Cheap-Stock Tunneling Around Pre-emptive Rights

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Abstract

Corporate law has long relied on pre-emptive rights to prevent a controlling shareholder from economically diluting minority shareholders by selling itself cheap stock. I show that pre-emptive rights, while making cheap-stock tunneling more difficult, fail to fully protect minority shareholders in most real world-settings. My analysis suggests the potential need for supplemental mechanisms, such as judicial review of equity issuances, to provide adequate protection to minority shareholders.

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Introduction

The conventional wisdom among corporatelaw academics and economists is that pre-emptive rights are effective at preventing a controlling shareholder from diluting minority shareholders by selling itself stock at a cheap price.[1] In this paper, I challenge that view. I show that pre-emptive rights, while offering *some* protection to minority shareholders, cannot prevent a controlling shareholder from engaging in cheap-stock tunneling. My analysis suggests the possible need for supplemental mechanisms, such as judicial review or minority-shareholder veto rights, to provide adequate protection to minority shareholders in equity issuances.

The overwhelming majority of firms around the world are controlling-shareholder ("CS") firms: control of the corporation rests in the hands of either a single shareholder or a small group of shareholders acting in concert. Almost all unlisted firms in the U.S. and elsewhere are CS firms. And most listed firms outside the U.S.—in Europe, Asia, and South America—are CS firms.[2] CS firms are thus by far the most common type of corporate ownership structure around the world.

In a CS firm, other shareholders ("minority" shareholders) are vulnerable to expropriation by the CS. In particular, the CS may extract value for itself through various transactions involving two or more of the following three parties: (1) the CS, (2) the firm, and (3) minority shareholders. Such transactions, often described as "tunneling,"[3] can involve either the firm's assets or its securities. An important objective of corporate law is to reduce tunneling by controlling shareholders to facilitate capital raising *ex ante* from minority investors.

In this paper, I focus on one form of equity tunneling: the sale of cheap stock to the CS: "cheap-stock tunneling".[4] In cheap-stock tunneling, the CS sells

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1 *See infra* TAN xx.

2 *See*, e.g., Barca and Becht (2001); Claessen, Djankov, and Lang (2000).

3 *See* Johnson, La Porta, Lopez-de-Silanes, and Shleifer, *Tunneling,* AER PAPERS AND PROCEEDINGS (2000)(introducing the term "tunneling" to describe self-dealing transactions that come at the expense of public or minority shareholders).

4 Other forms of equity tunneling include the sale of inflated-price stock to minority investors, the repurchase of inflated-price stock from the controlling shareholder, and the repurchase or purchase of cheap stock from minority investors (for example, through a freezeout or a going-dark transaction). *See* Atanasov, Black, and Ciccotello, *Law and Tunneling*, 37 J. CORP. L. 1 , 9 (2011).

For evidence of such tunneling, *see* Borja Larrain and Francisco Urzua I., *Controlling Shareholders and Market Timing in Share Issuance,* 109 J. FIN. ECON. 661 (2013)(examining equity issuances by controlling shareholders of Chilean firms between 1990 and 2009 and finding evidence consistent with controlling shareholders selling stock at a high price to minority its stock at a price lower than its post-issuance value. Cheap-stock tunneling economically dilutes minority shareholders by (i) reducing minority shareholders' percentage equity ownership and (ii) not increasing total equity value sufficiently to economically offset this reduction in percentage ownership. It has the same redistributive effect as a transaction in which the CS forcibly acquires a portion of the minority shareholders' equity for a cheap price.[5] Minority shareholders would be reluctant (and, in the limit, unwilling) to invest in CS firms if they anticipated substantial cheap-stock tunneling.

To make it easier for CS firms to raise equity capital from minority shareholders, corporate law seeks to protect minority shareholders from equity-issuance tunneling. The oldest and most widely used mechanism is "pre-emptive rights" that give minority shareholders the right to participate pro rata in any equity offering. In European jurisdictions and many countries in Asia and Latin America, such rights are typically still mandated by law, especially in private firms.[6] In many jurisdictions, public firms selling new shares must do so through a rights offering in which all existing shareholders may subscribe to new shares, usually at a price lower than the pre-issue market price – a particular implementation of pre-emptive rights.[7]

Corporate law's long-standing and heavy reliance on pre-emptive rights is natural and appealing. When minority shareholders are permitted to buy enough shares in an equity issuance to maintain their pro rata interest, it would appear

investors); Jae-Seung Baek, Jun-Koo Kang, and Inmoo Lee, *Business Groups and Tunneling: Evidence from Private Securities Offerings by Korean Chaebols*, 61 J. FIN. 2415 (2006) (finding evidence consistent with controlling shareholders of Korean firms using equity issuances to indirectly transfer value to themselves from public shareholders); Sergey Chernenko, Fritz C. Foley, and Robin Greenwood, *Agency Costs, Mispricing, and Ownership Structure*, __ FIN. MAN. (2012) (finding evidence that Japanese firms sell stock in controlled subsidiaries to public investors at inflated prices); Jesse M. Fried, *Firms Gone Dark*, 765 U. CHI. L. REV. 135 (2009) (describing evidence consistent with insiders expropriating value from public investors through going-dark transactions).

[5] *See infra* Part I.A.1.

[6] *See* infra Part I.C.1.

[7] *See* infra Part __. In the U.S., corporate law historically gave shareholders pre-emptive rights, but pre-emptive rights are no longer mandatory under the corporate laws of most states. *See* Franklin A. Gevurtz, Corporation Law 135 n. 63 (2010); Kraakman (2009), at 195. Instead, self-dealing transactions are generally regulated by fiduciary duties. However, many courts still rely heavily on the logic underlying pre-emptive rights to adjudicate equity-dilution claims. For example, courts applying Delaware law have ruled that a CS that voluntarily offers pro rata participation rights to minority shareholders in connection with an equity issuance can avoid fairness review, and prevail against a minority shareholder claiming dilution. *See* Jesse M. Fried, *Equity-Dilution Claims in Startups* (working paper, 2015). Thus, minority shareholders of Delaware-domiciled firms often have little protection from cheap-stock tunneling other than the right (provided to them by insiders) to participate pro rata in the issuance.

impossible for a CS to engage in cheap-stock tunneling. If minority shareholders believe that not participating would dilute them, they can simply participate on the same terms as the CS.

The academic literature on pre-emptive rights has therefore emphasized the importance of pre-emptive rights in preventing minority shareholders from cheap-stcok tunneling. For example, the legal academics who co-authored the highly regarded survey of corporate law in major jurisdictions around the world, *The Anatomy of Corporate Law: A Comparative and Functional Approach*, claim that

> "by allowing existing shareholders to purchase new shares pro rata…preemptive rights permit minority shareholders to safeguard their proportionate investment stakes and discourage controlling shareholders from acquiring additional shares from the firm at low prices."[8]

Economists have also emphasized the importance of pre-emptive rights in corporate governance. For example, Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer justified the use of pre-emptive rights as one of six important proxies for investor protection in their famous and widely-used "anti-director" index by stressing that:

> "In the absence of preemptive rights, insiders may expropriate minority shareholders by offering shares to related parties, or even to themselves, at below-market prices."[9]

I show that this view is incorrect: even when minority shareholders have pre-emptive rights, they are not protected from cheap-stock tunneling by controlling shareholders. In short, the promise of pre-emptive rights substantially exceeds what they can actually deliver in real-world settings.

I start with the biggest (but not only) problem: that pre-emptive rights simply cannot prevent cheap-stock tunneling if there is uncertainty as to whether (and by how much) the proceeds of the issuance will benefit the CS disproportionately.

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[8] Reinier Kraakman et al, THE ANATOMY OF CORPORATE LAW: A COMPARATIVE AND FUNCTIONAL APPROACH 195 (2nd ed. 2009). See also Marco Ventoruzzo, *Issuing New Shares and Preemptive Rights: A Comparative Analysis,* 12 RICH. J. GLOBAL L. & BUS. 517 (2013)(stating that pre-emptive rights protect shareholders from "dilution" as long as they have the financial means and the willingness to buy new shares); O'Neal and Thompson's 1 Close Corporations and LLCs: Law and Practice § 3:43 (Rev. 3d ed.) (updated November 2014) (arguing that pre-emptive rights in closely-held U.S. corporations are important and should "not only be preserved; they should be extended and strengthened.").

[9] Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer, The Law and Economics of Self-Dealing, 88 J. FIN. ECON. 430, 454 (2008).

An equity issuance could disproportionately benefit the CS in various ways that are difficult for an outside observer to detect and measure. For example, the CS may grab a disproportionate benefit from the proceeds through its executive compensation arrangements or because the CS has different types of cash-flow rights than minority shareholders (such as convertible preferred stock, options, or debt). Such disproportionate benefits would be difficult to prevent under any legal regime, even one that is protective of minority shareholders.

The CS' ability to capture a disproportionate benefit might also arise through classic self-dealing transactions between the CS firm and the CS or another firm it controls. The ability to substantially shift value through self-dealing transactions may be limited in high-quality legal regimes. But in low-quality legal regimes, such transactions are likely to be more common. Not surprisingly, there is evidence of post-issue self-dealing transactions in regimes with weak minority-shareholder protection.[10]

To the extent there is a disproportionate benefit, I explain, this benefit effectively provides a "rebate" or "discount" for the CS on the "retail" price of stock—the price of the stock in the issuance. This rebate, in turns, drives a wedge between the effective price of the shares for minority shareholders (who pay "retail," the nominal price without the rebate) and the effective price of the shares for the CS (who pays "wholesale", the retail price less the rebate). If there is a disproportionate benefit generated for the CS, the retail price for the issuance may simultaneously (a) be too expensive for minority shareholders and (b) cheap from the perspective of the CS (who pays the wholesale price).

When there is uncertainty about the *magnitude* of the post-issue disproportionate benefit, pre-emptive rights cannot protect minority shareholders from cheap-stock tunneling. For example, if the CS knows that it will not capture a disproportionate benefit, but minority shareholders rationally believe (based on their incomplete information) that such post-issue diversion *may* occur, the CS can leverage minority shareholders' rational fears about post-issue diversion to sell itself cheap stock: stock that both the CS and minority shareholders would profit from buying.

Uncertainty about post-issue disproportionate benefit is likely to be the biggest problem with pre-emptive rights, but I show that it is not the only one. Even if both the CS and minority shareholders know that the CS could never get a disproportionate benefit from the equity issuance, pre-emptive rights could fail to fully protect minority shareholders, for two reasons. First, minority shareholders generally do not know, with respect to any particular issuance, whether the CS is actually planning to buy any shares. Thus, the CS could be having the firm sell cheap stock (and planning to buy as many shares as it can) or having the firm sell inflated-price stock (and not planning to buy shares but

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[10] *See* infra Part ___.

hoping that minority shareholders will). The possibility that the CS is setting this trap may make minority shareholders more reluctant to exercise their pre-emptive rights even when the stock is in fact cheap, enabling the CS to buy more cheap stock for itself.

Second, there is likely to be capital asymmetry between the CS and minority shareholders, with minority shareholders (particularly in private firms) having less capital than the CS. Obviously, capital constraints render pre-emptive rights completely ineffective when minority shareholders lack enough money to participate in the current issuance. But I also show that when minority shareholders have sufficient capital to participate in the current issuance, but lack sufficient capital to participate in the current and future issuances, they may decline to participate in the current issuance, and knowingly be subject to cheap-stock tunneling by the CS in the current issuance.

Either of these two problems—uncertainty over whether the CS is seeking to buy cheap stock or sell expensive stock, and capital asymmetry—enables controlling shareholders to divert value from minority shareholders through an equity issuance, *even if the proceeds of the equity issuance will be shared pro rata.* Both of these problems increase the likelihood that minority shareholders will refrain from exercising their pre-emptive rights in a cheap-stock issuance, rendering them even more vulnerable to expropriation by the CS.

To be sure, pre-emptive rights are not worthless: pre-emptive rights offer *some* protection to minority shareholders from cheap-stock tunneling. Unquestionably, minority shareholders are better off with pre-emptive rights than without pre-emptive rights, everything else equal. Indeed, under ideal conditions (no post-issue disproportionate benefit, full information about CS participation in the issuance, no capital asymmetry) pre-emptive rights would completely prevent cheap-stock tunneling.

But overall, my analysis suggests that pre-emptive rights will fail, in a wide variety of circumstances, to protect minority shareholders cheap-stock tunneling. I conclude by considering how minority shareholders could be better protected from cheap-stock tunneling. The easiest way to improve the effectiveness of pre-emptive rights is to mitigate the last two problems I identified. In particular, the CS should be required to disclose the full extent of their participation in the equity issuance, and pre-emptive rights, at least in the context of public companies, should be freely and easily transferable. These two fixes would strengthen the effectiveness of pre-emptive rights by making it more likely that minority shareholders (or their transferees) would participate when the issue price is cheap.

Unfortunately, however, these two fixes will not eliminate the core problem of pre-emptive rights: these rights cannot provide effective protection when, as is typically the case, there is the possibility that the CS will disproportionately benefit from the issuance. My analysis thus suggests that corporate law cannot blindly rely on pre-emptive rights, even if they are optimally implemented, to govern equity issuances. More robust protection of minority shareholders, such as subjecting all equity issuances to a controlling shareholder to judicial fairness review, or giving minority shareholders the ability to block issuances they believe will hurt their interests, may well be needed.

The paper proceeds as follows. Part I explains how the sale of cheap stock to a CS hurts minority shareholders and describes the economic costs imposed by cheap-stock tunneling. It then shows that, in a very simplified setting, pre-emptive rights can eliminate this form of equity tunneling and its attendant costs. Part I concludes by briefly describing the widespread reliance on pre-emptive rights around the world to protect minority shareholders from cheap-stock tunneling. In Part II, I explain that pre-emptive rights are not effective when there is a possibility that the CS will enjoy a disproportionate benefit from the issuance. In Part III, I describe the two other problems that further undermine the ability of pre-emptive rights to protect minority shareholders from dilution via the sale of cheap stock to the CS: (1) the lack of a requirement that insiders disclose the extent to which they will participate in the issuance and (2) minority shareholders' inability to effectively transfer their participation rights to those with adequate capital. I show that either of these problems can render pre-emptive rights ineffective even if both the CS and minority shareholders know that the CS cannot get a disproportionate benefit from the issuance.

In Part IV, I make two modest suggestions for improving pre-emptive rights: (1) that the CS be required to disclose its intent around participation in the equity issuance and (2) that participation rights be made freely transferable, at least in public companies. However, I explain that these modest steps will not solve the fundamental problem with pre-emptive rights: that they cannot prevent cheap-stock tunneling as long as there is a possibility of disproportionate benefit. Thus other steps—such as giving minority shareholders veto rights over equity issuances—may well be needed. A conclusion follows.

Before proceeding, I wish to make clear that I do not address all of the possible uses and limitations of pre-emptive rights, and in particular will abstract from two issues. The first is the utility of pre-emptive rights when investors do not act rationally or are very risk averse. Even under otherwise ideal conditions, pre-emptive rights cannot protect minority shareholders from cheap-equity tunneling if the minority shareholders either fail to act rationally or decline to act because of risk aversion. Indeed, some studies claim that public shareholders do not always respond rationally to equity issuances, enabling others to benefit at their expense.[11] I do not consider these "behavioral" limitations of pre-emptive rights.

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[11] *See* Clifford G. Holderness and Jeffrey Pontiff, *Shareholder Nonparticipation in Valuable Rights Offerings* (working paper, 2013) (reporting that 36% of shareholders in rights offerings by U.S. firms do not participate, and that on average 7% of the value of the offering is transferred from these shareholders to participating shareholders).

My focus is on how pre-emptive rights can fail to protect even informed, pro-active, risk-neutral shareholders who seek to protect their economic interests.

The second is the failure of pre-emptive rights to protect minority shareholders from dilution via equity issuance even when they fully exercise their pre-emptive rights. For example, a CS can engage in "coerced contribution:" the CS can set the issuance price so low that minority shareholders decide they are better off maintaining their proportional interest and putting more money into the firm—even though much of it will be diverted or wasted—than letting the CS sell itself very cheap stock.[12] My focus here, however, is on pre-emptive rights failing to prevent the CS from selling itself cheap stock at the expense of minority shareholders who, notwithstanding the right to participate pro rata, do not buy stock in the equity issuance.

I. Cheap-Stock Tunneling and The Promise of Pre-Emptive Rights

This Part describes the problem of cheap-stock tunneling and the widespread use of pre-emptive rights to prevent such tunneling. Section A describes how a controlling shareholder (CS) can issue cheap stock to economically dilute minority shareholders. Section B explains how pre-emptive rights can, in theory, prevent cheap-stock tunneling. Section C briefly describes the widespread use of pre-emptive rights around the world to protect minority investors from cheap-stock tunneling.

A. Cheap-Stock Tunneling

In a CS firm, minority shareholders are vulnerable to cheap-stock tunneling: the CS may cause the firm to sell cheap stock to the CS.[13] It also explains that even if this tunneling itself does not destroy economic value, the anticipation of cheap-stock tunneling gives rise to substantial economic costs.

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[12] *See* Meoli et al. Another situation in which exercising pre-emptive rights does not protect minority investors from dilution via the sale of cheap stock is that in which there are asymmetric conversion rights. In particular, a firm may have issued securities (such as preferred stock) that are convertible into common stock and protected by anti-dilution provisions. When a CS holds these securities and minority shareholders do not, the CS can issue cheap stock for the purpose of increasing the conversion ratio of the convertible securities, diluting minority shareholders even if they participate pro rata in the offering.

[13] *See* Atanasov, Black, Ciccotello, and Gyoshev (2010) (finding evidence of equity tunneling via the sale of cheap stock to controlling shareholders in Bulgarian firms before 2002 changes to the Bulgarian securities laws).

1. The Risk of Cheap-Stock Tunneling

A CS can divert value from other shareholders ("minority shareholders") by issuing itself cheap stock in the firm.[14] In effect, cheap-stock issuance transfers value to the CS from other investors by increasing the CS' proportional ownership more than it increases the size of the corporate pie. It has the same distributional effect as a transaction in which the CS forces the minority shareholders to sell a portion of their equity to the CS for a cheap price.

Consider the extreme case where the CS pays $0 for newly issued shares, increasing the CS' proportional ownership from 60% to 70%. The value of the corporation remains unchanged, but minority shareholders' ownership is reduced from 40% to 30% (a 25% haircut). The increase in the CS' proportional ownership has the same distributional effect as a transaction in which the CS forces minority shareholders to turn over to the CS 10% of the firm's stock for no consideration.

All forms of tunneling, including cheap-stock tunneling, are more likely to occur where legal protection of minority shareholders is relatively poor.[15] But even in the U.S., where most large firms do not have controlling shareholders and the legal protection of minority shareholders is relatively strong, dilution via the sale of cheap stock to the controlling shareholder is sometimes alleged, typically by minority shareholders in private firms.[16]

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[14] A controlling shareholder will, through its control of the board and the shareholder vote, generally have the legal power to cause the firm to issue additional shares unless the relevant legal regime (or private ordering) provides blocking rights to minority shareholders. In the U.S., under the corporate laws of Delaware and other states, share issuances are generally the purview of the board; shareholder approval is not required unless (a) the firm is publicly traded and the issuance exceeds 20% of the firm's pre-issuance outstanding shares or (b) there is a need to amend the charter to increase the number of authorized shares. *See* Mira Ganor, *The Power to Issue Stock*, 46 WAKE FOREST L. REV. __ (2011). But even if shareholder approval were required to issue additional shares, the existence of the controlling shareholder will generally make that vote a formality unless private ordering gives minority shareholders the power to block the equity issuance.

[15] *See*, *e.g.,* Atanasov et al, *supra* note x (2010)(finding that dilutive offerings were common in Bulgaria before 2002).

[16] For example, in several high-profile cases in Silicon Valley, entrepreneurs have claimed that venture capitalists (VCs) that had taken control of their startups used that control to deal themselves cheap stock before selling the firm. *See*, *e.g.*, Carsanaro v. Bloodhound Technologies, Inc., 65 A.3d 618 (Del. Ch. 2013) (founding team alleges that VCs diluted them by issuing themselves excessive common shares); Joe W. and Dorothy Dorsett Brown Foundation v. Frazier Healthcare V, L.P., 889 F. Supp. 2d 893, (W.D. Tex. 2012) (same).

2. The *Ex Ante* Costs of Cheap-Stock Tunneling

From an economic perspective, cheap-stock tunneling would not be troubling if it merely transferred value from minority shareholders to the CS without reducing the size of the total pie. Parties would rationally anticipate the tunneling, and adjust the terms of their dealings appropriately. For example, minority shareholders buying shares in a particular CS firm while expecting to lose $10 through cheap-stock tunneling would pay $10 less for their shares; the CS would then recoup the $10 ex post through the tunneling. Aside from transaction costs, there would be no economic loss or even a redistributive effect, since the parties would end up with the same aggregate value whether or not there is cheap-stock tunneling.

Unfortunately, even if cheap-stock tunneling had no *ex post* effect other than to redistribute value, it is likely to impose substantial economic costs ex ante. In particular**,** cheap-stock tunneling makes it more difficult for all CS firms to raise capital from minority investors because of information asymmetry about the amount of such tunneling that is likely to occur. CS firms will thus not be able to pursue all of the socially valuable projects they could have otherwise pursued.

Suppose, for example, that in the economy there is initially an equal number of both "good" CSs (who can't or won't engage in cheap-stock tunneling) and "bad" CSs (who are likely to divert value in this manner). To the extent that minority shareholders cannot differentiate between a good and a bad CS, they will "charge" every CS selling shares to minority investors the same expropriation premium by discounting the price they are willing to purchase shares from any CS. If the discount is high enough, good CSs—who can't or won't engage in subsequent cheap-tunneling-- will not try to raise equity capital for some of their firms' (socially) desirable projects.[17] The proportion of bad/good CS will increase, leading minority shareholders to discount the price further, which in turn could lead to the classic market-for-lemons problem.[18] Only the bad CSs will be able to "afford" to issue shares via equity raises. The result will be a suboptimal allocation of capital economy-wide.

B. The Promise of Pre-emptive Rights

Corporate law can assist a CS in providing a credible commitment not to expropriate, through the use of either mandatory rules or legally-imposed fiduciary duties that constrain *ex post* opportunism. To the extent corporate law protects minority shareholders from expropriation, the cost of capital for CS firms

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[17] *See* Luca Enriques, *Related Party Transactions: Policy Options and the Real-World Challenges* 8 (working paper, 2014).

[18] *See* George A. Akerlof, The Market for Lemons: Quality Uncertainty and the Market Mechanism, 84 Q. J. ECON. 488 (1970).

will be lower. Investor protection thus facilitates capital raising and investment by firms, benefitting the economy as a whole.

1. The Promise

Pre-emptive rights would appear to be a useful tool to reduce the ability of a CS to engage in cheap-stock tunneling. The idea is simple: when minority shareholders participate pro rata in an equity issuance on the same terms as the CS, it should be impossible for the CS to transfer value from minority shareholders because both the CS and minority shareholders are getting the same deal.

Importantly, pre-emptive rights work—at least in theory—even if minority shareholders lack the same information as the better-informed CS about the value of the equity being issued. In theory, minority shareholders need only to "follow the smart money" by participating in the equity offering to the same extent as the CS. By consistently buying enough shares to preserve their proportional interest, the minority shareholders (as a group) could always protect themselves from dilution, and never be made worse off relative to their pre-transaction position.[19]

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[19] To understand why (in theory) always buying shares is the optimal strategy for minority shareholders, consider two potential scenarios for any equity issuance and two potential strategies for responding to equity issuances. The two potential scenarios are (1) the shares are cheap (they are issued for less than the pre-transaction value of the shares) and (2) the shares are expensive (they are issued for more than the pre-transaction value of the shares). The CS, but not the minority shareholders, knows whether the shares are cheap or expensive.

The two possible strategies for minority shareholders are (1) always participate and (2) never participate. If minority shareholders participate, they will always preserve the value of their interests in the firm. If the shares in a particular issuance are cheap, exercising pre-emptive rights will protect minority shareholders from economic dilution by maintaining their proportional interest in the firm. If, on the other hand, the shares are expensive, no harm will come to minority shareholders by buying shares alongside the CS. Minority shareholders may pay more for the new shares than their actual value, but they fully recapture that overpayment through their existing interest in the firm.

If minority shareholders never participate, they will be economically diluted whenever the stock is cheap and gain at the expense of the CS when the stock is expensive. If the magnitudes of the expected losses and gains were equivalent, the no-participation strategy would yield the same outcome as the participation strategy. However, the CS will quickly figure out that it makes sense to always price the stock cheap and expropriate value from minority shareholders in every issuance. Thus, the no-participation strategy will leave minority shareholders worse off. (It should also be easy to see that playing a random strategy would also make minority shareholders worse off, because the CS would always use a cheap price and then expropriate value from minority shareholders whenever they did not participate.)

2. Numerical Example

I will now use a simple numerical example involving ABC Corporation to illustrate how, in a very simplified setting, pre-emptive rights protect minority shareholders from cheap-stock tunneling.

a. ABC Corporation, Pre-Issuance

Consider ABC Corporation (ABC). Suppose that the value of ABC's assets is $20. ABC has 2 shares outstanding, 1 held by Controlling Shareholder (CS), and 1 held by Minority Shareholder (Minority). Each of the 2 shares is worth $10 (50% x $20). Assume that CS fully controls ABC, despite Minority's equal share ownership. ABC's "balance sheet" is depicted in Figure 1 below.

Figure 1: ABC Pre-Issuance	
Assets	Equity
$20	$20 (2 shares x $10)

b. Equity Issuance

Now suppose that CS causes ABC to issue 2 additional shares, for $4 each. As indicated above, the pre-transaction value of each of ABC's shares is $10. Thus, the shares are being sold for $6 less than the pre-transaction value of ABC's shares: they are "cheap."

In this ideal world, let us suppose that (a) CS cannot disproportionately benefit from the proceeds of the issuance; (b) CS must disclose its participation in an equity issuance to Minority before Minority decides to participate; and (c) that Minority has unlimited capital. And, for simplicity, let us further suppose that both CS and Minority have the same information about ABC and the value of its assets.

After the issuance, ABC will have $8 of new assets, so the total value of ABC's assets will be $28 ($20 + $8). Post-issuance, each of the 4 shares will thus be worth $7 ($28/4). ABC's post-issuance "balance sheet" is pictured in Figure 2 below.

Figure 2: ABC Post-Issuance	
Assets	Equity
$28 ($20 +$8)	$28 (4 shares x $7)

c. The Effect of Preemptive Rights

Consider two regimes: in the first, Minority does not have pre-emptive rights; in the second it has pre-emptive rights.

1. No Pre-emptive Rights

If CS can buy both of the two shares for $4, it will choose to do so. Before the issuance, CS owns 1 share worth $10. After buying both shares for a total of $8, CS will end up with 3 of ABC's 4 shares, worth $21 (3 x $7); its net wealth will be $13 ($21 in equity -$8 invested in the shares), $3 more than the $10 before the issuance.

The $3 increase in CS' wealth comes at Minority's expense. Before the issuance, Minority owns 1 share worth $10. After the issuance, Minority will own 1 of 4 shares of ABC, worth $7. Minority's $3 loss is CS' $3 gain.

Table 1 below shows the economic interests of CS and Minority before an after the issuance.

Table 1: No Preemptive Rights							
	Pre-Issuance				**Post-Issuance**		
	Equity	*- Cash*	*= Wealth*		*Equity*	*- Cash*	*= Wealth*
CS	$10 (50%)	0	$10		$21 (75%)	- $8	$13
Minority	$10 (50%)	0	$10		$7 (25%)		$7

2. Pre-emptive rights

Suppose Minority has pre-emptive rights to participate pro rata in the issuance. When CS announces the equity issuance, Minority, knowing the shares are cheap, will buy 1 of the 2 shares being offered. Both CS and Minority will each pay $4 for 1 share, and both CS and Minority will end up with 2 of the 4 shares of ABC, an equity position worth $14 (2 x $7). Thus, the net wealth of both CS and Minority will be $10 ($14 - $4), the position that they were in before the issuance. In this simple setting, pre-emptive rights work to protect minority shareholders from dilution.

Table 2 below shows the economic interests of CS and Minority before an after the issuance.

	Table 2: Preemptive Rights						
	Pre-Issuance				**Post-Issuance**		
	Equity	- Cash	= Wealth		Equity	- Cash	= Wealth
CS	$10 (50%)	0	$10		$14 (50%)	-$4	$10
Minority	$10 (50%)	0	$10		$14 (50%)	-$4	$10

C. The Widespread Use of Preemptive Rights

Pre-emptive rights are used by corporate-law regimes around the world, to protect minority shareholders in both private and public firms from cheap stock dilution.

1. Private Firms

Pre-emptive rights are widely used to protect minority shareholders, especially in private firms. For example, Germany mandates preemptive rights for closely-held firms. [20] So does Italy.[21] The U.K. grants them as a statutory default.[22]

2. Public Firms

For public companies, preemptive rights are a default rule in most major European jurisdictions. [23] And either by law or practice, publicly-traded companies outside the U.S. seeking to raise equity financing often do so through a preemptive rights issue that entitles current shareholders to the right to buy new shares at a specified price, often at a discount to the pre-issuance market price.[24] Such rights issues raise a substantial amount of capital. In a recent paper, Massimo Massa, Theo Vermaelen, and Moqi Xu report that firms around the world raised by $175 billion in rights issues in 2007, about one third of the amount raised in secondary (post-IPO) offerings.[25]

D. Toward Recognizing the Limits of Pre-emptive Rights

Reliance on pre-emptive rights to protect minority shareholders from cheap-stock tunneling by a CS would make sense in a world where these rights delivered on their promise—that is, where they ensured that minority shareholders could not be economically diluted through the sale of cheap stock

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[20] Kraakman (2009), *supra* note x, at 195.

[21] Ventoruzzo, *supra* note x, at 530-31**.**

[22] Kraakman (2009), *supra* note x, at 195.

[23] Kraakman (2009), *supra* note x, at 195.

[24] *See* Massimo Massa, Theo Vermaelen, and Moqi Xu, Rights Offerings, trading, and regulation: A global perspective 6 (working paper, October 2013). Firms with a controlling shareholder may choose to use a rights issue rather than a cash offer so that the controlling shareholder can retain control and access to private benefits. *See* Xueping Wu, Zheng Wang, and Jau Yao, A Rent Protection Explanation for SEO Flotation Method Choice (JFQA).

[25] *Id.*

to the CS. In such a world, minority shareholders could always protect themselves from dilution by “following the smart money.”

However, I will show in the next two Parts (Parts II and III) that pre-emptive rights cannot adequately protect minority shareholders from cheap-stock tunneling. As we will see minority shareholders cannot simply rely on “following the smart money” to protect themselves. It’s just not that simple.

II. Cheap-Stock Tunneling When the Issuance May Disproportionately Benefit the CS

This Part explains that pre-emptive rights cannot always protect minority shareholders from cheap-stock tunneling when the CS knows, but the minority shareholders do not know, the magnitude of the CS’ disproportionate benefit from the issuance.

Section A provides a simple example of how the existence of disproportionate benefit creates a wedge between the “retail” price paid by minority shareholders and the effective “wholesale” price paid by the CS, thereby making the stock simultaneously cheap for the CS and expensive for minority shareholders. Section B explains why the CS is likely to enjoy some disproportionate benefit from the issuance, even in regimes where minority shareholders receive relatively robust protection. Section C explains that, when there is asymmetric information about the magnitude of the disproportionate benefit, pre-emptive rights may not prevent minority shareholders from being economically diluted through the sale of cheap stock.

For purposes of this Part, I will assume that pre-emptive rights are structured to provide maximum protection to minority shareholders. Among other things, (1) the CS must disclose the extent of its participation in the issuance, and (2) minority shareholders are not capital-constrained. Thus, minority shareholders know whether the CS are participating in the offer and can always participate in the offering if they so choose.

A. Why The CS’ Disproportionate Benefit from an Equity Issuance Creates an Effective-Price Wedge

As I will show, the ability of the CS to disproportionately benefit from an equity issuance creates a wedge between the effective stock price for the CS and the effective stock price for minority shareholders. In particular, the disproportionate benefit provides CS a “discount” or “rebate” on the “retail” price of the stock, lowering the effective price for the CS. For a range of prices, the stock will be cheap from the perspective of the CS (who is paying the “wholesale” price, after the discount), but expensive for minority shareholders paying the full retail price.

In the next Section, I will explain why the CS' disproportionate benefit is likely to be substantial in many settings. For now, however, I will take this benefit as given.

1. ABC Corporation, Pre-Issuance

Consider again ABC Corporation (ABC). Again, the value of ABC's assets is $20; ABC has 2 shares outstanding, 1 held by Controlling Shareholder (CS), and 1 held by Minority Shareholder (Minority), with each share worth $10 (50% x $20). See Figure 1, reproduced below.

Figure 1: ABC Pre-Issuance

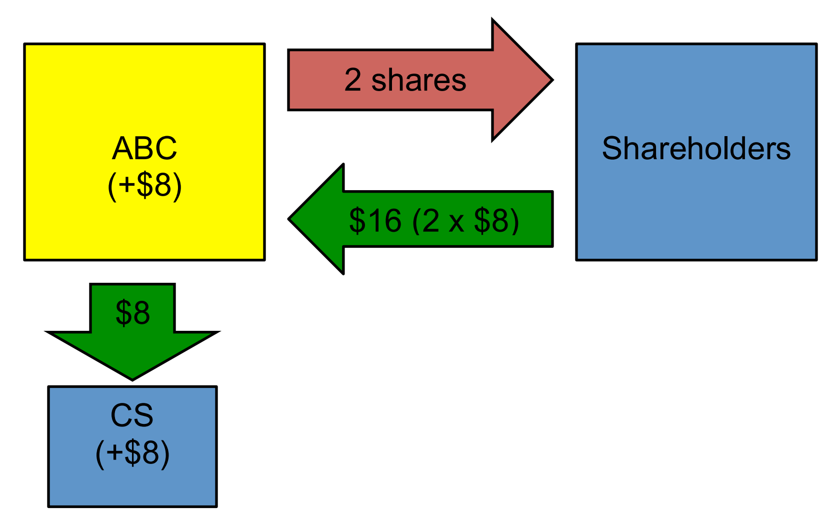
Assets	Equity
$20	$20 (2 shares x $10)

2. Equity Issuance: Proceeds Disproportionately Benefits CS

Now suppose that CS disproportionately benefits from the issuance. For ease of exposition, I will assume that the CS can capture exclusively for itself (through compensation, other cash-flow claims on the corporation, or self-dealing dealing transactions) 50% of the proceeds of the issuance (and, for convenience, that this benefit is generated a split second after the issuance.) This means that CS captures 75% of the proceeds of the issuance rather than what would be its pro rata share: 50%. Also, solely for ease of exposition, I will assume that the 50% captured solely by the CS flows outside of ABC.

Suppose that CS causes ABC to issue 2 additional shares, for $8 each (rather than $4 in the earlier example). At the issuance, $16 of new value initially flows into ABC, but $8 immediately is captured exclusively ? CS, leaving ABC with only $8 ($16 in, less $8 out) of additional value. See Figure 3 below.

Figure 3



Thus, ABC's equity value increases by $8 from $20 to $28. Post-issuance, each of the (now) 4 shares will be worth $7 each ($28/4). Figure 4 shows ABC's post-issuance balance sheet.

Figure 4: ABC Post-Issuance	
Assets	Equity
$28 ($20 +$8)	$28 (4 shares x $7)

3. The Price Wedge

CS' ability to disproportionately benefit from the proceeds of the equity issuance creates a wedge between the effective price paid by CS (the "wholesale" price) and the effective price that would be paid by Minority if it participates (the "retail" price).

In the above issuance, ABC issues shares for $8 each. This is the "retail" price. Post-issuance, each of ABC's shares will be worth $7 each. Thus, the retail price exceeds the value of the share being acquired: the retail price is "expensive." From Minority's perspective, buying a share for $8 that will be worth $7 makes little sense.

But CS does not pay the retail price; it gets a discount or rebate. For every share it buys, it gets 50% back through a disproportionate benefit (salary, other cash-flow rights, etc.). So when CS buys a share, it gets the wholesale price—the retail price minus the discount. Where, as here, the discount is 50% and the stock retails for $8, CS is effectively paying $4 per share. Because the share will be worth $7 after the issuance, this is a great deal for CS. Thus, CS will want to purchase as many shares as it can.

B. The Disproportionate Benefit

There will be no wedge between the effective price of the issued stock to the CS and the effective price of the issued stock to minority shareholders unless the CS benefits disproportionately from the proceeds of the issuance. This disproportionate benefit can arise through "classic" self-dealing transactions, as well as through less visible, more indirect, and harder-to-police channels.

1. Classic Self-Dealing Transactions

The CS' ability to capture a disproportionate benefit might arise through classic self-dealing transactions between the CS firm and the CS or another firm it controls. Such tunneling could take the form of, among other things, the sale of CS firm assets at a cheap price to another firm wholly-owned by the CS, or the purchase of assets from such a firm at an inflated price, or financial transactions (loans, guarantees, securities purchases) between the CS firm and a firm wholly-owned by the CS. The ability to substantially shift value through self-dealing transactions may be limited in high-quality legal regimes. But in low-quality legal regimes, such transactions are likely to be more common.

There is indeed evidence that CS firms conducting seasoned equity offerings (SEOs) subsequently use at least part of the proceeds to engage in related-party transactions. For example, a study of 533 SEOs by Chinese CS firms during the period 1999-2006 found that related-party transactions (involving the transfer of cash from the CS firms to other firms connected to the CS) increased after equity issuances.[26] While the terms of some of these transactions may well be perfectly fair to the minority shareholders of the CS firms, it will be in the self-interest of the CS to fashion these transactions in a way that transfers value from minority shareholders to itself.

To be sure, the potential magnitude of subsequent value diversion in such transactions will vary from country to country. Any such transactions will be visible. Depending on the circumstances, the substantive legal rules, and shareholders' incentive to sue, minority shareholders might decide to sue. This, in turn, may dissuade the CS from engaging in large-scale post-issue tunneling. For example, in a corporate-law regime where fiduciary duties may be of real substance and where there is a reasonable likelihood of enforcement, the threat of such a suit is likely to deter CS from engaging in massive transactional tunneling.

However, pre-emptive rights are widely used in many other regimes where the legal protection of minority shareholders is poor, in part because the disciplining mechanism of common-law fiduciary duties is not available. Indeed, one of the reasons why pre-emptive rights may be more heavily relied on in low-protection regimes is that it is a mechanical rule that can (in theory) be relatively easily implemented in a low-quality legal environment. The problem, however, is that in such an environment other forms of diversion (such as self-dealing transactions between a CS firm and another firm owned by the CS) are difficult to adequately police. In these regimes, value diversion by insiders through such transactions is common; the magnitudes can be substantial. [27]

[26] *See* Hong Bo, Zhongnan Huang, and Elmer Sterken, Bait and Switch: How do Chinese Firms Use Proceeds from Seasoned Equity Offerings? 27 (working paper, 2015).

[27] *See* Atanasov (2010), *supra* note x (reporting that, in pre-2002 Bulgaria, that post-issuance freezeout risk was sufficiently high that minority shareholders would not participate in an equity offering even if they knew it was underpriced relative to pre-freezeout intrinsic value).

2. Invisible Value-Shifting Channels

An equity issuance could also disproportionately benefit the CS in various ways that are difficult for an outside observer to detect and measure. For example, the CS may grab a disproportionate benefit from the proceeds through executive compensation arrangements for itself and allies in situations where the "right" level of compensation is unknowable. More significantly, the CS may have different types of cash-flow rights than minority shareholders (such as convertible preferred stock, options, or debt). The proceeds of the issuance could in part increase the value of these other cash-flow rights, which are unique to the CS and not shared by minority shareholders. Such disproportionate benefits would be difficult to prevent under any legal regime, even when one that is protective of minority shareholders.

C. The Failure of Pre-Emptive Rights to Prevent Cheap-stock Tunneling Under Asymmetric Information about Post-Issue Diversion

In this Section I explain that, if the magnitude of the CS' post-issuance disproportionate benefit is unknown, minority shareholders may be deterred from exercising their pre-emptive rights in situations where the issuance price is actually cheap (each share is worth more post-issuance than the issuance price), enabling the CS to engage in cheap-stock tunneling.

1. The Problem, Conceptually

Consider an equity issuance in which the CS knows that it will not subsequently capture a disproportionate benefit from the issuance. In such an issuance, the value of the stock to CS and minority shareholders would be exactly the same because there would be no "rebate" to CS via the post-issue tunneling. If CS sets the price low (below the post-issuance value), and minority shareholders do not participate, CS can transfer value from minority shareholders through cheap-stock tunneling. However, if minority shareholders know that CS will not capture a disproportionate benefit from the issuance, they will exercise their pro rata rights and not suffer economic dilution.

But in the real world, there is likely to be asymmetric information between CS and minority shareholders over how much of a disproportionate benefit CS will get from the issuance. In particular, there may be situations where the actual magnitude of the disproportionate benefit (which may well be known by the CS), is higher or lower than the expected magnitude as *perceived* by minority shareholders with more limited information. In these situations, minority shareholders may exercise their pre-emptive rights and buy shares when they would not choose to do so under symmetric information, or may fail to exercise pre-emptive rights when they would choose to do so under symmetric information.

My focus here is on the second scenario: minority shareholders over-estimate the magnitude of the disproportionate benefit and are thus deterred from participating. When minority shareholders are so deterred, the CS can dilute minority shareholders by selling itself stock that is cheap. Put differently, CS can leverage the rational fear of possible post-issue diversion into the certainty of cheap-stock tunneling.

2. Numerical Example

a. ABC Pre-Issuance

Returning to our ABC Corporation example, suppose again that ABC Corporation has 2 shares of common stock outstanding. As before, ABC has two shareholders: CS and Minority. Each owns 1 common share (and thus each owns 50% of the outstanding common stock). ABC's equity is currently worth $20 ($10 per share).

b. ABC Post-Issuance

CS will have ABC issue 2 additional shares for $8 each. CS announces that it will buy both shares, unless Minority exercises its pre-emptive right and buys 1 share. Based on Minority's information, Minority believes that there is a 50% chance that CS will divert 50% of the proceeds (the diversion scenario we've been considering so far) and a 50% chance that CS will divert 0% of the proceeds.

1. Diversion Scenario

In the diversion scenario, CS diverts $8 of the $16 contributed to ABC. As in all of the diversion examples we've looked at, ABC's value will increase from $20 to $28. There will be 4 shares outstanding. As before, each share will thus be worth $7. See Figure 5 below.

Figure 5: ABC: Diversion Scenario

Assets	Equity
$28 ($20 + $8)	$28 (4 shares x $7)

2. No-Diversion Scenario

In the no-diversion scenario, ABC's value increases by the full $16, from $20 to $36. There will be 4 shares outstanding. Each share will thus be worth $9. See Figure 6 below.

Figure 6: ABC: No-Diversion Scenario	
Assets	Equity
$28 ($20 + $16)	$36 (4 shares x $9)

c. Minority's Dilemma

CS knows which of the two scenarios will take place, but Minority does not. Because there is a 50% likelihood that the value of the shares is $9 (no-diversion scenario) and a 50% likelihood that the value of the shares is $7 (diversion scenario), the expected value of the shares is $8.

If the shares are issued for $8 each, Minority should be indifferent between participating in the issuance by buying 1 share and not participating at all. Minority may thus decline to participate.

If Minority declines to participate, and CS diverts 50% of the proceeds from the issuance (the diversion scenario), Minority will see the value of its share decline from $10 to $7. Minority will thus be happy that it declined to participate, because had Minority participated—buying a $7 share for $8 (and therefore ending up with wealth of $6)—it would be even worse off. Thus, ex post, Minority will have made the right choice.

But if Minority declines to participate, and CS does not divert any of the proceeds of the issuance, Minority will also be diluted; its interest will decline from $10 to $9. Minority will regret having not participated, because had it participated its wealth would have remained at $10. Thus, ex post, Minority will have made the wrong choice.

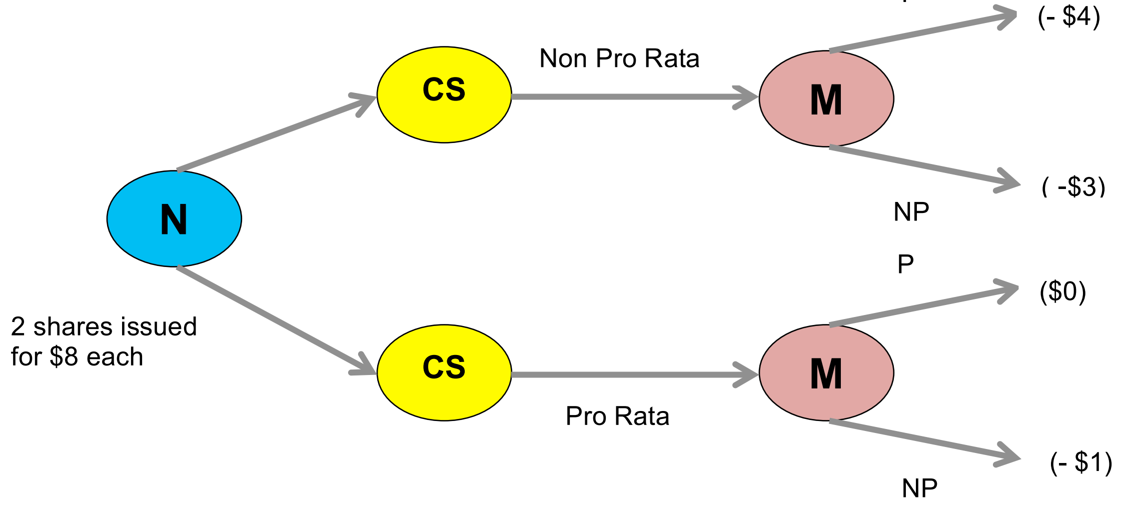
In this scenario—Minority declines to participate, and there is no subsequent diversion—Minority will be diluted solely by the sale of cheap stock. However, such cheap-stock tunneling is accomplished because Minority rationally believed that there was some probability that subsequent diversion would occur. In other words, CS can exploit the **mere possibility** of post-issue value diversion to deal itself cheap stock.

Minority's dilemma is captured in Figure 7 below. ABC issues 2 shares for $8 each. CS knows whether it will capture a disproportionate benefit (75%) or a pro rata benefit (50%) from the issuance. In either case, CS puts in an order to buy as many shares as it can. Minority, not knowing whether CS will extract a disproportionate benefit, must choose whether to participate (P) or not participate (NP).

If CS is capturing 75% of the value of the proceeds (the upper part of the decision tree), and Minority participates, it will pay $8 and end up with 2 shares worth $7. Minority had 1 share worth $10 before the issuance. So its wealth will decline by $4. If Minority does not participate, the value of its existing share will be reduced from $10 to $7, a loss of $3.

If CS is not capturing a disproportionate amount of the proceeds (the bottom part of the decision tree), and Minority participates, it will pay $8 for a new share worth $9. Because Minority started with 1 share worth $10, and after paying $8 owns two shares worth $18, it's wealth is still $10. So there is no change in its wealth ($0). If Minority declines to participate, it will lose $1 from cheap-stock tunneling (-$1).

Figure 7



D. Evidence from Public Companies

The analysis above generates several predictions: in settings where post-issue diversion is likely to be substantial, minority shareholders are less likely to exercise pre-emptive rights, and the CS is likely to increase its proportional ownership in equity offerings. If the firm is publicly traded, so that pre-emptive rights are implemented by rights issues, the stock price reaction is likely to be negative.

A recent empirical study of equity issuances by publicly-traded CS firms in Hong Kong provides evidence of this dynamic.[28] In this market, publicly-traded firms often raise capital through rights offerings, in which existing shareholders are given (sometimes tradable) rights to purchase stock at a substantial discount to the market price. The study finds that, in firms with poor corporate governance, the market reacts more negatively to announcements of rights offerings, more rights are forfeited by minority shareholders, and because of these forfeitures controlling shareholders can more easily increase their percentage ownership at a low price.[29]

III. Two Additional Problems with Pre-Emptive Rights

In Part II, we saw that pre-emptive rights cannot prevent a CS from engaging in cheap-stock tunneling when minority shareholders do not know the amount by which the CS will disproportionately benefit from the issuance. In that Part, I made two assumptions about minority shareholders' information and wealth: they (1) had complete information about whether CS was planning to attempt to increase its equity stake through the issuance, and (2) were not capital constrained.

In this Part, I will explain why pre-emptive rights work even more poorly if minority shareholders do not know whether the CS is planning to increase its equity stake (Section A) and/or if minority shareholders are capital constrained (Section B). Indeed, if there is uncertainty about CS's plans and/or capital constraints, pre-emptive rights cannot prevent cheap-stock tunneling *even if both the CS and minority shareholders know that the CS cannot disproportionately benefit from an equity issuance*.

Importantly, a pre-emptive rights regime may well have other possible limitations besides these two. For example, if minority shareholders are not given adequate notice about the prospective issuance and adequate instructions about how to participate, pre-emptive rights obviously cannot work.[30] Similarly, as I noted in the introduction, pre-emptive rights will not work well if minority shareholders cannot process the information they are given or are risk-averse. For purposes of my analysis in this Part, however, I will assume away all other limitations of pre-emptive rights, as well as assume that the CS benefits pro rata from the proceeds of the equity issuance.

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[28] *See* Wai-Ming Fong and Kevin C.K. Lam, Rights Offerings and Expropriation by Controlling Shareholders, 41 J. BUS. FIN. & ACCT 773 (2014).

[29] *Id.* at 774.

[30] *Cf.* Atanasov et al (2010), *supra* note x (describing how Bulgarian pre-emptive rights failed to work before 2002 because notice periods were short and notice requirements were often not enforced).

A. Insiders' Ability to Hide their Intentions

Outside the U.S., pre-emptive rights are mandatory in many corporate-law regimes. But in these regimes, insiders are generally not required to disclose their intentions about whether they are planning to increase their equity holdings via the issuance.[31] As I explain below, this lack of disclosure requirement creates a potential trap for minority shareholders that enables the CS to sell itself cheap stock.

When a CS announces an equity issuance, and CS does not indicate whether it plans to increase its equity holdings through the issuance, minority shareholders cannot easily infer whether the stock is overpriced, underpriced, or fairly priced. Why? Because the CS might be setting the price high, plan to not participate in the issuance and decrease its proportional ownership, and hope that minority shareholders will participate, buying inflated-price stock and thereby benefiting the CS.[32] Or the CS might set the price low, plan to increase its ownership, and hope that minority shareholders do not participate. What should minority shareholders do? Minority shareholders cannot simply "follow the smart money" because the smart money is not revealing what it will do.

Minority shareholders may rationally decide to participate if they believe the expected cost of buying inflated-price stock is lower than the expected cost of cheap-price tunneling. But then they may be economically diluted by buying stock at a high price. On the other hand, minority shareholders may rationally decide not to participate if they believe that the expected cost associated with buying inflated-price stock exceeds the expected cost of cheap-stock tunneling. But they then may be diluted by an offering that—unbeknownst to them but known to CS—is cheap.[33]

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[31] Jurisdictions in which there appears to be no requirement that controlling shareholders disclose their intended participation in an equity issuance include Argentina, Belgium, Brazil, France, India, the Netherlands, and the U.K. I have not yet found any jurisdiction in which controlling shareholders of either private or public companies are required by the pre-emptive rights statute to disclose the details of their intended participation in an equity issuance.

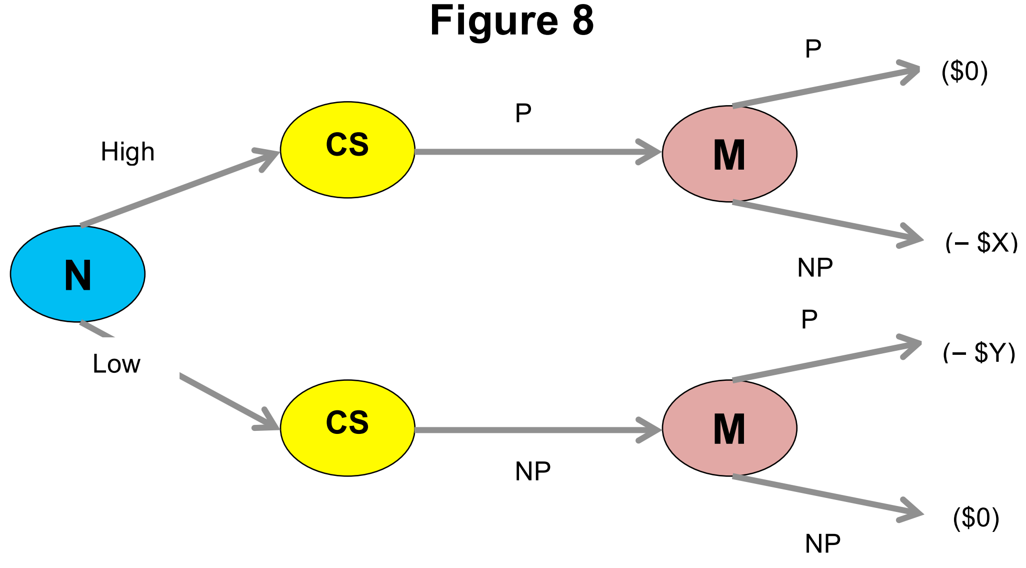
[32] Of course, if the CS maintains control solely through its ownership of a large fraction of the firm's common stock, the CS will not wish to sell so much stock that is loses. Thus, for example, if the CS owns 61 of a firm's 100 shares, and wishes to own at least 50% of the firm's stock, it would not have the firm issue more than 20 additional shares.

[33] As I have shown elsewhere, controlling shareholders can use a transaction that is the "mirror-image" of an equity issuance–a repurchase tender offer (RTO)–to sell their own shares at an inflated price to other shareholders. In particular, controlling shareholders can conduct a repurchase tender offer at an offer price that is at a premium to the current market price but may be either above or below actual share value. Because minority shareholders are uncertain as to whether the offer price is high or low, they can be expected to tender some but not most of their shares. When the offer price is in fact low, controlling shareholders will (indirectly) acquire outsiders' shares at a low price. When the offer price is in fact high, controlling shareholders will tender all or most of their shares, in effect forcing minority shareholders to buy their shares at a premium price. *See* Jesse M. Fried, *Insider Signaling and Insider Trading with Repurchase Tender Offers*, 67 U. CHI. L. REV. 421 (2000).

Minority shareholders' dilemma can also be illustrated through the decision tree depicted in Figure 8 below. "Nature" (N) moves first, determining whether ABC is high value or low value. If ABC's value is high, CS secretly participates (P) in the issuance. If ABC's value is low, CS secretly does not participate (NP). Minority (M) must decide whether to participate or not participate.

The payoffs in parentheses indicate what M can expect to get under each scenario. If ABC's value is high, and both CS and M participate, the payoff to M (relative to the value of its current economic interest) is $0. Similarly, if ABC's value is low, and neither CS nor M participates, the payoff to M is $0. If by luck M ends up "following" CS, no harm is done to M. However, if M acts inconsistently with CS, M loses value relative to its existing investment. If ABC's value is high, and M does not participate, it loses $X through cheap-stock tunneling. If ABC's value is low, and M buys overpriced stock, M loses $Y by indirectly transferring value to CS.

Figure 8



In making its decision whether to participate or not, M will estimate $Y and $X and the probability that the issuance is overpriced. M may thus decide it is rational (based on its information) not to participate, but then find itself having been diluted through cheap-stock tunneling. In such a case, CS will have disabled M's pre-emptive rights by causing M to rationally believe that there is some probability that the retail price is too high. The situation minority shareholders find themselves in is similar to the situation described in the previous Part, where minority shareholders know that CS will participate but don't know whether there will be subsequent diversion of value that will cause the retail price to be expensive.

Evidence consistent with controlling shareholders playing this type of game comes from a recent study of equity issuances by Chilean CS-firms between 1999 and 2009.[34] The study, by Larrain and Urzua I., examined the post-issue performance of these firms, comparing firms in which the CS participated in the rights offering (and in at least one instance purchased additional shares not subscribed by minority shareholders) and those in which the CS declined to participate, letting other shareholders buy all of the issued equity. Not surprisingly, subsequent stock price returns are significantly lower when the CS declines to participate.[35]

One might believe that there is an easy way to solve this problem: require the CS to disclose its intentions when the firm announces an equity issuance and minority shareholders are deciding whether to exercise their pre-emptive rights. Such a disclosure requirement would in fact be useful – and I suggest it in the next Part. However, we will see, such a disclosure requirement is difficult to impose on a public company because the CS may well be able to engage in offsetting transactions in the open market.

B. Minority Shareholders' Capital Constraints

A second limitation of pre-emptive rights is that minority shareholders are often capital constrained, and participation rights are often not transferable or easily transferable. I refer to this problem—capital constraints with non-transferability of participation rights—as "capital asymmetry" between minority shareholders and the CS: the CS may have deeper pockets than minority shareholders.

It is not difficult to understand that capital asymmetry vitiates the ability of pre-emptive rights to prevent cheap-stock tunneling in the current issuance when the minority shareholders lack enough capital to participate in this issuance. As we will see, it also vitiates the ability of pre-emptive rights to prevent cheap stock tunneling in the current issuance and even when minority shareholders have enough capital for *the current* issuance but may lack capital for *both current and future* issuances. In other words, capital-constrained minority shareholders may choose to refrain from exercising pre-emptive rights to buy stock that they know

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34 See Larrain and Urzua I., *supra* note x, at….

35 *Id.* at ___ (reporting that post-issue monthly dollar returns average 0.81% for CS firms where the CS' proportional interest decreases, and 2.31% when its proportional interest stays the same).

is cheap because they are afraid that buying the cheap stock now will make them worse off down the road, when the CS issues more stock through one or more subsequent issuances.

For purposes of this Section, I will assume that (1) the CS must disclose participation in the issuance; (2) the CS will benefit pro rata from the proceeds of any equity issuance; and (3) there is no information asymmetry between the CS and minority shareholders about the value of the firm. These simplifying assumptions enable us to focus on the problems that arise solely from capital asymmetry.

1. The Non-Transferability of Participation Rights

It is highly unlikely that minority shareholders will always have as much capital as a CS. When minority shareholders may be capital-constrained, corporate law can assist by making it easy to transfer their participation rights to other parties. Such a transfer, if it could easily be effected, would make it more difficult for CS to exploit minority shareholders' capital constraint to buy cheap stock at their expense. Unfortunately, participation rights are often not easily transferable, or not transferable at all.

a. Public Companies

Minority shareholders in CS firms that are publicly traded often receive pre-emptive rights through a rights issue entitling all of the firm's shareholders to buy stock at a particular price, usually at a discount to the current market price. Surprisingly, these rights are not always transferable. In some jurisdictions, the law does not require the rights to be tradable, in which case firms can—and frequently do-- choose to make the rights nontradable.[36] Sometimes the law requires that the rights be legally tradable, but does not require that the firm make a market for them, without which the rights are not *effectively* tradable.[37] Thus, there is often no trading in rights. [38]

[36] Massa et. al. found within a sample of 8,238 rights offerings during the period 1995-2008, that firms that were not required to make rights tradable did so in only 62% of the offerings and that the market for traded rights is often highly illiquid. *See* Massa et al, *supra* note x, at 2.

[37] Massa et. al. report that some countries require issuers to make rights tradable and make a market in the rights; others require issuers to make rights tradable but do not require the issuers to make a market in the rights; some countries do not require that the issuers make rights tradable. *See id.* at 7.

[38] According to Massa et al, the fraction of rights offerings without trading is 56% in the U.S., 8% in the U.K., 29% in Hong Kong, 68% in Australia, 38% in Germany, 27% in Belgium, and 21% in Switzerland. *Id.* at 9.

To be sure, when rights are not legally or effectively tradable, shareholders who lack the capital to exercise their rights can in principle sell their shares with the attached rights to other investors. This limits the ability of the CS to sell itself cheap stock at the expense of current minority shareholders. In an efficient market, the price paid by the buyer for the stock with the attached participation right should largely compensate the selling shareholder for the pre-issuance value of its equity interest.

However, there may well be large tax costs to such a sale, particularly if the shareholder's tax basis in the stock is much lower than the current market price. As a result, rights are often not exercised by either the current shareholder or a transferee. Thus, as long as the CS does not set the strike price of the rights too low, the CS can use equity issuances with rights offerings to buy cheap stock at the expense of minority shareholders.

b. Private Companies

In a private company, the problem of capital asymmetry can be much worse. Participation rights would generally not be transferable. And the stock itself may be difficult to sell. Many private firms place restrictions on the transferability of shares. Even if such a restriction is not in place, there may well be no ready buyers for the stock because of information asymmetry and the difficulty to the buyers of reselling the shares.

Of course, a shareholder can try to get around these restrictions by seeking to borrow against the shares or recruiting a hidden partner who is willing to hold shares in the company under the name of the original shareholder. But such efforts will not always be successful, and if they are successful they are likely to come at some cost—financial and otherwise—to the original shareholder. Thus at best these work-arounds place a low floor on the ability of the CS to price the stock cheap and then acquire a disproportionate amount of the issuance at the expense of minority shareholders.

2. Lack of Capital

I now explain how capital asymmetry undermines pre-emptive rights' ability to prevent the CS from cheap-stock tunneling.

a. Not Enough For Current Issuance

I start with the simple, obvious case. If minority shareholders lack adequate capital to participate in the current issuance (and cannot legally or effectively transfer their rights), pre-emptive rights cannot protect them from the issuance of cheap stock to the CS. Pre-emptive rights fail even if the CS discloses its participation, there is no possibility of other tunneling, and CS and minority shareholders have the same information about the world. For reasons stated earlier, this problem is more likely to arise in private firms than in publicly-traded firms.

b. Lack of Capital for Current and Future Issuances

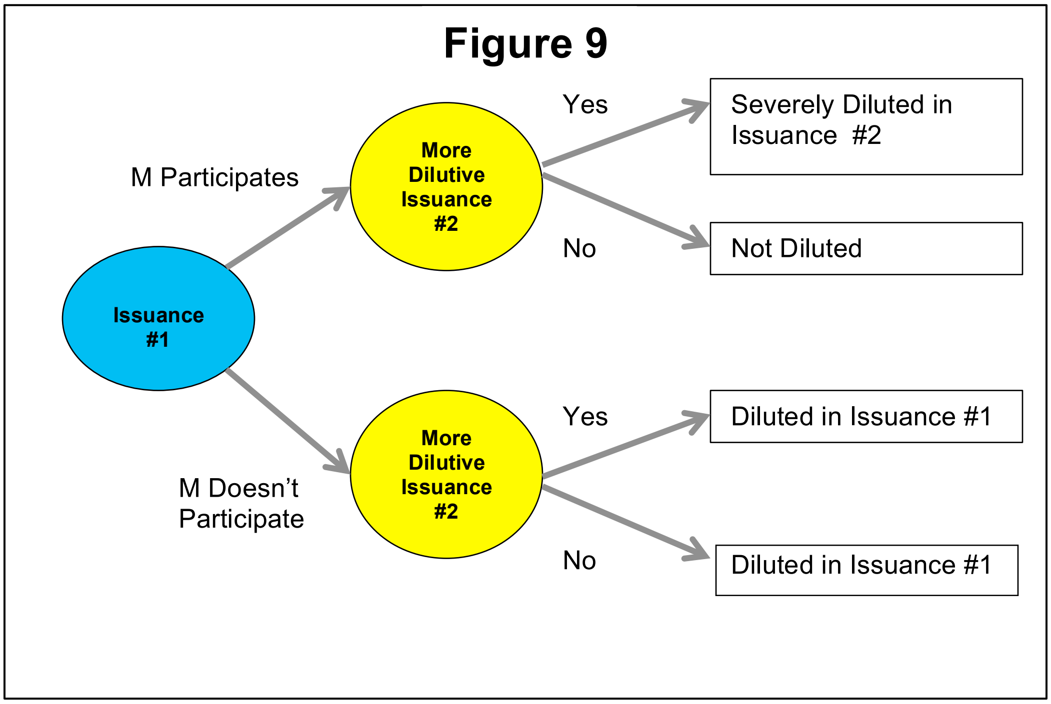
1. The Basic Problem

I now turn to the more complicated case in which minority shareholders have sufficient capital to participate in the current (cheap) issuance, but if they participate they will not have enough capital to participate in any subsequent issuance(s), at which point they would be diluted via the sale of cheap stock. Again, this problem is more likely to occur in the context of private corporations than in the context of public corporations.

A minority shareholder given pre-emptive rights with sufficient cash to participate in an issuance that she knows to be cheap may decline to participate if she (a) anticipates the possibility of future issuances and (b) lacks enough cash to participate in the current issuance as well as future issuances. Why? The minority shareholder may decide that the economic dilution that will certainly occur by not participating in the current cheap issuance is less than the *expected* economic dilution that will occur if the minority shareholder contributes additional capital to the firm in the current issuance, and the current investment is then diluted in an even cheaper issuance (or multiple issuances) in the future.

Minority shareholders' dilemma can also be illustrated through the decision tree depicted in Figure 9 below. There is a current issuance ("Issuance #1") and a possible future issuance ("Issuance #2"). Issuance #1 is at a cheap price (and will dilute Minority if it does not participate pro rata). But Issuance #2 would be even more dilutive (if Minority does not participate pro rata). Minority has enough capital to participate in only a single issuance.

On the upper side of the tree, we can see Minority's payoffs if it decides to participate in Issuance #1. If there is a more dilutive Issuance #2, Minority gets severely diluted. If not, it experiences no dilution (because it participated in Issuance #1 pro rata. On the bottom of the tree, we see Minority's payoff if it does not participate in Issuance #1, but rather saves its funds for Issuance #2. While it cannot be hurt by Issuance #2, Minority will be diluted by Issuance #1 whether or not there is an Issuance #2.



Of course, in the real world, minority shareholders' situation is even worse than this simple example suggests. If CS knows that minority shareholders lack adequate capital, the CS has a greater incentive to conduct highly dilutive equity issuances. Over and over again.

IV. Toward Better Protection of Minority Investors

This Part offers guidance to legislators and regulators about how to better protect minority shareholders from equity dilution via sales of cheap stock to controlling shareholders. Section A describes some easy-to-adopt low-cost mechanical fixes that will improve the performance of pre-emptive rights. Section B discusses additional protective measures that could be used to supplement pre-emptive rights.

A. Picking the Low-Hanging Fruit

In Part III, I explained that there are two problems with pre-emptive rights that make minority shareholders vulnerable to cheap-stock tunneling even if the controlling shareholder has no ability to divert value other than through equity issuances. At a minimum, regulators should strengthen the effectiveness of pre-emptive rights by taking some simple steps to ameliorate these problems. In particular, regulators should require that (a) a controlling shareholder reveal the extent to which it will participate in an equity issuance and (b) rights distributed to public shareholders be effectively and easily transferrable.

1. Controlling-Shareholder Disclosure

As explained in Part III.A., most (or all) pre-emptive right statutes do not require a controlling shareholder to indicate whether it will participate in an equity issuance. When a controlling shareholder need not and does not disclose whether it is going to participate in an equity issuance, minority shareholders cannot protect themselves from cheap-stock tunneling by simply "following the smart money." They can't protect themselves at all.

Thus, an easy way to improve the functioning of pre-emptive rights is to require the controlling shareholder to disclose the extent of its participation in the equity issuance *before* minority shareholders decide whether and how to participate. The cost of imposing such a disclosure requirement is very low, and the benefit is likely to be high.

2. Making Rights Transferable in Public Companies

As explained in Part III.A., minority shareholders may well be capital constrained and unable to "follow the smart money" because they do not have any money of their own. As was also explained, this problem is likely to be more severe in private firms than in publicly-traded firms. But it can arise even in publicly-traded firms when rights are not transferable and there are costs to selling the underlying shares.

However, it is easier to solve in the latter. In particular, rights to buy stock in public companies that are issued to satisfy the pre-emptive rights of minority shareholders should be made effectively tradable through the creation of a market in the rights. This will, on the margin, make it more difficult for a controlling shareholder to sell itself cheap stock.[39]

B. Further Steps For Consideration

Requiring better disclosure by the controlling shareholder of its participation plans and effective tradability of participation rights will reduce a controlling shareholder's ability to engage in cheap-stock tunneling. However, these two steps, by themselves, will not be sufficient to protect minority shareholders. In particular, even optimally designed pre-emptive rights cannot fully protect minority shareholders from cheap-stock tunneling if minority

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[39] Note that making rights tradeable would also solve the problem of minority-shareholder non-participation due to risk aversion and could reduce the problem of minority-shareholder non-participation due to inattention if the creation of the market increases the salience of the value of the rights to minority shareholders.

shareholders know or fear that the controlling shareholder will engage in direct or indirect tunneling in the future, deterring them from participating.

These residual problems with pre-emptive rights suggest that more robust protection of minority shareholders, such as providing ex post fairness review of the issuance or giving minority shareholders blocking rights over equity issuances—by requiring majority of the minority (MOM) approval—may well also be needed.

To be sure, such additional protections have their own limitations and costs.[40] It is certainly possible that providing additional protections will not turn out to be worthwhile. But my analysis suggests that, at the very least, such cost-benefit analysis be undertaken, given the glaring problems associated with relying on even optimally implemented pre-emptive rights to protect minority shareholders.[41]

For this purpose, my analysis identifies several factors that increase the likelihood that the challenged equity issuance is indeed dilutive: (a) defendants enjoy considerable private benefits, engage in self-dealing transactions with the firm, or own a large percentage of other securities besides the ones being offered; and (b) there is capital asymmetry between the controlling shareholder and minority shareholders, particularly in a setting where the firm is likely to raise additional rounds of equity capital. The more these factors are present, the more likely it is that the issuance was harmful to minority shareholders.

Conclusion

Pre-emptive rights are widely used around the world to protect minority shareholders from "cheap-stock" tunneling by controlling shareholders. The theory underlying pre-emptive rights is that controlling shareholders should not be able to expropriate value through the issuance of cheap stock to themselves if minority shareholders can participate pro rata in the equity issuance and get the same "deal" as the controlling shareholder.

I have shown that the theory is flawed: controlling shareholders can easily dilute minority shareholders through cheap-stock tunneling even when all investors may participate pro rata. The core problem is that pre-emptive rights cannot prevent cheap-stock tunneling whenever minority shareholders do not

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[40] *See* Enriques, *supra* note x, at 16 (describing the conditions under which MOM approval is likely to be effective and the conditions under which it is likely to be ineffective or prevent value-increasing transactions).

[41] To the extent that ex post fairness review is used, it should not follow Delaware's current approach, which treats as presumptively fair equity issuances in which the controlling shareholder gives minority shareholders the right to participate pro rata *See* Fried, *supra* note x.

know whether and by how much the controlling shareholder will disproportionately benefit from the equity issuance, through self-dealing transactions or less visible and harder-to-police channels.

I also identify two additional problems with pre-emptive rights that make minority shareholders even more vulnerable to cheap-stock tunneling. In particular, (1) controlling shareholders are not required to disclose their participation intentions and (2) minority shareholders' participation rights, even in public companies, are often not effectively transferable. The presence of either of these two flaws further vitiates the effectiveness of pre-emptive rights, and would prevent pre-emptive rights from working to prevent cheap-stock tunneling even in a hypothetical world where controlling shareholders could not derive a disproportionate benefit from equity issuances.

I conclude by considering how to increase the protection provided to minority shareholders. I propose as a first step that the two identified problems with pre-emption rights should be fixed. In particular, controlling shareholders should be required to disclose their participation intentions, and pre-emptive rights in public companies should be freely transferable. But even optimally implemented pre-emptive rights won't work if there is any risk that the controller will derive a disproportionate benefit from the issuance. Thus, supplementary mechanisms for protecting minority shareholders, such as veto rights on equity issuances and robust judicial review, may well be needed.