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Managing Ownership by Management

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April 2024

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Abstract

This paper provides a first analysis of a largely undocumented phenomenon of management creating firm value by managing the ownership of their own firms. It describes how firms in Japan purchase blocks of shares from insiders, hold them in treasury stock and sell them to strategic corporate investors. In the process, they address the Grossman Hart free-riding problem and its associated market failures by selling the shares at a discount, thereby allowing strategic buyers to capture some of the value they create. The paper shows that these management organized ownership transactions are on average value enhancing.

Keywords: Corporate ownership, managerial discretion, stock repurchases, treasury stock, private placements

JEL Classifications: G32, G35, K22

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1. Introduction

Shareholders have rights of appointment and removal of managers to promote firm value. Traditionally, the ownership and control of companies is viewed as determined by shareholders selling their shares to those who attach the greatest value to exercising their control rights.

This paper describes a process by which managers themselves exercise control over the share ownership of their companies. This is done through a process of repurchasing controlling blocks of shares, holding them in treasury stock and then selling them to other purchasers. We believe this to be the first paper to have formally documented this process and to provide an explanation for why it contributes to creating corporate value.

Viewed from the perspective of directors as agents of their shareholders, determination of ownership by management might be thought to exacerbate managerial entrenchment and impediments to managerial accountability to shareholders. The entrenchment view is associated with Barclay and Holderness (1989), and Dyck and Zingales (2004). They regard management purchases of shares from insiders and their placement with other insiders as a way of preserving the private interests of management or other insiders at the expense of outside shareholders.

In contrast, Klein et al. (1978), and Aghion and Tirole (1994) describe a commitment view of ownership in which the market responds positively to new block holders who 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.

The main proposition of the paper is that, if there are enough outside shareholders with authority to discipline management, then management can be granted discretion to influence the ownership of their firm without detracting from the value of the firm. In this respect, managing ownership by management is no different from any other activity over which management has discretion that they are encouraged to exercise.

The reason why internal management of ownership is required to achieve this is that there is a free-rider problem in the participation of strategic investors. Strategic investors require a higher return on their shares than purchases at market prices permit so as to compensate for the cost of their strategic as well as financial investments. Since the market price of the shares will

reflect the value of the strategic investments, the strategic investors will not be willing to purchase shares at the market price demanded by outside shareholders. The lower price demanded by strategic investors reflects the fact that market transactions do not compensate for the cost of strategic investments.

Since the strategic investment is contributing to the increase in value of the firm and all its shareholders, it is an externality to those transacting the stock at market prices and therefore is not priced by them. In this respect, there is a market failure in the price at which the market trades shares that should be allocated to strategic investors. Management of the company's shareholding is required to ensure that ownership is allocated at an appropriate price to value enhancing strategic investors. The market failure does not come from the exploitation of private benefits, but rather from the free riding benefit earned by outside shareholders on the value created by strategic investors. Only management that is seeking to maximize total value can internalize this by transferring shares to strategic investors at below market prices.

The underlying market failure of free riding is exactly analogous to that documented by Grossman and Hart (1980) in takeovers. In that case, the free riding problem is that shareholders of target firms do not sell their shares to acquirors because, by retaining their shares, they can derive the enhanced value the acquiror brings to the target. The acquiror is therefore unable to purchase shares of the target at a price that is less than the post-acquisition value of the shares. A resolution of the Grossman-Hart problem could in principle be provided by the seller of the target shares issuing them at a discount below their post-acquisition value.

However, this delegation of authority of ownership to management depends on the alignment of interests of management with shareholders. It therefore presumes that the internal management of ownership takes place against a backdrop of external market influences and governance arrangements that protect shareholder interests. It is only then that conferring discretion on management can be presumed to be value enhancing.

We illustrate the operation of these considerations in the context of a particular country, Japan. There are several reasons for focusing on Japan. The first is that it appears to demonstrate precisely the type of internal determination of ownership by management described above at large scale over an extended period. Second, the process by which this happens involves a form of purchase and sale of shares that isolates their relevance to the management of ownership from other possible influences, in particular financing. Third, the

history of Japan over the last few decades reveals both the positive and negative aspects of management of ownership with and without necessary accompanying governance and market conditions.

A feature of ownership that emerged in post-WW2 Japan was the establishment of corporate "cross-shareholdings",[1] which unlike bank holdings persisted into the first decade of this century. This 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 resulting in the complacent, inefficient, and self-interested conduct that has been documented in Japan at the beginning of the 21st century.[2]

In the face of poor economic performance and the lost decade, the cross-shareholdings were largely unwound (Miyajima and Saito, 2021). However, in their place a system of "intercorporate holdings" emerged by which companies owned substantial blocks of shares in other companies. There was 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, held primarily for strategic reasons.

There are three stages to the process of creating intercorporate holdings. First, shares are repurchased often from insiders as block purchases; second, they are then held as treasury stock; and, finally, they are issued from treasury stock, via a private placement, to other corporations, including strategic partners. Repurchases of blocks from insiders and their sales are organized through quasi-private transactions rather than through outside markets. In a minority of cases, the placements are made from issues of authorized share capital.

Repurchases and sales of treasury stock are often linked by one group of investors, particularly insiders, being replaced by another set of insiders. Had the repurchases and sales of blocks of shares in private placements not occurred then dispersion of ownership of Japanese

[1] 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; see Franks, Mayer and Miyajima (2014, pp.2611-2619).
[2] Miyajima and Kuroki (2007), and Ikeda, Inoue and Watanabe (2018)1、and Bebchuk et al. (2000).

companies would have increased. The process of purchasing and reselling blocks of shares is therefore a mechanism for retaining controlling shareholdings in the face of what might otherwise have been a dispersal of block shareholdings.[3]

The block transfer process is observed to be value enhancing for outside shareholders, particularly when the shares are ultimately used for organizing strategic alliances and creating joint ventures. Key to this beneficial influence of managerial determination of ownership were the reforms that Premier Abe introduced in Japan in the second decade of this century. These reforms accelerated the transformation of 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. This promoted a different type of ownership and form of corporate control from that observed previously in Japan and in 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 were selected by management.

There is an extensive literature on ownership and its influence on corporate performance. However, this paper is about a specific aspect of that, regarding the involvement of management in the purchase and sale of existing shareholding to promote value creation by overcoming the free rider problems that otherwise afflict such transactions. There are several papers that relate to this. For example, Allan and Phillips (2000), record positive share price reactions to purchase of shares by other companies in a sample of private placements and block trades in the US.[4] Barclay, Holderness, and Sheehan (2007) report positive share price reactions and purchases at premia in block purchases by companies in the US but negative share price reactions and purchases at discounts in most private placements

The distinction between block trades and private placements is important because management is in general not involved in managing block trades but plays a critical role in private placements. As Barclay, Holderness, and Sheehan (2007) suggest, the negative market responses and price discounts in placements implies that they are being used by management for self-interest and entrenchment reasons. The positive share price reactions and price premia are predominantly associated with block trades that do not involve management. The existing

[3] Another reason for considering both the repurchase decision and their subsequent sale is that the share price reaction at repurchase reflects the anticipated wealth effects of subsequent sales. Thus, the wealth effects of both should be considered.

[4] Fee, Hadlock and Thomas (2006) and Wruck and Wu (2009).

literature has therefore not focused on the feature of Japan emphasized in this paper of the involvement of management in managing ownership to overcome the free rider problem of market transactions and create financial value from selling blocks to strategic investors at a discount.

This suggests that market reactions to private placements depend on whether they are made for commercial, strategic or financial, cash raising reasons. For commercial transactions, placements to strategic investors create financial value, arguably for the commitment and information reasons originally suggested by Klein et al. (1978), and Aghion and Tirole (1994). In contrast, private placements to raise cash from passive investors protect managerial interests at the expense of financial value, as suggested by Barclay and Holderness (1989).

The evidence from Japan is very consistent with these contrasting results. Private placements from treasury stock to strategic investors are associated with significant value creation. Since treasury stock is accumulated from stock repurchases, they are not in general motivated by financial considerations. In contrast, new equity issues from authorized share capital that are used to raise finance result in large negative share price reactions, whereas issues from authorized share capital undertaken for commercial reasons, such as joint ventures, are associated with positive abnormal returns, as in issues from treasury stock. Therefore, it is the purpose of new equity issues, rather than their source, which determines stock market reactions.

This paper is arranged as follows. The next section sets out a theoretical framework that provides a justification for an internal market in the management of ownership. Section 3 describes the data and the organization of the internal market for corporate control in Japan. Section 4 illustrates several cases of companies using stock repurchases as ways of internally managing their ownership. Section 5 examines the impact of repurchases on ownership of Japanese firms and the disposition of treasury stock. Section 6 records share price reactions to disposals of shares and block transfers. Section 7 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. The Theory of the Internal Market for Managing Ownership

This paper relates 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.[5] The first is the external market for corporate control, closely associated with the dispersed, outsider dominated ownership systems of the UK and US.[6] 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 purchase blocks of shares in target companies with the aim of achieving change in their management practices. 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.[7] In contrast to the Anglo-American markets, these are negotiated deals between holders of large blocks of shares.

This paper describes a third form which is an internal market for managing the ownership of firms by management. It is a process by which the management of a firm purchases a block of shares that will otherwise be sold in the market, holds the block in treasury stock, and at some later stage places the block with a strategic corporate investor.

There are two competing hypotheses - entrenchment and value enhancement. The former is motivated by private benefits for management at the expense of outside shareholders and therefore result in negative returns on announcement of the block repurchases. In the second case, the transaction is value enhancing resulting in positive announcement returns. Note that there are two announcement effects, one when the block repurchase is announced and the second when the stock is placed i.e., disposed of. These two announcement effects should be combined to determine the total effect.

The prediction of the paper is that management promotes value enhancing strategic investments through block repurchases and placements. This prediction assumes that managerial entrenchment is prevented by a market for corporate control and institutional activism that corrects any managerial failure. If this is the case then management discretion to undertake repurchases and placements is value enhancing, analogous to the discretion conferred on management to invest in plant and machinery and strategic assets. There is in our framework no difference between the two activities. The assumption in both is that

[5] La Porta et al. (1999), Franks and Mayer (2017), and Aminadav and Papaioannou (2020).
[6] For example, Black (1998) and Brav et al. (2008).
[7] Claessens et al. (2000) for Asia, Faccio and Lang (2002) for Continental Europe, Khanna and Yafeh (2007) for emerging economies.

management is bringing to the table a capability not available to shareholders who trade their securities. That is, they both involve managerial actions that add value to the company, i.e., the purchase of real assets with a positive NPV, like joint venture.[8]

The reason why the internal management of shareholdings is required to achieve this is that strategic investors will not be willing to purchase shares at market prices. When an outside shareholder sells their shares, they do so at market prices. Strategic investors, who in addition to purchasing shares also invest in the company, will expect a higher return on their shareholding to compensate for the cost of their strategic as well as financial investment. They will not therefore be willing to purchase shares at the market price demanded by outside shareholders.

In contrast, the company will be willing to purchase shares from outside investors at market prices, hold them in treasury stock and place them with the strategic investor at a lower than market price which reflects the cost of their strategic investment. The requirement for the transfer of ownership of shares to be managed by management arises from the fact that market transactions do not compensate for the costs of strategic investments. Since the strategic investment is of benefit to the firm as a whole and all its shareholders, it is an externality in relation to those transacting the stock at market prices and therefore not priced by them. There is a market failure in the price at which the market trades shares that should be allocated to strategic investors, and management of the company shareholding is required to ensure that ownership is allocated to value enhancing strategic investors.

This can be modelled as follows. Let B be the highest price that a buyer (b) is willing to pay for a share of a company that a seller (s) is seeking to sell above a reservation price of S < B. Let (m) be the management of the firm (f) that offers to purchase the share at the market price of B and hold in treasury stock.

Let A < B be the price that an alternative buyer (a) is willing to pay in a private placement of the share from treasury stock. The cost for the company buying the share in the market, holding it in treasury stock and placing it with (a) is B – A. Let V be the value added per share that (a) contributes to (f). The net value of the transaction (i.e., the abnormal return

[8] The assumption in our framework is that block repurchases, and placements are made for a minority of the shares outstanding, i.e., they do not involve a transfer of control, since this would risk disrupting the market for corporate control and reducing its disciplinary effect. One might, for example, assume that block repurchases in aggregate should not exceed 30 percent of outstanding stock over a given period to avoid disrupting the market for corporate control.

of outside shareholders (o)) is V – B + A > 0 if V > B – A.

In other words, the "natural owner" is not the shareholder (b) who is willing to pay the highest price B, but the shareholder (a) who is able to contribute the highest value V, provided that it exceeds the difference in willingness to pay of the two shareholders. That natural owner is not determined by a market process (the external market for corporate control) but by management (through an internal market).

This can be thought of as a positive externality, V, that (a) contributes to (o), which is not included in the price that (a) is willing to pay for the share, and therefore the outcome of the market for corporate control.[9] This suggests a problem in trading controlling blocks of shares arising from the benefits that are conferred by active/ strategic investors on outside shareholders, analogous to the free-riding problem in takeovers, described in Grossman and Hart (1980). Market trades do not capture those benefits and therefore result in blocks being dissipated in the market or sold to block holders with the greatest willingness to pay but not necessarily the greatest ability to add value to the firm. By going through the process of purchasing and reselling blocks, management can identify purchasers whose capability of adding value more than offsets their lower willingness to pay.

This suggests the following three hypotheses:

Hypothesis 1. The internal management of ownership results in a higher level of concentration of ownership of the firm than would have been observed had the repurchase of blocks not occurred.

Transfer of blocks of shares between investors via treasury stock preserves blocks and ownership concentration where they would otherwise be dissipated in the market. In section 5.1, we look at the changes in ownership that are associated with block transfers. Internal management of ownership is expected to influence the concentration of ownership of a firm.

Hypothesis 2. Treasury stock is placed as a block with a strategic purchaser, and not sold in the open market.

In section 5.2, we describe the disposition of treasury stock. We would anticipate that

[9] Alternatively, this may be viewed as a negative externality that (b) imposes on (o) from excluding (a) from contributing V. Instead, the transfer of the share must be managed by (m) to secure the value added. A full acquisition of all outside shareholders' (o) shares removes the externality but encounters the equivalent problem of free riding by minority shareholders on value creation by acquirors described in Grossman and Hart (1980).

private placements to strategic purchasers are particularly associated with treasury stock acquired through repurchases of share blocks rather than market transactions.

Hypothesis 3. There are positive share price reactions to the different stages of the internal management of ownership and the combined effect of repurchase of shares, their holding in treasury stock and placement with strategic investors is associated with positive share price reactions. In contrast, there are negative share price reactions to new issues of shares to raise finance.

In section 6, we report the stock market reaction to each of the phases of repurchase, cancellation or holdings in treasury stock, and their sale and disposition. The above describes the features of managerial management of ownership. However, if $V < B - A$ then the value added of a strategic block holder is not sufficient to offset their lower willingness to pay and ownership should be allocated to the highest offer, i.e., to B not A, by a market transaction without intermediation by management. Whether managerial intermediation in ownership changes is justified is measured by the degree of value creation or destruction associated with it. If $V - B + A$ is positive, then it is justified; otherwise, it is not.

3. Stock repurchases in Japan

3.1. Deregulation of stock repurchases

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 cancelled rather than resold or retained as treasury stock.

In 2001 an amendment to company law for the first time allowed firms to repurchase shares and dispose of them without restriction. The new rules relaxed restrictions on the size of repurchases and removed the requirement for shareholder approval. 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.[10] Kobayashi 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."

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 further increased after 2014 when the Japanese government initiated a series of corporate governance reforms but, they have remained below that in the United States.

3.2. Declining insider ownership

Around the period when stock repurchases were permitted in 2001, the ownership structure of Japanese firms experienced substantial changes. Figure 1 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. 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, mutual funds, and pension trusts, which only derive financial returns rather than private benefits. The figure shows the ratios of holdings by insiders and outsiders based on stock market values of their holdings.

== Figure 1 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 required 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

[10] To mitigate the market impact of banks' sales of stocks, in conjunction 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).

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.[11] Insurance companies also reduced their stock holdings due to declines in their solvency ratios. However, the proportion of shares held by commercial, as distinct from financial, 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 to around 30%. The Corporate Governance Code in 2015 required newly listed firms to explain or disclose the reason for their shareholdings in other companies. This was followed by a further dissolution of cross-shareholdings by mainly commercial corporations.[12]

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 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,[13] and institutional investor engagement was encouraged by a new Stewardship Code, which required institutions to engage with portfolio firms. 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).

3.3. Description of data on Japanese stock repurchases

We describe our data on repurchases, cancellations and disposals for 1,772 Japanese firms (Tokyo Stock Exchange, 1st section, excluding financial industries) for the period 2001 to 2018.

[11] For reasons for the rapid decline of bank shareholdings, see Miyajima and Kuroki (2007).
[12] See Miyajima and Saito (2021).
[13] Financial Times (2020) "Investors should note that Japan is dismantling some old defences" (https://www.ft.com/content/fed216f5-83a9-4909-b062-4a62fb4e9915).

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% . 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%.

Panel A of Table 1 shows that the size of annual stock repurchases is 0.54% on average. However, there is considerable variation across companies in the amounts repurchased. It also shows the annual percentage of cancelled 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 cancelled; with the remainder retained as Treasury stock. While the panel shows the average annual percentage over the entire time series of 0.22 percent, there is considerable variation over time with only 0.06 percent in 2009-2012 and 0.41 percent in 2001-2008. While not shown in the table, the share of treasury stock as a proportion of total shares outstanding over the entire time series increased from 0.5% in 2001 to almost 4% in 2018.[14]

== Table 1 about here ==

3.4. 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 in the company's articles of association, in which case there is no requirement to seek further shareholder approval. The repurchased shares may be cancelled 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. If more than 20% of shares are placed, then shareholder approval must be obtained.

If the shares are placed at a particularly advantageous price to the purchaser, then

[14] The time series is available on request. 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.

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. The rules are the same as those for private placements from authorized share capital. They are weaker than those in the US where firms must obtain shareholder approval.[15]

In successive panels we analyze the different methods of repurchases including: (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.

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 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). [16] 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.

Panel B of Table 1 summarizes the importance of each method of repurchase. Auctions or open market operations account for 49.3% of all shares repurchases. The equivalent figure for auctions 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%. 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. We view ToSTNeT and tender offers as "quasi-private transactions", using the definition of Peyer and Vermaelen (2005) who

[15] In the US, Section 312.03 of the NYSE's Listed Company Manual requires firms to obtain shareholder approval for issuing shares under certain conditions, and this rule has also applied to private placements from treasury stock since 2006 when a treasury share exemption rule was abolished (Banyi and Caplan, 2016, p.43).
[16] See Ota and Lau (2021).

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.

Panel C of the table shows the relative frequency and size of the different methods of repurchase.[17] In the first column, we find the most frequent method of repurchase is open market operations with a total of 3305, almost one half of the total. However, the average size of each repurchase is much smaller than ToSTNeT, 1.5% compared with 2.3%. Although there are few tender offers, their average size is large at 9.2% and, of the 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).[18] In the US tender offers are usually made to outside shareholders at a significant premium (Vermaelen, 1984; Anderson and Dyl, 2004).

In Panel D, we describe the 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 payments as part of the medium of exchange in mergers and acquisitions. Although stock options are the most common form, the value of each disposal is small. Unlike the US, public offerings and M&A payments using repurchased shares are infrequent, while private placements are frequent, representing more than half of disposals (709 cases out of 1,364).[19] If we exclude the less important cases of stock options or restricted stocks (part of incentive programs), of the remaining 388 cases, 321 are private placements to other insiders (corporations, banks, and families) as shown in Panel F of Table 1. This is consistent with the view that an important proportion of treasury stock is used both for purposes of joint ventures and to place shares in friendly hands for control purposes. Treasury stock is also used for M&A purposes, largely, to purchase shares of listed and unlisted subsidiaries.[20] An important implication is that disposals of treasury stock do not increase dispersion of ownership, as reported by Golbe and Nyman (2013), but rather result in

[17] Estimates of the determinants of stock repurchases, repurchase methods and cancellations are reported in the Appendix (table 9).
[18] Almost all tender offers with a discount are purchased from insiders (business corporations or families).
[19] See Jenkins and Ovtchinnikov (2010).
[20] 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.

an increase in concentration largely for control purposes.

In Panel E, 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 this panel, we find that repurchasing firms make more frequent 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 (85+35) by repurchasing firms compared with only 21 by non-repurchasing firms. Of the 120 issues, 35 were made from treasury stock and 85 were made from authorized share capital. Those made from authorized share capital were on average larger, for example in the period 2001-2008, 9.95% compared with only 5.13% from Treasury stock. This comparison holds for other sub periods.

In Panel F, we break down the disposals of treasury stock through the different channels of private placement 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 (i.e., incentive programs); they are also larger than issues made as part of M&A transactions, in contrast to the US where repurchased shares are mainly used for stock options, M&A and share issues.[21] The placements to insiders are consistent with other evidence of 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 made 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 refer to as the internal management of ownership and we turn now to describe three case studies that illustrate how this has been managed in practice.

[21] Abdou and Gupta (2019) documented that approximately 45% of the repurchased shares were used for fulfilling stock option grants, while 8% were used for the purposes of M&As in a sample of S&P 500 firms between 1991 and 2013.

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

4.1. 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.

4.2. 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. 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 a 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.

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

On February 4, 2014, as part of a transfer of control from a founder to professional manager, 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.[22]

On 17 March 2015 Nintendo distributed 1,759,400 shares from its treasury 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.[23] 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 a block purchased from a (family) insider wishing to cash out followed by a sale to a strategic corporate partner in private transactions at a discount.

5. Impact of repurchases on ownership and disposition

5.1 Impact on ownership structure – Hypothesis 1

Hypothesis 1 states that the internal management of ownership results in a higher level of insider ownership of the firm than would have been observed in the absence of repurchases of blocks. There are two factors influencing the level of insider ownership: (i) how the repurchases are made, including repurchases from outsiders through open market purchases or purchases from insiders through ToSTNeT; (ii) the disposition of the repurchased stock, which might be cancelled or retained as treasury stock; in the latter case the treasury stock might be sold to insiders through private placement or to outsiders through the secondary market.

Figure 1 shows how ownership of our sample of firms changed over the period from 2001 to 2018. Insider ownership has rapidly declined, while outsider ownership has increased. However, this figure does not inform us of how ownership would have changed in the absence of repurchases. 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 2000,

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

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

while outsider ownership was 26.4%, 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, and the blocks sold in the secondary market, 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 minus 6.7%. In the absence of ToSTNeT stock repurchases, the difference between insider and outsider ownership would therefore have been 19.2% (i.e., 12.5 + 6.7) less than what was observed. It is against this counterfactual of what would have happened if stock repurchases from insiders had not occurred that we evaluate their impact on ownership.

Figure 2 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, we assess that 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% that would have occurred ((counterfactual increase (= 17%) minus the actual increase (= 7%)) /17%) was avoided through repurchases of shares.

== Figure 2 about here ==

Table 2 reports a regression summarizing the impact of repurchases on changes in ownership over the 17-year period. It shows that the yearly change of outsider ownership is negatively related to open market repurchases while repurchases using ToSTNeT and tender offers are negatively correlated with changes in insider ownership. This result reflects the fact

that the latter transactions are associated with the sales of corporate insiders and therefore automatically reduce insider ownership. If any such repurchases are either cancelled 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.[24]

== Table 2 about here ==

Consistent with hypothesis 1, 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.

5.2 Impact of repurchases on disposal of treasury stock - Hypothesis 2

We consider how the company disposes of its treasury stock. As described above in panel D, treasury stock can be used for public offerings (share sales in the secondary market), private placements (selling to a friendly third party), 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.

In Table 3, we formally test hypothesis 2, the control motivated theory for stock repurchases, by relating the average size of repurchases using ToSTNeT to the average size of disposals of treasury stock to insiders/joint venture partners using private placement. We estimate the choice of disposal by the following multinomial model. In Model 1 of the table, 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 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 made for

[24] 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.

incentive programs.

Our main variable of interest is ToSTNeT/Mcap (or Open /Mcap), which is calculated by dividing the amount of repurchased shares acquired through ToSTNeT by the market capitalization and then accumulating them over the past three years.[25] Our prediction is that where repurchases are made through ToSTNeT (open market), they will be correlated with sales of treasury stock made through private (public) issues, which is consistent with the hypothesis 2 that firms purchase from insiders then resell to other insiders.

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

The table also shows that the average proportion of M&A payments from treasury stock are correlated with the average proportion of repurchases from open market transactions. The implication is that 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 in treasury, demonstrating a close association between ToSTNeT and private placements to insiders. In Section 5 we explore the extent to which these private placements are for the purpose of entrenchment or joint ventures.

== Table 3 about here ==

6. Share price reactions to stock repurchase program – Hypothesis 3

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 test hypothesis 3 using an event study methodology to examine how the market

[25] Where we use a modification (ToSTNeT + Tender offer)/Mcap as the explanatory variable, the result is similar.

reacts to stock repurchases when they are motivated by control changes compared with those motivated by the distribution of excess cash to shareholders.

6.1. 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 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 cancelled or retained as treasury stock. 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. 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 4 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). Combining the two announcement effects totals 2.3 percent (median 1.7 percent).

== Table 4 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]

[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

The results show that the market is less positive about quasi-private transactions (i.e., ToSTNeT) than open market transactions, possibly because the former are motivated more by control concerns. In addition, if repurchases are cancelled the stock market response is larger than repurchases without cancellation.

6.2. Share price reaction to share issuance

The third stage of repurchase is the disposal of treasury stock. In Table 5 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, -7 percent.

== Table 5 about here ==

This suggests that positive wealth effects of announcements of stock repurchase programs were 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 are small and average 0.7 percent, while those associated with use in executive remuneration are virtually zero at 0.08 percent.

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is consistent with a view that open market transactions are motivated by undervaluation, but ToSTNeT transactions are not.

6.3. Further analysis of private placements

The results in the previous section show that the market response to private placements is slightly positive on average, although much larger than those in public offerings. [28]

Using data provided in the company announcements, we divided private placements using treasury stock of more than 1% of issued stock into three categories and compared their market reactions with those of private placements made from authorized share capital. We analyze the 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 two company metrics: 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 6 shows the category of purchaser in private placement both from treasury stock and authorized shares. Private placements are mainly purchased by corporations (83 percent), not by asset managers or other institutional shareholders, in contrast to the US where financial institutions are the main purchasers[29].

Panel B shows that the market response for multiple purchasers is lower than for single purchasers (0.0 versus 1.9 percent). Although the results for placements from treasury stock are similar in magniture for the CARs of authorized share capital, the former are statistically significant at the ! percent level while the latter are statistically insignificant.

== Table 6 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

[28] 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 were 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.

[29] Wruck and Wu (2009) reports that financial institutions account for 48% of all purchasers in private placements, while key business partners account for only 37% in the US.

financial distress is small (12 out of 127) where the private placement is made from treasury stock. In contrast, financial distress is a much more important motivation in private placements from authorized shares (39 of 124 cases). Finally, private placements with joint ventures are associated with high CARs, 3.15 percent over the 5 days (-1 to +3), significant at the 1 percent level; it is higher at7.4 percent over 122 days (-1 to 120) (unreported), suggesting value enhancement. This reinforces our view that private placements from treasury stock are mainly used for strategic or synergistic purposes, rather than for liquidity reasons, and that they are value enhancing.

To test whether, as suggested by the free riding problem described in section 2, the price that a corporate buyer is willing to pay is lower than the market price, in Panel C of Table 6, we have estimated the premia/discounts on private placements based on closing prices two day after the announcement, following the methodology of Dyck and Zingales (2004). We find that premiums on private placements in Japan are negative at -2.8 percent in the case of disposals of treasury stock and -5.8% in the case of issues of authorized shares; all are significant at the 1 percent level.

Where placements are made from treasury stock for control reasons then they are sold at significant discounts of around 3 to 4%, consistent with the theory of this paper that placements have to be made at a discount to attract strategic investors. Where placements are made from authorized share capital for financial reasons then they are made at very substantial discounts of approximately 13% (in the case of making operating losses).

The fact that corporate buyers purchased stakes at below market prices, and that the market response to placements is still positive to the issuing company is consistent with our prediction that although discounts are necessary to attract business partners who contribute positive NPV to the joint venture, they still confer benefits to the company issuing the stock.

6.4. Aggregate market response to repurchases and the cancellation/sales of treasury stock

In this sub-section we report the abnormal returns for all stages of block transfers, including cases where the repurchased shares are cancelled and other cases where they are held as treasury stock and subsequently disposed of. While we cannot match the source of a repurchase with its disposition, we show all permutations for the three stages that make up the process of

round tripping.

In Panel A of Table 7 we show that conditional on the repurchases of stock being made from insiders through ToSTNeT/tender offers, and held in treasury and subsequently disposed of in the public market, stock market reactions are on average negative with CARs of -6.8 percent. In this respect, block transfers from insiders and their sale to outsiders resulted in the worst stock market response. While we show that quasi-private transactions through ToSTNeT of stock repurchases are usually associated with private disposals, the 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 since multiple purchasers are more likely to be interpreted by the market as an absence of investment benefits to the company, particularly where there is no announcement of a joint venture. For purchases from outsiders the CARs are 2.7% and from insiders they are 0.7%.

== Table 7 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 (3.7%). 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 large.

Panel B of Table 7 shows results for cases of companies issuing equity from authorized share capital. It reports that the results here are similar to those in Panel A, which suggests that market responses to block transfers that involve issues from treasury stock and from authorized share capital are not very different providing the purpose of the sale is the same, for example joint ventures. In other words, the use of treasury stock is not a necessary part of the process in explaining the pattern of returns for block transfers reported here. This is particularly relevant for comparisons with other countries where treasury stock is not typically employed to the same extent as in Japan as a source of stock issuance.

Table 8 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 but they are somewhat lower than the 3% for those associated with joint ventures.

== Table 8 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 -7.1% in seasoned new issues from treasury stock observed in Japan (Table 5, 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. Consistent with hypothesis 2, 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 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.

7. 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

managing 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 has an internal capital market that relies on allocating and reallocating resources within the corporate sector. In such markets, resort to external financing is a signal of the failure of the corporate sector to be able to manage its financial affairs without resort to external funding. This provokes the negative share price reaction when companies make new open market equity issues.

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.

The paper 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 reflects growing pressures from outside investors. The evidence from Japan is that, in the presence of such pressures, managerial management of ownership can be

value enhancing by overcoming the free rider problem that otherwise afflicts purchases of blocks in the market.

However, regulation in the US and especially the UK militates against the use of stock repurchases and treasury stock for control as against financing purposes by discriminating against private placements relative to public issues, stock options and M&A. Managerial discretion over the disposition of treasury stock without shareholder approval is therefore less than in Japan and does not in general include private placements, which are the main mechanism by which strategic alliances are formed in Japan.

This points to a general antipathy in the UK and US to allowing management to manage their own ownership. Management is viewed as the agent of shareholders and is not there to change ownership. The obvious concern that dispositions through private placements raise is that they are used as a managerial entrenchment device to the detriment of outside shareholders, as was the case in Japan prior to corporate governance reforms and the arrival of international institutional investors. However, corporate governance standards and extensive participation by international investors in the UK and US suggest that the effect of enhanced managerial discretion in those markets could be in line with the recent positive experience of Japan.

The reason why this warrants serious consideration is that granting discretion to management over the determination of their corporate ownership could promote the adoption of ownership structures that are better suited to both the purposes of their businesses and the interests of their shareholders. It provides a means by which companies can establish stable, committed shareholdings that create long-term value by forming strategic partnerships in the companies they own.

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Figure 1:
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 shares held by banks (excluding trust accounts of trust banks), insurance companies, other financial institutions, and corporations. The outsider ratio is the aggregated ratio of shares held by foreign investors, individuals, mutual funds, and pension trusts. The ownership ratios are based on market capitalizations.

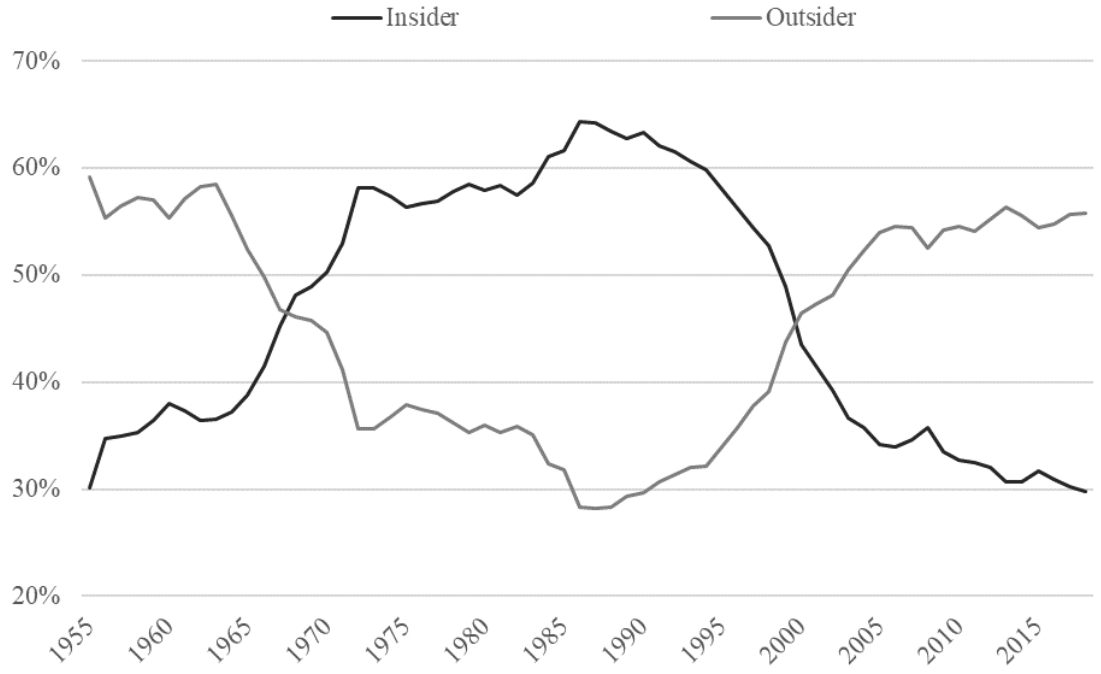


Figure 2:
Comparison between actual and counterfactual changes in ownership
The figure shows what extent repurchases from inside owners prevented increases in outsider ownership occurring, based on 1,772 non-financial Japanese firms listed on the TSE 1st section over the period April 2001 to March 2019. The lower black line is the actual outsider ownership in our sample firms. The grey dashed line shows how much outsider ownership would have increased in the absence of open market transactions (OMTs). The upper grey dotted line shows how much outsider ownership would have increased in addition in the absence of quasi-private transactions (QPTs). Quasi-private transactions are defined as stock repurchases using ToSTNeT, tender offers, or private negotiations.

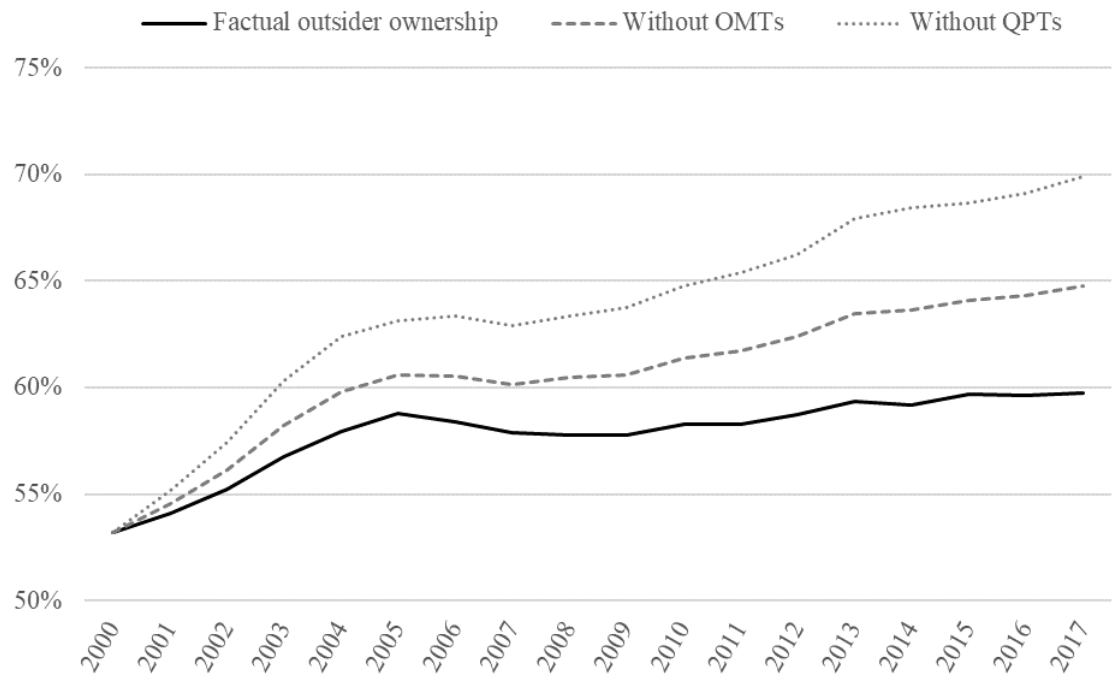


Table 1:
Description of stock repurchases, cancellations, disposals and treasury stock for all TSE 1st section firms
Panel A shows the annual time series of stock repurchases, cancellations, disposals, and treasury stocks in Japan. The sample consists of all non-financial firms listed on the TSE 1st section for the period April 2001 to March 2019. 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 share cancellations is defined as the number of cancelled shares divided by the number of outstanding shares at the beginning of the year. The percentage of share disposals is defined as the number of disposed shares divided by the number of outstanding shares at the beginning of the year. The percentage of treasury stock is defined by subtracting the percentages of cancellations and disposals from the percentage of stock repurchases. Panel B shows the composition of repurchase methods, including open market operations, ToSTNeT, tender offers, and private negotiations. Panel C shows the size of repurchases made by each method. Panel D presents the size of disposals that take the form of public offerings, private placements, and mergers and acquisitions. Panel E shows compares equity issues between firms that repurchased their stock and firms that did not over the entire period from 2001 to 2019. Panel F records the size of private placements and M&As by repurchase firms.

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

Year	Obs.	Repurchase	Cancellation	Disposal	Treasury stock
2001-2018	21,408	0.54	0.20	0.11	0.22
2001-2008	9,143	0.63	0.14	0.09	0.41
2009-2013	5,891	0.38	0.19	0.13	0.06
2014-2018	6,374	0.54	0.30	0.12	0.12

Panel B: 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 C: Size of repurchases

	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 D: 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 E: Comparison of equity issues by repurchasing and non repurchasing 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 F: Disposals by private placements and by M&A transactions by firms that make repurchases

	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 2:
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 in column 1 and column 2, and the change in insider ownership in 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. *Open*, *ToSTNeT*, *Tender*, and *Private* represent the number of shares repurchased through respective methods, divided by the shares outstanding at the beginning-of-the-year. *Public offering*, *Private placement*, and *Merger and acquisition* represent the number of shares disposed of by. these methods, divided by the shares outstanding 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 the 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. Note regression coefficients in columns 3 and 4 are not exactly the negative of 1 and 2 because of a few missing ownership measures.

	(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 3:
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 the value one if treasury stocks are issued through public issues (SEOs/M&As) and 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 shares scaled by the beginning-of-the-year shares outstanding. *CAN* is defined as the no. of shares cancelled 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. *Open* and *ToSTNeT* represent the market value of shares repurchased through each method, divided by the market capitalization at the beginning-of-the-year. The sample consists of firms which have made repurchases 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 4:
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. Panel A shows the CARs of repurchases and Panel B shows the size and the CARs of cancellations. Statistical tests assess whether the results are significantly different from zero. The t-test is used for means, and the Wilcoxon signed-rank test is used for medians. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

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	1087	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 5:
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 are defined as firms that have not made any repurchases over the eighteen-year period. Panel C shows the CARs for private placements and M&As of repurchase firms. Panel D compares the CARs of private placements motivated by maintaining insider control and those motivated by strategic alliances (more than 1%). We define control samples 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 the 116 cases placement to single business corporations were classified as strategic alliances. Statistical tests assess whether the results are significantly different from zero. The t-test is used for means, and the Wilcoxon signed-rank test is used for medians. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

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	
Year	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	
Year	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 6:
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 where the size of the private placement is more than 1% of the issued stockes. Panel A shows the distribution of private placements by type of investors. Financial institutions include banks and insurance firms. Panel B focuses on cases where the purchasers are only business corporations. Panel C summarizes the premiums and discounts on private placements using the same method as Dyck and Zingales (2004). The t-test is conducted to assess whether the means are significantly different from zero. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: The distribution of private placements by 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
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

Panel C: Premiums and discounts on issues by private placements

	Private placements to business corporations (>= 1.0%)	
	Treasury shares	Authorized shares
Total	-2.81 ***	-5.82 **
Single purchaser	-2.81 ***	-3.50
Multiple purchasers	-2.91 ***	-12.15 ***
Operating loss	-3.66	-13.38 ***
ICR <= 1.5	-2.83	-8.96
Joint projects/ventures	-3.75 ***	-4.47 **

Table 7:
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 cancelled and cases where they are held as treasury stock 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 cancellations or disposals of treasury stock. 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 sold to multiple purchasers or for the purpose of joint projects/ventures.

Panel A: Whole program

Stage I		Stage II		Stage III			Aggregated CAR (-1,+3)
Open market	→	Cancellation					3.20
		Treasury stocks	→	Public sales			-4.85
			→	Private placements	→	Multiple purchasers	2.66
					→	Joint projects/ventures	5.76
ToSTNeT	→	Cancellation					1.22
		Treasury stocks	→	Public sales			-6.83
			→	Private placements	→	Multiple purchasers	0.68
					→	Joint projects/ventures	3.78
Tender offers	→	Cancellation					1.43
		Treasury stocks	→	Public sales			-6.62
			→	Private placements	→	Multiple purchasers	0.89
					→	Joint projects/ventures	3.99

Panel B: Cancel and Authorized share

Stage I		Stage II		Stage III			Aggregated CAR (-1,+3)
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 8:
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

Appendix

Table 9:

Determinants of stock repurchases, repurchase methods and cancellations for all TSE 1st section firms

This table reports the results of Tobit regressions for the determinants of stock repurchases, repurchase methods and cancellations. The dependent variable in models (1) through (3) is the market value of repurchased shares divided by the market capitalization at the beginning of the year. In model (4), the dependent variable is the market value of shares repurchased by ToSTNeT divided by the market value of all repurchased shares. In model (5), the dependent variable is the number of shares cancelled 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. *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. *TSR* is defined as the beginning-of-the-year no. of treasury stock shares scaled by the beginning-of-the-year shares outstanding. *Open*, *ToSTNeT*, *Tender*, and *Private* represent the market value of shares repurchased through these respective methods, divided by the market capitalization at the beginning-of-the-year. All independent variables are winsorized at the top and bottom 1 percentile. The sample consists of non-financial firms whose fiscal year end is March and listed on the TSE 1st section from 2001 to 2017. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)
Dependent variable:	Repurchase / Market cap	Repurchase / Market cap	Repurchase / Market cap	ToSTNeT / Repurchase	Cancellation / Repurchase
Period:	2001-2017	2001-2013	2014-2017	2001-2017	2001-2017
CF	0.081 ***	0.077 ***	0.093 ***	-0.430	9.225 ***
	(0.011)	(0.012)	(0.026)	(0.435)	(1.914)
CH	0.022 ***	0.024 ***	0.022 **	-0.337 *	-0.797
	(0.005)	(0.006)	(0.010)	(0.181)	(0.755)
MB	-0.461 ***	-0.613 ***	-0.143	-5.534 **	-10.854
	(0.063)	(0.077)	(0.120)	(2.447)	(9.726)
RET	0.001	0.002	-0.003	0.139 ***	0.187
	(0.001)	(0.002)	(0.003)	(0.052)	(0.241)
LEV	-0.039 ***	-0.041 ***	-0.025 ***	-0.726 ***	-1.813 ***
	(0.004)	(0.004)	(0.009)	(0.141)	(0.667)
DIV	0.068 ***	0.072 ***	0.052 ***	-0.271	5.813 ***
	(0.006)	(0.007)	(0.013)	(0.229)	(0.932)
SIZE	0.312 ***	0.334 ***	0.278 ***	-1.769	29.971 ***
	(0.046)	(0.051)	(0.098)	(1.655)	(7.048)
FOR	0.022 ***	0.020 ***	0.030 ***	-1.126 ***	1.615 **
	(0.005)	(0.006)	(0.011)	(0.199)	(0.782)
ACTIVIST	0.069 ***	0.038 *	0.115 ***	1.973 ***	4.490 *
	(0.018)	(0.023)	(0.030)	(0.612)	(2.432)
DINS	-0.094 ***	-0.059 ***	-0.144 ***	-2.654 ***	
	(0.006)	(0.008)	(0.010)	(0.390)	
TSR					12.367 ***
					(1.586)
Open / Market cap					24.177 ***
					(3.925)
ToSTNeT / Market cap					7.749 **
					(3.020)
Tender / Market cap					6.740 **
					(3.213)
Private / Market cap					-35.689
					(35.865)
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Pseudo R^2	0.043	0.048	0.041	0.025	0.042
Observations	19,699	14,694	5,005	4,523	4,860

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