are granted considerable influence over large transactions like acquisitions, whereas in the US state of Delaware management is given much more discretion. For example, poison pills are employed in the US to deter hostile changes of ownership whereas they are not permitted under takeover rules in the UK. Arguably, the UK regulatory system has done an effective job of protecting shareholders but possibly at the expense of the performance of companies and their incentives to list on stock markets.

The main point is that management managing ownership in its various forms is not unusual even in regulated capital markets with dispersed ownership. However, the degree to which this is observed varies significantly between countries with the UK being at the extreme of antipathy towards managerial discretion. The paper suggests that, while Japan has benefited from shareholder protection in the last decade, there is also a potential risk of conferring too much control on shareholders over management to the detriment of corporate performance. This is at the heart of the comparison between UK and US law.

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Figure 1:
Stock repurchases as a percentage of market capitalisation for Japan and the US
This figure compares stock repurchases in Japanese and US firms as a percentage of market capitalisation for the period 1994-2018. The sample consists of Nikkei 500 for Japan and S&P 500 firms for the US. Data are obtained from Astra Manager and *Commercial Law Review* for Nikkei 500 and J.P. Morgan (2014) and *S&P Dow Jones Indices* for S&P 500.

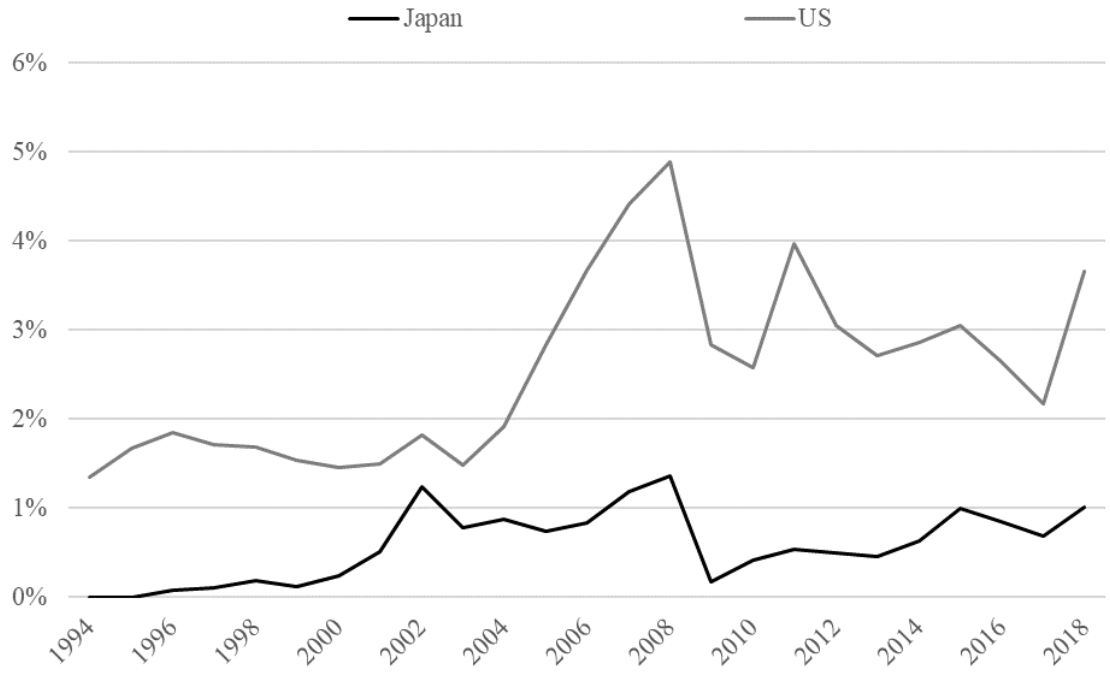

Figure 2:
Long-term trend of ownership structure in Japan
The figure shows insider and outsider ownership ratios based on the *Share Ownership Survey* reported by the Tokyo Stock Exchange. The insider ratio is the aggregated ratio of share held by banks (excluding trust accounts of trust banks), insurance companies, other financial institutions, and corporations. The outsider ratio is the aggregated ratio of share held by foreign investors, individuals, mutual funds, and pension trusts. The ownership ratio is aggregated on a market capitalization basis.

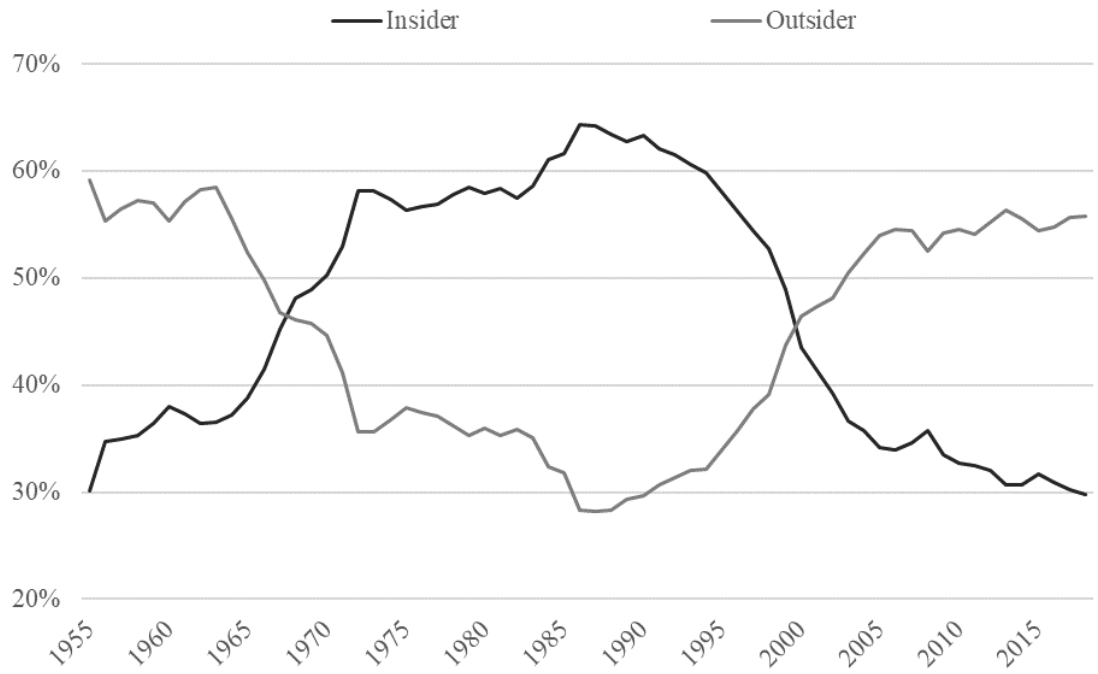

Figure 3:
Annual time series of stock repurchases, cancellations, and treasury stock in Japan
The figure shows the annual time series of stock repurchases, cancellations, disposals and treasury stocks in Japan. The sample consists of all non-financial firms listed on the TSE 1st section. The percentage of stock repurchases is defined as the no. of repurchased shares divided by the no. of shares outstanding at the beginning of the year. The percentage of cancellation of shares is defined as the no. of canceled shares divided by the no. of outstanding shares at the beginning of the year. The percentage of treasury stock is defined as the no. of treasury stocks divided by the no. of outstanding shares at the end of the year.

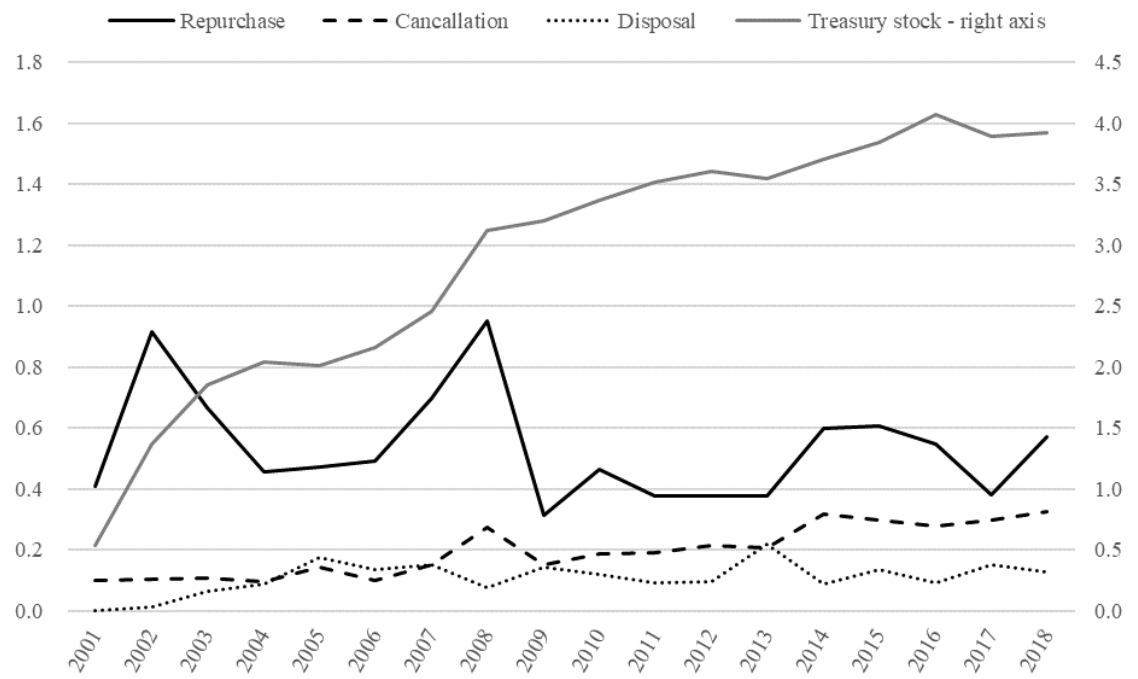

Figure 4:
Comparison between real and counterfactual change
This shows what extent of avoidance of this counterfactual increase in outsider ownership was achieved through repurchases from insiders, based on 1,772 listed companies reported in Table 1. The lower black line is the real outsider ownership in our sample firms. The gray dashed line shows that in the absence of open market transactions (OMTs), how much outsider ownership would have increased. In contrast, the upper gray dotted line shows the counterfactual results that in the absence of quasi-private transactions (QPTs), how much outsider ownership would have increased. Quasi-private transactions are defined as stock repurchases using ToSTNeT, tender offer, and private negotiation.

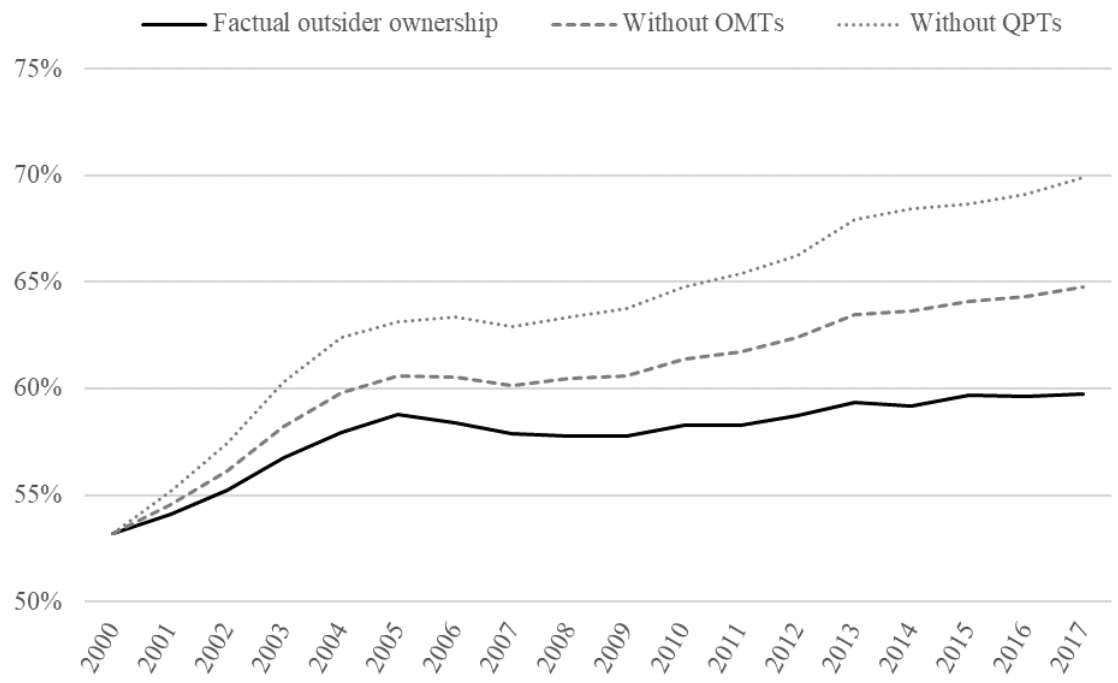

Table 1:
Description of stock repurchases for the period 2001 to 2018 for all TSE 1st section firms
This table shows the stock repurchases for 1,772 non-financial Japanese firms listed on the TSE 1st section for the period April 2001 to March 2019, using company accounts. Stock repurchases are calculated as a proportion of the shares outstanding of each company.

No. of firms		1,772	100.0%
No. of firms	that have not share repurchase	528	29.8%
	that made share repurchase	1,244	70.2%
	that shows the aggregates share repurchase with more than 5%	686	38.7%
	with more than 10%	399	22.5%
	with more than 15%	249	14.1%
	with more than 20%	143	8.1%
Mean of cumulative share repurchase (only firms that made share repurchase)		9.2	
Median		5.9	
Std. dev.		10.1	
25th percentile		2.2	
75th percentile		13.0	

Table 2:

Annual time series of stock repurchases, cancellations, and treasury stock for all TSE 1st section firms

This table shows the annual time series of stock repurchases, cancellations, disposals and treasury stocks in Japan for the period April 2001 to March 2019. The sample consists of all non-financial firms listed on the TSE 1st section for Panel A, and newly listed and delisted companies are excluded for Panel B. The percentage of stock repurchases is defined as the number of repurchased shares divided by the number of shares outstanding at the beginning of the year. The percentage of cancellation of shares is defined as the number of canceled shares divided by the number of outstanding shares at the beginning of the year. The percentage of treasury stock is defined as the number of treasury stocks divided by the number of outstanding shares at the end of the year.

Panel A: **Trend of stock repurchases, cancellations, disposal, and treasury stock**

Year	Obs.	Repurchase	Cancallation	Disposal	Treasury stock
2001-2018	21,408	0.54	0.20	0.11	2.95
2001-2008	9,143	0.63	0.14	0.09	1.97
2009-2013	5,891	0.38	0.19	0.13	3.45
2014-2018	6,374	0.54	0.30	0.12	3.89

Panel B: **Cumulative stock repurchases, cancellations, and disposals**

	Cumulative repurchases during 2001-18		Cumulative cancellations during 2001-18		Cumulative disposals during 2001-18		Treasury stocks as % of shares outst. in 2018
	# of repurchases	as % of shares outst.	# of cancellations	as % of shares outst.	# of disposals	as % of shares outst.	
Mean	5.8	9.77	1.1	4.11	1.1	1.66	4.03
Median	4.0	6.64	0.0	0.00	1.0	0.03	2.60
Std. dev.	5.8	10.80	2.4	8.49	1.6	3.96	4.62
25th percentile	2.0	1.63	0.0	0.00	0.0	0.00	0.60
75th percentile	8.0	14.17	1.0	4.97	2.0	1.50	5.80

Table 3:
Description of method of repurchase and disposal for all TSE 1st section firms
This table shows the analysis of repurchases and disposals for all listed firms. Panel A shows the composition of repurchase methods, including open market operations, ToSTNeT, tender offers, and private negotiation. Panel B shows the size of repurchase which were made by each method. Panel C shows the size of disposal which were made by each method, including public offering, private placement, and merger and acquisition. Panel D shows the comparison of equity issues between repurchase firms and non-repurchase firms. Non-repurchase firms defined as firms that have not any repurchase over the eighteen-year period. Panel E shows the size of private placement and M&A of repurchase firms.

Panel A: Composition of repurchase methods

Year	Total repurchase		Composition of repurchase methods				
	Obs.	Mean	Open-market	ToSTNeT	Tender offer	Private negotiation	Others
2001-2018	6,170	1.86	49.3%	38.3%	10.3%	2.1%	0.1%
2001-2008	3,086	1.88	48.5%	40.9%	7.6%	3.0%	0.0%
2009-2013	1,179	1.91	46.6%	40.8%	10.4%	1.9%	0.2%
2014-2018	1,905	1.81	52.3%	32.4%	14.7%	0.5%	0.1%

Panel B: Size of repurchase

	Obs.	Mean	Median	Std. dev.	25 percentile	75 percentile
Total repurchase	6,170	1.86	1.17	2.62	0.50	2.25
Open-market	3,305	1.50	1.12	1.37	0.57	2.01
ToSTNeT	1,566	2.26	1.34	2.99	0.66	2.58
Tender offer	121	9.15	5.72	8.44	2.93	12.25
Private negotiation	174	1.30	0.28	2.87	0.06	1.10
Others	412	0.02	0.00	0.04	0.00	0.02
Mixed	592	2.79	2.16	2.29	1.30	3.56

Panel C: Size of disposal

	Obs.	Mean	Median	Std. dev.	25 percentile	75 percentile
Total disposal	1,364	1.74	0.57	2.97	0.12	1.98
Public offering	112	6.00	4.56	4.95	2.44	8.16
Private placement	709	1.27	0.44	2.23	0.08	1.48
M&A	533	1.43	0.47	2.56	0.13	1.55
Others	10	2.82	1.45	2.84	0.76	4.35

Panel D: Comparison of equity issues between repurchase firms and non-repurchase firms

	Non-repurchase firms		Repurchase firms			
	Seasoned equity offerings		Not using treasury stocks Seasoned equity offerings		Using treasury stocks Public offerings	
	Obs.	Mean	Obs.	Mean	Obs.	Mean
2001-2018	67	14.68	167	14.24	112	10.75
2001-2008	21	10.62	85	9.95	35	5.13
2009-2013	21	19.94	60	20.72	39	13.63
2014-2018	25	13.68	22	13.13	38	12.97

Panel E: Disposal through private placements and M&As of repurchase firms

	Repurchase firms (Using treasury stocks)							
	Private placements		Private placements to other insiders		Private placements for incentive programs		M&As	
	Obs.	Mean	Obs.	Mean	Obs.	Mean	Obs.	Mean
2001-2018	709	1.27	321	2.30	388	0.42	533	1.43
2001-2008	166	2.14	138	2.46	28	0.57	264	1.28
2009-2013	150	1.74	93	2.44	57	0.61	165	1.50
2014-2018	393	0.73	90	1.92	303	0.37	104	1.72

Table 4:
Determinants of stock repurchases for the sample of all TSE 1st section firms
This table reports the results of Tobit regressions for the determinants of stock repurchases. The dependent variable is the market value of repurchased shares divided by market capitalisation at the beginning of the year. *CF* is defined as earnings before interest, taxes, depreciation, and amortization (EBITDA) scaled by beginning-of-the-year total assets. *CH* is defined as beginning-of-the-year cash and short-term investments scaled by beginning-of-the-year total assets. *MB* is defined as the beginning-of-the-year market value of equity scaled by the beginning-of-the-year book value of equity. *RET* is the annual stock return during the previous year. *LEV* is defined as beginning-of-the-year total debt scaled by beginning-of-the-year total assets. *DIV* is defined as cash dividends scaled by EBITDA and is set to 0 if EBITDA is negative. *SIZE* is natural logarithm of beginning-of-the-year total assets. *FOR* is the ownership share held by foreign institutional investors at the beginning of the year. *ACTIVIST* is a dummy variable that equals 1 if any activist held a stake greater than 5 percent at the beginning of the year, and zero otherwise. *DINS* is a variable which is the change in the percentage of shares held by corporate insiders (scaled by shares outstanding minus treasury stock at the beginning of the year). Insiders are defined as sum of banks, insurance firms, other corporations, families, managerial and employee ownership. All independent variables are winsorized at the top and bottom 1 percentile. The sample consists of non-financial firms whose fiscal year end are March and listed on the TSE 1st section from 2001 to 2017. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

	2001-2017	2001-2013	2014-2017
CF	0.081 ***	0.077 ***	0.093 ***
	(0.011)	(0.012)	(0.026)
CH	0.022 ***	0.024 ***	0.022 **
	(0.005)	(0.006)	(0.010)
MB	-0.461 ***	-0.613 ***	-0.143
	(0.063)	(0.077)	(0.120)
RET	0.001	0.002	-0.003
	(0.001)	(0.002)	(0.003)
LEV	-0.039 ***	-0.041 ***	-0.025 ***
	(0.004)	(0.004)	(0.009)
DIV	0.068 ***	0.072 ***	0.052 ***
	(0.006)	(0.007)	(0.013)
SIZE	0.312 ***	0.334 ***	0.278 ***
	(0.046)	(0.051)	(0.098)
FOR	0.022 ***	0.020 ***	0.030 ***
	(0.005)	(0.006)	(0.011)
ACTIVIST	0.069 ***	0.038 *	0.115 ***
	(0.018)	(0.023)	(0.030)
DINS	-0.094 ***	-0.059 ***	-0.144 ***
	(0.006)	(0.008)	(0.010)
Year fixed effects	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes
Pseudo R^2	0.043	0.048	0.041
Observations	19,699	14,694	5,005

Table 5:
Determinants of repurchase methods for all TSE 1st section firms

This table reports the results of Tobit regressions for the determinants of repurchase methods. The dependent variable is the market value of repurchased shares through ToSTNeT divided by the market value of all repurchased shares. *CF* is defined as earnings before interest, taxes, depreciation, and amortization (EBITDA) scaled by beginning-of-the-year total assets. *CH* is defined as beginning-of-the-year cash and short-term investments scaled by beginning-of-the-year total assets. *MB* is defined as the beginning-of-the-year market value of equity scaled by the beginning-of-the-year book value of equity. *RET* is the annual stock return during the previous year. *LEV* is defined as beginning-of-the-year total debt scaled by beginning-of-the-year total assets. *DIV* is defined as cash dividends scaled by EBITDA and is set to 0 if EBITDA is negative. *SIZE* is natural logarithm of beginning-of-the-year total assets. *FOR* is the ownership share held by foreign institutional investors at the beginning of the year. *ACTIVIST* is a dummy variable that equals 1 if any activist held a stake greater than 5 percent at the beginning of the year, and zero otherwise. *DINS* is a variable which is the change in the percentage of shares held by corporate insiders (scaled by shares outstanding minus treasury stock at the beginning of the year). Insiders are defined as sum of banks, insurance firms, other corporations, families, managerial and employee ownership. All independent variables are winsorized at the top and bottom 1 percentile. The sample consists of firms which made repurchase in the year. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

	2001-2017	2001-2013	2014-2017
CF	-0.430	0.017	-1.213
	(0.435)	(0.475)	(1.056)
CH	-0.337 *	-0.540 ***	0.005
	(0.181)	(0.204)	(0.400)
MB	-5.534 **	-15.432 ***	4.654
	(2.447)	(3.137)	(4.583)
RET	0.139 ***	0.208 ***	-0.074
	(0.052)	(0.055)	(0.132)
LEV	-0.726 ***	-0.555 ***	-1.642 ***
	(0.141)	(0.151)	(0.358)
DIV	-0.271	-0.317	-0.794
	(0.229)	(0.254)	(0.525)
SIZE	-1.769	-3.381 *	3.035
	(1.655)	(1.822)	(3.831)
FOR	-1.126 ***	-0.834 ***	-1.293 ***
	(0.199)	(0.225)	(0.439)
ACTIVIST	1.973 ***	1.621 **	1.688
	(0.612)	(0.788)	(1.067)
DINS	-2.654 ***	-2.302 ***	-4.231 ***
	(0.390)	(0.408)	(1.067)
Year fixed effects	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes
Pseudo R^2	0.025	0.027	0.032
Observations	4,523	3,318	1,205

Table 6:
Determinants of cancellations for all TSE 1st section listed firms

This table reports the results of Tobit regressions for the determinants of cancellation of shares. The dependent variable is the number of shares canceled divided by the number of shares repurchased during the year. *CF* is defined as earnings before interest, taxes, depreciation and amortization (EBITDA) scaled by beginning-of-the-year total assets. *CH* is defined as beginning-of-the-year cash and short-term investments scaled by beginning-of-the-year total assets. *MB* is defined as the beginning-of-the-year market value of equity scaled by the beginning-of-the-year book value of equity. *RET* is the annual stock return during the previous year. *LEV* is defined as beginning-of-the-year total debt scaled by beginning-of-the-year total assets. *DIV* is defined as cash dividends scaled by EBITDA and is set to 0 if EBITDA is negative. *SIZE* is natural logarithm of beginning-of-the-year total assets. *TSR* is defined as the beginning-of-the-year no. of treasury stock scaled by the beginning-of-the-year shares outstanding. *FOR* is the ownership share held by foreign institutional investors at the beginning of the year. *ACTIVIST* is a dummy variable that equals 1 if any activist held a stake greater than 5 percent at the beginning of the year, and zero otherwise. All independent variables are winsorized at the top and bottom 1 percentile. The sample consists of firms which made repurchase in the year. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

	2001-2017	2001-2013	2014-2017
CF	9.225 ***	7.444 ***	13.663 ***
	(1.914)	(2.175)	(3.888)
CH	-0.797	-0.329	-0.601
	(0.755)	(0.917)	(1.329)
MB	-10.854	-15.648	-11.716
	(9.726)	(14.367)	(15.881)
RET	0.187	0.306	-0.013
	(0.241)	(0.276)	(0.459)
LEV	-1.813 ***	-2.043 ***	-1.396
	(0.667)	(0.768)	(1.273)
DIV	5.813 ***	3.934 ***	8.209 ***
	(0.932)	(1.120)	(1.667)
SIZE	29.971 ***	17.599 **	52.176 ***
	(7.048)	(8.207)	(13.329)
TSR	12.367 ***	12.464 ***	12.505 ***
	(1.586)	(2.150)	(2.410)
FOR	1.615 **	0.559	2.791 **
	(0.782)	(0.954)	(1.398)
ACTIVIST	4.490 *	6.905 **	2.039
	(2.432)	(3.105)	(3.990)
Open / Mcap	24.177 ***	22.800 ***	25.914 ***
	(3.925)	(5.081)	(6.228)
ToSTNeT / Mcap	7.749 **	5.727	10.773 **
	(3.020)	(3.824)	(4.945)
Tender / Mcap	6.740 **	3.805	12.406 **
	(3.213)	(4.283)	(5.072)
Private / Mcap	-35.689	-38.486	-22.567
	(35.865)	(40.077)	(76.232)
Year fixed effects	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes
Pseudo R^2	0.042	0.044	0.048
Observations	4,860	3,326	1,534

Table 7:
Determinants of the sale of treasury stock, either by public issues or by private issues

This table shows the results of multinomial regressions that examine the determinants of the sale of treasury stock. In model 1 (column 1-2), the dependent variable takes one if treasury stocks are issued through public issues (SEOs/M&As), and takes two if treasury stocks are issued through private issues (private placements to insiders and executives/employee incentive programs). In model 2 (column 3-6), the dependent variable is divided the two categories (public issues and private issues) into four categories (SEOs = 1, M&As = 2, Private placements = 3, and incentive programs = 4). *SIZE* is natural logarithm of beginning-of-the-year total assets. *CF* is defined as earnings before interest, taxes, depreciation and amortization (EBITDA) scaled by beginning-of-the- year total assets. *LEV* is defined as beginning-of-the-year total debt scaled by beginning-of-the-year total assets. *MB* is defined as the beginning-of-the-year market value of equity scaled by the beginning-of-the-year book value of equity. *RET* is the annual stock return during the previous year. *TSR* is defined as the beginning-of-the-year no. of treasury stock scaled by the beginning-of-the- year shares outstanding. *CAN* is defined as the no. of shares canceled divided by the no. of shares repurchased during the year. *FOR* is the ownership share held by foreign institutional investors at the beginning of the year. *ACTIVIST* is a dummy variable that equals 1 if any activist held a stake greater than 5 percent at the beginning of the year, and zero otherwise. The sample consists of firms which have made repurchase at least once in the past three years. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

	Model (1)		Model (2)			
	Public issue	Private issue	Public offering	M&A	Private placement to insiders	Private placement for incentive
	1	2	1	2	3	4
SIZE	0.482 ***	-0.028	-0.923 ***	0.608 ***	-0.040	0.010
	(0.064)	(0.061)	(0.253)	(0.068)	(0.082)	(0.090)
CF	0.006	-0.014	0.042	0.004	-0.009	-0.013
	(0.016)	(0.015)	(0.048)	(0.018)	(0.020)	(0.022)
CH	-0.011	-0.008	0.023	-0.015 *	-0.025 ***	0.005
	(0.008)	(0.006)	(0.023)	(0.009)	(0.009)	(0.008)
LEV	0.000	0.005	0.061 ***	-0.007	0.012 *	-0.009
	(0.005)	(0.005)	(0.017)	(0.006)	(0.006)	(0.008)
MB	0.243 ***	0.072	-0.141	0.298 ***	0.106	0.026
	(0.085)	(0.064)	(0.232)	(0.091)	(0.096)	(0.085)
RET	0.003	0.003 *	0.007	0.002	0.004 *	0.002
	(0.002)	(0.002)	(0.005)	(0.002)	(0.002)	(0.003)
TSR	0.059 ***	0.063 ***	0.062	0.062 ***	0.092 ***	0.024
	(0.015)	(0.011)	(0.041)	(0.016)	(0.014)	(0.017)
CAN	-0.050 **	-0.043 **	-0.392	-0.042 *	-0.051 *	-0.030
	(0.024)	(0.019)	(0.295)	(0.024)	(0.027)	(0.026)
FOR	-0.010	0.002	0.063 ***	-0.017 **	0.009	-0.006
	(0.008)	(0.007)	(0.023)	(0.009)	(0.009)	(0.010)
ACTIVIST	-0.067	0.020	-2.728	-0.050	0.028	0.011
	(0.042)	(0.021)	(358.525)	(0.042)	(0.026)	(0.033)
Open / Mcap	0.099 ***	0.028	-0.071	0.111 ***	0.012	0.043
	(0.022)	(0.021)	(0.106)	(0.023)	(0.029)	(0.029)
ToSTNeT / Mcap	0.001	0.066 ***	0.019	-0.004	0.083 ***	0.001
	(0.025)	(0.015)	(0.059)	(0.028)	(0.018)	(0.033)
Year fixed effects	Yes		Yes			
Industry fixed effects	Yes		Yes			
Pseudo R^2	0.124		0.168			
Observations	6,941		6,941			

Table 8: Regression results of the annual change in ownership structure

This table reports the results of first-difference regressions for the change in ownership structure from 2001-2017. The dependent variables are the change in outsider ownership for column 1 and column 2, and the change in insider ownership for column 3 and column 4. *Outsider ownership* is shares held by foreign institutional investors. *Insider ownership* is shares held by insiders: banks, insurance companies, business corporations, a trust (called mochikabu-kai) for non-executive employees (ESO), directors, and family members. The denominators of ownership variables are shares outstanding minus the number of treasury shares. *CF* is defined as earnings before interest, taxes, depreciation and amortization (EBITDA) scaled by beginning-of-the-year total assets. *CH* is defined as beginning-of-the-year cash and short-term investments scaled by beginning-of-the-year total assets. *MB* is defined as the beginning-of-the-year market value of equity scaled by the beginning-of-the-year book value of equity. *RET* is the annual stock return during the previous year. *LEV* is defined as beginning-of-the-year total debt scaled by beginning-of-the-year total assets. *DIV* is defined as cash dividends scaled by EBITDA and is set to 0 if EBITDA is negative. *SIZE* is natural logarithm of beginning-of-the-year total assets. All independent variables are winsorized at the top and bottom 1 percentile. Standard errors robust to heteroskedasticity and firm-level clustering are in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, 10% level, respectively.

	(1)	(2)	(3)	(4)
	Annual change in outsider ownership		Annual change in insider ownership	
Open-market	-0.297 ***	-0.285 ***	0.291 ***	0.277 ***
	(0.027)	(0.027)	(0.029)	(0.029)
ToSTNeT	0.242 ***	0.255 ***	-0.258 ***	-0.269 ***
	(0.070)	(0.071)	(0.076)	(0.076)
Tender offer	0.304 ***	0.313 ***	-0.324 ***	-0.336 ***
	(0.083)	(0.081)	(0.092)	(0.089)
Privately negotiated	0.328 *	0.430 **	0.218	0.012
	(0.190)	(0.185)	(0.222)	(0.126)
Total Disposal	-0.020		-0.050	
	(0.069)		(0.067)	
Public offering		0.486 ***		-0.590 ***
		(0.064)		(0.070)
Private placement		-0.504 ***		0.366 ***
		(0.125)		(0.112)
Merger and acquisition		-0.167		0.188
		(0.164)		(0.153)
ΔCF	-0.011	-0.011	-0.009	-0.008
	(0.013)	(0.013)	(0.013)	(0.013)
ΔCH	-0.010	-0.010	0.002	0.003
	(0.010)	(0.010)	(0.011)	(0.011)
ΔMB	-0.318	-0.309	0.040	0.028
	(0.208)	(0.209)	(0.122)	(0.122)
ΔRET	0.003 **	0.003 **	0.000	0.000
	(0.001)	(0.001)	(0.001)	(0.001)
ΔLEV	-0.025 **	-0.023 **	0.040 ***	0.038 ***
	(0.011)	(0.011)	(0.012)	(0.012)
ΔDIV	-0.003	-0.002	-0.001	-0.002
	(0.004)	(0.004)	(0.005)	(0.005)
ΔSIZE	0.679	0.658	-1.187 *	-1.171 *
	(0.676)	(0.672)	(0.675)	(0.669)
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
Adjusted R^2	0.046	0.054	0.036	0.042
# of Observations	19,021	19,021	19,309	19,309

Table 9:
Market reactions to repurchases and cancellations
This table summarizes CARs (cumulative abnormal returns) for announcements of stock repurchases and cancellations, using the complete list of 1,772 listed companies reported in Table 1. Panel A shows the CARs for repurchases and Panel B shows the size and the CARs for cancellations.

Panel A: CARs for repurchases

		Total repurchase	Open-market	ToSTNeT	Tender offer	Private negotiation	Others	Mixed
2001-2018	Obs.	6,144	3,289	1,563	120	173	411	588
	Mean	1.72	2.61	0.63	0.84	0.40	-0.43	1.72
	Median	1.22	2.10	0.36	1.14	0.02	-0.45	1.03
2001-2008	Obs.	3,064	1,717	811	38	117	1	380
	Mean	1.24	1.81	0.32	1.23	0.08	10.97	0.99
	Median	0.58	1.07	0.00	0.85	-0.03	10.97	0.36
2009-2013	Obs.	1,175	614	354	22	37	83	65
	Mean	2.65	4.03	1.11	0.30	1.24	0.03	2.90
	Median	2.21	3.72	0.99	-0.57	0.07	0.40	3.35
2014-2018	Obs.	1,905	958	398	60	19	327	143
	Mean	1.92	3.13	0.83	0.79	0.68	-0.58	3.14
	Median	1.66	2.93	0.82	1.42	0.71	-0.61	2.75

Panel B: CARs for cancellations

Year	Obs.	Size of cancellation			CARs for cancellation		
		Mean	Median	Std. dev.	Mean	Median	Std. dev.
2001-2018	1,087	3.96	2.70	4.08	0.59	0.49	5.67
2001-2008	428	2.93	2.11	2.89	0.38	0.14	5.10
2009-2013	237	4.72	3.30	4.56	0.55	0.36	5.44
2014-2018	422	4.57	3.03	4.58	0.82	0.74	6.31

Table 10:
Market reactions to disposals using all TSE 1st section listed firms
This table summarizes CARs (cumulative abnormal returns) for announcements of disposals. Panel A shows the CARs for different methods of disposals. Panel B shows the comparison of CARs between new issues from authorized shares and sales of treasury stocks. Non-repurchase firms defined as firms that have not any repurchase over the eighteen-year period. Panel C shows the CARs for private placements and M&As of repurchase firms. Panel D compare the CARs for private placements motivated by maintaining insider control and those motivated by strategic alliances (more than 1%). We defined control sample as (i) where the stock was sold to more than three business corporations simultaneously, and (ii) treasury stock was sold to banks or insurance companies. The rest of 116 cases placement to single business corporations were classified as strategic alliances.

Panel A: CARs for disposals

		Total disposal	Public offering	Private placement	M&A	Others
2001-2018	Obs.	1,359	112	704	533	10
	Mean	-0.45	-7.46	0.36	-0.05	-0.91
	Median	-0.12	-6.79	0.33	-0.15	-0.77
2001-2008	Obs.	466	35	164	264	3
	Mean	0.11	-4.18	0.64	0.32	2.06
	Median	-0.09	-3.39	0.58	-0.09	1.48
2009-2013	Obs.	353	39	148	165	1
	Mean	-0.64	-7.10	0.57	-0.11	-14.06
	Median	-0.26	-7.17	0.31	-0.12	-14.06
2014-2018	Obs.	540	38	392	104	6
	Mean	-0.82	-10.85	0.17	-0.91	-0.21
	Median	-0.06	-10.82	0.25	-0.39	-0.70

Panel B: Comparison of CARs between new issues from authorized shares and sales of treasury stocks

	Non-repurchase firms		Repurchase firms			
	Seasoned equity offerings		Not using treasury stocks Seasoned equity offerings		Using treasury stocks Public offerings	
	Obs.	Mean	Obs.	Mean	Obs.	Mean
2001-2018	61	-7.05	164	-7.29	112	-7.46
2001-2008	20	-5.89	83	-5.30	35	-4.18
2009-2013	21	-7.16	59	-10.19	39	-7.10
2014-2018	20	-8.09	22	-7.02	38	-10.85

Panel C: CARs for private placements and M&As of repurchase firms

	Repurchase firms (Using treasury stocks)							
	Private placements		Private placements to other insiders		Private placements for incentive programs		M&As	
	Obs.	Mean	Obs.	Mean	Obs.	Mean	Obs.	Mean
2001-2018	704	0.36	318	0.71	386	0.08	533	-0.05
2001-2008	164	0.64	136	0.63	28	0.72	264	0.32
2009-2013	148	0.57	92	0.54	56	0.62	165	-0.11
2014-2018	392	0.17	90	1.01	302	-0.08	104	-0.91

Table 11:
Comparison of market reactions to share issues from treasury stock and authorized shares
This table summarizes the CARs (cumulative abnormal returns) for announcements of disposals. Sample is limited to the cases that the size of the private placement is more than 1% of the issued stockes. Panel A shows the number of cases that various insitutions for the private placement. Financial instituions includes banks and insurance firms. Panel B focusd on the cases that the purchasers are only the business corporation.

Panel A: The distribution of the types of investors

	Treasury stock	Authorized shares
Total	191	150
Business corporation	134	124
Financial institutions	15	3
Funds	10	13
Individuals or family	0	7
Foundations	4	0
Incentive plans	28	3

Panel B: CARs for private placement (business corporation)

	Private placements to business corporations (>= 1.0%)					
	Treasury shares			Authorized shares		
	Frequency	Percentage	CAR (-1, +3)	Frequency	Percentage	CAR (-1, +3)
Total	127	100%	1.52%	124	100%	1.53%
Single purchaser	100	79%	1.91%	90	73%	1.91%
Multiple purchasers	27	21%	0.05%	34	27%	0.51%
Issuer holds purchaser's share	34	27%	0.11%	35	28%	2.24%
Purchasers hold issuer's share	53	42%	0.69%	73	59%	1.05%
Cross-shareholdeing	30	24%	-0.05%	33	27%	1.94%
Operating loss	10	8%	4.17%	33	27%	2.95%
ICR <= 1.5	12	9%	3.51%	39	31%	2.83%
Joint projects/ventures	44	35%	3.15%	41	33%	2.06%
with cash-in	30	24%	2.53%	34	27%	2.49%
with cross-shareholding	14	11%	4.48%	7	6%	-0.12%

Table 12:
CARs associated with round-tripping in Japan
This table summarizes the sum of the abnormal returns for all stages of block transfers, including cases where the repurchased shares are canceled and in other cases where they are held as treasury stocks and subsequently disposed of. Stage I is classified into three categories: open market repurchases, ToSTNeT transactions, and tender offers. Stage II is then classified as either cancellation or disposal of treasury stocks that has been repurchased. Stage III is then classified according to whether the disposal of treasury stocks is made through a public offering or a private placement. Lastly, private placements are categorized as either for multiple purchasers or for the purpose of joint projects/ventures.

Stage I		Stage II		Stage III			Aggregated CAR (-1,+3)
Whole program							
Open market	→	Cancellation					3.20
		Treasury stock	→	Public sales			-4.85
			→	Private placements	→	Multiple purchasers	2.66
					→	Joint projects/ventures	5.76
ToSTNeT	→	Cancellation					1.22
		Treasury stock	→	Public sales			-6.83
			→	Private placements	→	Multiple purchasers	0.68
					→	Joint projects/ventures	3.78
Tender offers	→	Cancellation					1.43
		Treasury stock	→	Public sales			-6.62
			→	Private placements	→	Multiple purchasers	0.89
					→	Joint projects/ventures	3.99
Cancellation & Authorized shares							
Open market	→	Cancellation	→	New issues from authorized shares			-4.09
			→	Private placements from	→	Multiple purchasers	3.71
				authorized shares	→	Joint projects/ventures	5.26
ToSTNeT	→	Cancellation	→	New issues from authorized shares			-6.07
			→	Private placements from	→	Multiple purchasers	1.73
				authorized shares	→	Joint projects/ventures	3.28
Tender offers	→	Cancellation	→	New issues from authorized shares			-5.86
			→	Private placements from	→	Multiple purchasers	1.94
				authorized shares	→	Joint projects/ventures	3.49

Table 13:
International evidence on round-tripping
This table reports international evidence from seven published studies on each of stock repurchases, private placements and seasoned equity offerings. It records the average CARs reported in the papers for the stated events over the period shown around the specified window.

Panel A: Repurchases (Open-market)

Author(s)	Period	Window	Return
Vermaelen (1981)	1970-1978	(-1, 1)	3.67
Ikenberry et al. (1995)	1980-1990	(-2, 2)	3.54
Kahle (2002)	1993-1996	(-1, 1)	1.61
Jagannathan and Stephens (2003)	1986-1996	(-1, 1)	2.16
Grullon and Michaely (2004)	1980-1997	(-1, 1)	2.71
Payer and Vermaelen (2009)	1991-2001	(-1, 1)	2.39
Chan et al. (2010)	1980-2000	(-2, 2)	1.80
Mean			2.55
Median			2.39

Panel B: Private placements

Author(s)	Period	Window	Return
Wruck (1989)	1979-1985	(-1, 0)	1.89
Hertzel and Smith (1993)	1980-1987	(-3, 0)	1.72
Goh et al. (1999)	1979-1993	(-3, 0)	2.39
Hetzel et al. (2002)	1980-1996	(-3, 0)	2.40
Krishnamurthy et al. (2005)	1983-1992	(-1, 1)	1.36
Barclay et al. (2007)	1979-1997	(-1, 0)	1.70
Wruck and Wu (2009)	1980-1999	(-3, 0)	2.02
Mean			1.93
Median			1.89

Panel C: Seasoned equity offerings

Author(s)	Period	Window	Return
Jung et al. (1996)	1977-1984	(-1, 0)	-2.70
Walker and Yost (2008)	1997-2000	(0, 1)	-2.76
Elliott et al. (2009)	1990-2002	(-1, 1)	-1.20
Lee and Masulis (2009)	1990-2002	(-1, 1)	-2.71
Hull et al. (2012)	1999-2005	(-2, 0)	-2.60
Bradley and Yuan (2013)	1997-2006	(-1, 1)	-2.48
Akhigbe and Whyte (2015)	1996-2012	(-1, 1)	-2.02
Mean			-2.35
Median			-2.60