Title

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Abstract

In recent years, the popular press and academic commentators have expressed a concern that controlling shareholders of foreign issuers with a cross-listing in the United States (and especially Chinese issuers) are exploiting U.S. investors by paying unfairly low prices in freezeout transactions. But despite the political and economic significance of these claims, there is no systematic evidence on them. We contribute to filling this gap by comparing the gains of the investors in freezeouts of cross-listed issuers and freezeouts of domestic issuers during the 2000-2021 period. The data show that investors in fact receive approximately 6-11% lower returns in freezeouts of issuers located in "Restrictive Markets" (i.e., jurisdictions that U.S. authorities have flagged as posing a particularly high risk of exploitation) than investors in domestic companies. In addition, we show that this difference is driven by Chinese issuers. These results support the conclusion that minority investors in Chinese-controlled companies do not have the same protections as minority investors in U.S. companies, which may result in greater challenges for Chinese-controlled companies in raising capital (e.g., through a higher cost of capital) and an efficiency loss (as inefficient freezeouts might be facilitated).

JEL classification: G30, G34, K22.

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Freezeouts of Cross-Listed Issuers

1. Introduction

In recent years, the popular press and academic commentators have expressed a concern that controlling shareholders of foreign issuers with a cross-listing in the United States (and especially Chinese issuers) are exploiting U.S. investors by paying unfairly low prices in freezeout transactions – that is, transactions in which the controlling shareholder buys the remaining shares of the corporation for cash or stock. The basic idea is that freezeouts of foreign cross-listed issuers are not subject to the same rules and enforcement mechanisms that apply to U.S. companies, which facilitates the underpricing. Fried (2021), for instance, states:

> Over the past decade, controlling shareholders of more than 90 China-based, US-traded firms have arranged confiscatory "take-private" transactions. The goal: delist U.S. shares at a low buyout price and then relist in China at a much higher valuation (…) Investors in US-listed Chinese companies are more vulnerable to this tactic than investors in public U.S. companies. Financial statements are unreliable and most companies … incorporate[d] in the Cayman Islands. This jurisdiction affords investors less protection than Delaware, home to most U.S. companies. Neither U.S. nor Cayman court judgments can be enforced in China, where insiders and assets are based. When American investors are hurt, [state-secrecy laws are] invoked to shield audit papers from the PCAOB, [which makes] it difficult for shareholders and regulators to get to the bottom of things.

But despite the political and economic significance of these claims, there is no systematic evidence on whether investors in Chinese cross-listed issuers in fact receive lower gains than domestic U.S. issuers in freezeouts. In fact, there is no empirical evidence on whether investors in *any type* of foreign cross-listed issuer (not just Chinese companies) fare worse than investors in domestic issuers. We therefore address those questions by examining all freezeouts of domestic and foreign cross-listed issuers during the period 2000-2021.

The results indicate that investors in fact receive approximately 6-11% lower returns in freezeouts of issuers located in "Restrictive Markets" (i.e., jurisdictions that U.S. authorities have flagged as posing a particularly high risk of exploitation) than investors in domestic companies. In addition, we show that this difference is predominantly driven by Chinese issuers. Although investors in other cross-listed issuers (typically, Canadian or European companies) also receive lower returns than investors in domestic companies, the differences are weaker.[1]

These results have important policy implications. The law that governs a freezeout is the law of the country in which the target company is incorporated, which implies that, leaving aside some disclosures mandated by federal securities law, domestic investors are left with little protection if the home country of the corresponding foreign issuer does not have a judiciary that actively polices conflicted deals and a reliable disclosure regime. The results presented in this paper suggest that controlling shareholders seem to exploit that regulatory discrepancy, which in turn calls for greater protections for domestic investors.

2. Protections of minority shareholders in freezeouts

2.1. Protections in U.S. companies

A freezeout (also known, with some occasional loss of precision, as a "controlled merger," a "going private merger," a "squeeze-out," a "parent-subsidiary merger," a "minority buyout," a "take-out," or a "cash-out merger") is a transaction in which a controlling shareholder buys out the minority shareholders for cash or the controller's stock. Freezeouts are inherently conflicted transactions because the controller stands on both sides of the deal (i.e., the controller is the buyer and typically dominates the seller), so they expose minority shareholders to an acute risk of exploitation. As a result, U.S. courts subject these transactions to enhanced judicial review.

The main source of doctrine in this area is Delaware. Delaware is home to approximately half of all public corporations and an even greater share of large public corporations.[2] Although the exact drivers behind that phenomenon remain debatable, it is clear that novel corporate law issues are often presented in Delaware first, and then other courts follow the doctrine created in Delaware.

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[1] We define a freezeout as a parent/subsidiary merger or acquisition in which the controlling shareholder owns more than 30% of the shares in the target. If we use the lower threshold of 20%, which stock exchanges often use, the difference between domestic freezeouts and freezeouts of foreign issuers from "Non-Restrictive Markets" becomes significant – although the difference is smaller than the one between U.S. and issuers from "Restrictive Markets."

[2] Own estimations based on data from the Center for Research in Securities Pricing. See also, e.g., Delaware Division of Corporations (2022).

Under Delaware law, freezeouts are subject to entire fairness review, a stringent standard of judicial review that requires the defendant to prove "fair dealing" and "fair price." "[Fair dealing] embraces questions of when the transaction was timed, how it was initiated, structured, negotiated, and disclosed to the directors, and how the approvals of the directors and the stockholders were obtained. [Fair price] relates to the economic and financial considerations of the proposed [transaction]" (*Weinberger v. UOP*, 457 A.2d 701, 711 (Del. 1983)).

Importantly, enhanced judicial review in the form of entire fairness is not just law on the books: Delaware courts are known for their expertise in business law and their willingness to intervene in transactions that suggest unfair treatment to the minority shareholders, so the possibility that a court will revise the price paid by a controlling shareholder represents a meaningful check on the behavior of the controller (e.g., Cain et al., 2019).

Freezeouts are exempted from entire fairness scrutiny only when the transaction is subject to two important procedural protections: approval by a special committee of independent directors with power to veto the transaction (the "SC" condition), and approval by an informed and uncoerced majority-of-the-minority shareholders (the "MOM" condition). When these two procedural protections are implemented, the standard of judicial review shifts from entire fairness to the very deferential business judgment rule, under which a court will not intervene in the transaction unless the plaintiff can show that the terms of the deal were extremely poor – a very high bar for the plaintiff to meet (*Kahn v. M&F Worldwide Corp.*, 88 A.3d 635 (Del. 2014)). If only one of the two procedural protections is met, the controlling shareholder will still obtain greater judicial deference, but it will be less: the transaction will remain subject to entire fairness review, but the burden of proof will shift to the plaintiff to show that the transaction was not fair. (*Kahn v. Lynch Commc. Sys., Inc.*, 638 A.2d 1110, 1117 (Del. 1994)). In large part because of the significant impact that the SC and MOM conditions can have in terms of judicial deference, both conditions are ubiquitous today (see, e.g., Subramanian, 2007; Restrepo, 2021).

From a policy perspective, the combination of the SC and MOM conditions leads to greater judicial deference because those protections help emulate a transaction between unrelated parties (Gilson and Gordon, 2003, 785, 818, 837–38; Subramanian, 2005, 50, 53, 59-61; *In re MFW Shareholders Litigation*, 67 A.3d 496, 500, 528 (Del. Ch. May 29, 2013)). The SC limits the controller's ability to act opportunistically against the minority in three ways. First, the special committee has access to non-public information about the target company, which means that the committee can extract a price from the controller that includes the value of that information. Second, related to the first point, the special committee can veto the transaction entirely if the controlling shareholder attempts a freezeout at a time when the company is poised to do well. If the company is on a positive trajectory, the market value of the company might not reflect its intrinsic value, so having a special committee in place helps ensure that the controller pays a price that accurately reflects the company's intrinsic value. And third, because special committees are concentrated bodies of individuals, they mitigate the collective action problem that is so pervasive in shareholder action (e.g., Kastiel and Nili, 2016).

The MOM condition then provides a check on the actions of the SC. After the special committee negotiates with the controlling shareholder, the minority shareholders make a single "binary choice" on a take-it-or-leave-it offer, which provides a backstop against a disloyal or complacent committee. Since the minority vote is not a negotiation with the controlling shareholder, the vote may not be effective in providing more than the low end of the bargaining range, much less a "fair price" – but at least it will likely prevent grossly inadequate offers (Subramanian, 2005).[3]

In addition to providing a backstop against an unfair deal price, a MOM condition has an upstream effect on the deal process. One the one hand, the special committee will have more bargaining power against the controlling shareholder knowing that the transaction will be subject to a MOM condition. If the committee does not agree with the terms and thus recommends that the shareholders vote against the deal, the execution risks for the controlling shareholder increase significantly. And the other hand, the presence of an MOM condition may give the controlling shareholder incentives to negotiate with the minority shareholders in addition to negotiating with the special committee.

The freezeout of the minority shareholders of AmTrust Financial Services Corp. illustrates how this source of leverage can play out in practice. In November 2017, the controlling family of AmTrust (which owned 55% of the outstanding shares), along with its private equity partner, offered $12.25 per share to buy out the minority shareholders of the company. The AmTrust

[3] For a more detailed analysis of the limitations of shareholder voting in mergers and acquisitions, see Cox et. al (2019).

board formed a special committee of independent directors, and in February 2018 the parties agreed to $13.50 per share, subject to a MOM condition. Activist investor Carl Icahn held 9% of the outstanding shares and threatened to vote against the deal. Although Icahn's 9% only represented 20% of the minority shares, his threat increased the risk that the MOM condition would not be fulfilled. The controlling family negotiated directly with Icahn and eventually agreed to $14.75 per share, which amounted to a 9% improvement over the $13.50 price previously negotiated with the special committee. Two-thirds of the minority shares approved the revised deal, and the freezeout closed in November 2018. The 9% improvement for the minority shareholders was only achieved because of the presence of a MOM condition in the deal, illustrating the power of the condition.

A MOM condition also implicitly subjects the controller's offer to a "market check" in the sense that it creates the possibility of a "deal jumper" who can offer more. Without a MOM condition, the negotiation process essentially ends after the special committee and the controlling shareholder reach an agreement because the controlling shareholder will typically have enough voting power to approve the deal at the shareholders meeting. In contrast, with an MOM condition, after the announcement of the merger but before the shareholder vote, a third party can announce a competing bid for the minority shares at a higher price. For precisely this reason, former Clark (1986) argued approximately 40 years ago that a MOM condition is "one of the most appealing ideas" to protect the minority shareholders in a freezeout.

The freezeout of Asta Funding by Asta's CEO (Gary Stern) and his private equity partner illustrates the market check created by a MOM condition (even in a situation where the controlling shareholder has expressed his intention to not sell into a higher offer). Stern held approximately 35% of Asta Funding. In October 2019, he proposed to acquire the remaining shares of Asta for $10.75 per share, subject to special committee approval and a MOM condition. In his initial proposal, Stern stated that he was "not interested" in selling his shares to a third party. In April 2020, the parties agreed to a deal at $11.47 per share, subject to a MOM condition. RBC Capital, a 9% holder in Asta, objected to the $11.47 per share price; and in May 2020, RBC made a competing offer at $13.00 per share. This offer would have had no pathway to success without the MOM condition (and therefore would have been unlikely to have been made), because in the absence of a MOM condition, Stern could have unilaterally voted his lower-value deal through. Instead, Stern was forced to increase his offer to $13.10 per share, amounting to a 22% increase over his initial offer and a 14% increase over his previously agreed-upon price. In September 2020, the $13.10 offer was approved by a majority of the minority shares, and the deal closed shortly thereafter.

Although corporate law is the main form of protection in freezeout transactions, securities law also provides protection, especially in the form of disclosures. Securities law requires listed firms to disclose periodic financial information (Exchange Act Rule 13a-3) and information on material events (Exchange Act Rule 13a-11). In addition, auditors of public firms in the United States are subject to routine inspections by the Public Company Accounting Oversight Board ("PCAOB"), which ensures that the audits are conducted in accordance with generally accepted accounting principles.

2.2. Protections in foreign cross-listed issuers

When foreign issuers cross-list in the United States, they do not become subject to the minority protections offered by Delaware law. The governing law of a freezeout is the law of the country where the target is incorporated, which means that minority investors (including U.S. investors) can have far less strong protections when they invest in a foreign issuer with a U.S. cross-listing than when they invest in companies incorporated in the United States.

Outside the United States, the law generally protects minority shareholders by mandating a tender offer when a controlling shareholder intends to buy the remaining shares of the corporation (see, e.g., Ventoruzzo; 2010; Dahui, 2022). The combination of entire fairness review and procedural protections in the form of SC and MOM conditions, however, is rather unique to the United States.

Moreover, foreign issuers (especially those from China)[4] sometimes incorporate in a tax heaven – especially in the Cayman Islands. As Fried and Kamar (2022) observe, this raises greater concerns in terms of substantive law and procedural barriers to enforcement. On the substantive side, controlling shareholders do not owe fiduciary duties to the minority shareholders in the Cayman Islands.[5] Directors do owe fiduciary duties, and a controlling

[4] See, e.g., Moon (2021). Moon estimates that the majority of China-based, U.S.-listed firms are domiciled in the Cayman Islands. The next jurisdiction attracting most incorporations is the British Virgin Islands, which has a legal regime similar to the one of the Cayman Islands.

[5] Feiner Family Trust v. VBI Corp., No. 07 CIV. 1914 (RPP), 2007 WL 2615448, at *7 (S.D.N.Y. Sept. 11, 2007). See also Wimbledon Fin. Master Fund, Ltd. v. Weston Cap. Mgmt. LLC, 2017 N.Y. Misc. LEXIS 2725, at *49–50 (N.Y. Sup. Ct. July 17, 2017); Davis v. Scottish Re Grp. Ltd., 73 N.Y.S.3d 533 (N.Y. App. Div. 2018); In re CIL Ltd., Case No. 13–11272–JLG (Bankr. S.D.N.Y. Apr. 24, 2018).

shareholder could potentially be deemed a "shadow director" if the shareholder is shown to dominate the actions of the board.[6] However, demonstrating domination is difficult in practice, especially when, as is typically the case, the individuals that run the corporation and the relevant documents are located in China (a jurisdiction that, as discussed below, creates unique barriers to the formation of evidence). In addition, the concept of "shadow director" is only mentioned in the context of insolvency law, which suggests that the concept is not applicable in other contexts (see, e.g., Walkers, 2019).

From the procedural perspective, unlike in the United States, where plaintiffs' lawyers working on a contingent basis are highly motivated to file legal actions because they are compensated with a substantial part of the settlement or the damages award, in the Cayman Islands, contingent fees are illegal (e.g., Martin et al., 2018). Moreover, the default rule in the Cayman Islands is that the winner can obtain a reimbursement of the legal expenses from the loser, which creates additional disincentives to initiate a lawsuit (see also Huskisson et al., 2020). In theory, investors of a Cayman Islands firm with a U.S. listing could also sue in the United States; however, the plaintiffs might not be successful in convincing the court that the United States is the appropriate forum and that the court has personal jurisdiction over foreign defendants.[7]

Securities laws are also more lenient in the case of foreign companies with a U.S. cross-listing – a phenomenon that is in large part explained by the fact that the regime that applies to those companies has been significantly motivated by the desire to attract non-U.S. issuers to the U.S. market (e.g., Solomon, 2010). In particular, unlike domestic issuers, foreign issuers are not subject to quarterly reports or current reports:[8] they only have to file annual reports, and even those reports contain less information than what domestic issuers are required to disclose.[9]

[6] More specifically, a "shadow director" is "any person in accordance with whose directions or instructions the directors of the company are accustomed to act…" See Cayman Companies.
[7] See, e.g., Fasano v. Li, No. 16 Civ. 8759 (KPF), 2020 WL 5096001 (S.D.N.Y. Aug. 28, 2020) (dismissing, on arguments related to the most appropriate forum, shareholder claims against a firm based in China and incorporated in the Cayman Islands, and insiders based in China). Similarly, New York courts have held that they lack personal jurisdiction over directors of companies incorporated in the Cayman Islands who did not reside in the state or personally conduct business in it. See Davis v. Scottish Re Grp. Ltd., 46 Misc. 3d 1206(A), at *9 (N.Y. Sup. Ct. 2014).
[8] See Exchange Rule 13a-13(b)(2); Exchange Rule 13a-11(b).
[9] See Form 20-F, General Instruction A(a).

China has received particular attention not only because of the high number of Chinese firms with a U.S. listing, but also because the corporate and securities laws governing those firms are often considered unenforceable. This concern is comprehensively articulated in a systematic study on the issue, in which Fried and Kamar (2022) conclude that insiders of Chinese companies are essentially "law-proof" because the firms' insiders, records, and assets are in China, which makes it exceptionally difficult to enforce foreign judgements, file claims in its courts, or even obtain information for the benefit of foreign authorities or plaintiffs' lawyers.

As Fried and Kamar (2022) point out, enforcement of a foreign judgment in China is difficult because the country does not have an enforcement treaty with the United States – and attempts to enforce a foreign judgment that has not been recognized by a Chinese court can be punished as a violation of Chinese judicial sovereignty. Moreover, even if there were a treaty, article 282 of the Civil Procedure Law would still provide a broad basis for not enforcing a U.S. judgment, because that provision states that a foreign judgment will not be enforced if it is considered to "violate the basic principles of the laws of China and the sovereignty, security, and public interest of China" (see also Tsang, 2017; Jianli, 2018). In theory, a Chinese court may still choose to enforce a U.S. judgment; but in practice, those decisions are extremely rare (Celniker, 2017).

It is also difficult to obtain information from China-based defendants because, as Fried and Kamar (2022) observe, service of process is ineffective,[10] depositions of Chinese citizens by foreigners in Chinese territory are prohibited, and reliance on documentary evidence is difficult for two reasons. The first is that China's State Secrets Protection Law criminalizes the disclosure of information that relates to state secrets, and those secrets are broadly defined to include matters related to state security and national interest – including matters of national economic interest, science and technology, and the investigation of criminal offences. Moreover, the law has a very broad provision that penalizes individuals for sharing information that they "should have known" concerned national security, even if the information is not

[10] In fact, service of process in China can take even years, and on some occasions, Chinese officials simply hinder the process. Stock exchanges in the United States require that U.S.-listed firms have a local agent, so service against listed firms is simple. However, service against individual defendants is more difficult because there is no comprehensive registry for the officers and directors of cross-listed issuers and a pre-arranged agent for service of process. See also Silvers (2020).

explicitly contemplated as classified; and documents can be classified as a state secret even after litigation commences (see also Moncure, 2015; Huang, 2021).

The second reason is that discovery of documents not protected by state secrecy law is also limited. China's Archives Law classify firms' financial and audit information (which is broadly defined to include a firm's audit books, financial reports, and bank statements) as documents that require government authorization to be delivered to foreigners.[11] In addition, the rules governing the accounting industry prohibit accountants from disclosing information about Chinese companies,[12] and the Chinese Securities Law prohibits the transfer of information relating to securities to foreign regulators without the approval of the Chinese securities regulator and various government officials.[13] The United States and China signed the Enhanced Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information, which "encourages and enables cooperation between securities regulators" through the exchange of information to "combat securities and derivatives violations with a cross-border element."[14] However, the memorandum is not binding, a request for assistance may be denied on grounds of national interest, and, in fact, China has refused to comply with requests for information in cases involving firms with a U.S. cross-listing on the basis of the laws discussed above (see Dunke, 2018; Chan and Ho, 2015).

Fried and Kamar (2022) also note that several examples illustrate that the risks posed by the enforcement hurdles described above are real. From 2010 to 2012, many fraudulent firms were uncovered, which resulted in the delisting or suspension of trading of more than fifty Chinese firms (see also Lang and McGowan, 2013; Chen, 2017; Masako et al., 2020). A case that is particularly illustrative is Puda Coal, a Chinese mining firm with a cross-listing in the New York Stock Exchange, whose insiders secretly sold the firm's assets to a Chinese competitor before raising money from U.S. investors (SEC, 2018). But despite the magnitude of the infractions in this and other cases, neither U.S. investors nor the SEC were successful in recovering. U.S. investors filed several actions against the companies and their insiders for violations of corporate and federal securities law, but the defendants in some cases failed to

[11] See Regulations on Strengthening Secrecy and Archive Administration Work for Issuing Securities and Listing Overseas
[12] Law of the People's Republic of China on Certified Public Accountants, article 19.
[13] Chinese Securities Law, article 177.
[14] See International Organization of Securities Commissions Enhanced Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information (the "EMMoU").

appear in court after being duly served,[15] the recoveries were rare and small, and the recoveries did not come from China-based insiders (instead, they often came at the expense of U.S. investors who owned shares in the firms). In addition, the SEC investigations were frustrated by the defendants' allegation that sharing information would violate China's secrets law[16] and the defendants' failure to respond to the actions (and default judgments were never paid).

In response to the enforcement hurdles posed by China, the United States has repeatedly sought to secure at least a very basic form of protection for U.S. investors: PCAOB inspections of the auditors that audit Chinese issuers with a U.S. cross-listing. These efforts have not been very successful, although there has been some progress in recent years. After a first batch of negotiations, in 2013, the PCAOB and the China Securities Regulatory Commission signed a memorandum of understanding that supposedly established a "cooperative framework … for the production and exchange of audit documents relevant to investigations in both countries" (Memorandum of Understanding on Enforcement Cooperation between the PCAOB of the United States and the China Securities Regulatory commission and the Ministry of Finance of China (May 7, 2013)). However, the memorandum provided broad grounds for not observing it (as it required the parties to provide cooperation only when "consistent with [their] domestic laws"), and in fact the PCAOB complained from the outset that Chinese cooperation was not sufficient for the board to obtain timely access to documents and relevant testimony (PCAOB, 2013).

In this light, in 2020, Congress passed the Holding Foreign Companies Accountable Act (HFCA), which forces firms whose audits cannot be inspected by the PCAOB for three consecutive years to delist from U.S. stock exchanges; and in November 2021, Nasdaq (one of the primary trading venues on which foreign firms are traded in the U.S.) classified China as a "Restrictive Market," which Nasdaq defines as "a jurisdiction that does not provide the PCAOB with access to conduct inspections of public accounting firms that audit Nasdaq-listed companies" (Nasdaq Rule 5005(37)). Under Nasdaq rules, this classification carries with it special restrictions on the ability of a firm to raise capital through a public offering, engage in a combination with another company, or attempt a direct listing (i.e., a listing of shares without raising additional capital) (see Nasdaq Rule 5210(k)).

[15] See, e.g., In re Puda Coal, Inc., No. 6476–CS, 2014 WL 2469666 (Del. Ch. June 2, 2014).
[16] See, e.g., BDO China Dahua CPA Co. Ltd., Initial Decision Release No. 553, at 8 (ALJ Jan. 22, 2014).

All these efforts ultimately bore some fruit in the fall of 2022, when the PCAOB was able to inspect, for the first time, the audits of PCAOB-registered accounting firms located in China (e.g., SEC, 2022). However, it is important to emphasize that this is only a first step. As the SEC (2022) has pointed out, even with the recent PCAOB inspections, investors still face very substantial obstacles to enforcement, and it remains unclear whether the PCAOB will be able to conduct inspections on an ongoing basis and whether there will be meaningful responses to the deficiencies found in the inspections.

3. Literature Review

The empirical evidence suggests that the legal protections of minority shareholders discussed in the previous section have meaningful economic effects. Subramanian (2007) examined a sample of freezeouts between 2001 and 2005, and found that minority shareholders received lower cumulative abnormal returns (CARs) in tender offer freezeouts (which the Delaware Chancery Court's decision in *Siliconix* exempted from entire fairness review during the sample period) than in merger freezeouts (which were continuously subject to entire fairness review).[17] In light of these findings, Subramanian concluded that entire fairness appears to exert a positive effect on the gains of the minority shareholders.

To determine with more confidence whether the difference in CARs identified by Subramanian (2007) was in fact attributable to the differences in standards of judicial review, Restrepo (2013) examined a sample of freezeouts executed before and after *Siliconix*, and concluded that CARs in tender offer freezeouts in fact decreased after the opinion in relation to CARs in merger freezeouts.[18] Similarly, Restrepo and Subramanian (2015) examined the effect of *Cox*

[17] See *In re Siliconix Inc. Shareholders Litigation*, Civ. A. No. 18700, *7 2001 WL 716787 (Del. Ch. June 19, 2001). The Chancery Court's decision in *Siliconix* was based on the premise that the decision to tender or not to tender is a sufficient protection for minority shareholders – which renders entire fairness review unnecessary. However, motivated in part by the empirical evidence presented by Subramanian (2007), the Chancery Court subsequently questioned this premise in its *Cox Communications* decision and ultimately reversed the *Siliconix* policy in *CNX Gas* and *MFW*. See *In re Cox Communications, Inc. Shareholders Litigation*, 879 A.2d 604, 618–19 (Del. Ch. 2005); *In re CNX Gas Corp. Shareholder Litigation*, 4 A.3d 397, 407 (Del. Ch. 2010); *In re MFW Shareholders Litigation*, 67 A.3d 496, 500, 528 (Del. Ch. May 29, 2013).

[18] Bates, Lemmon, and Linck (2006, 681-708) also studied CARs in freezeouts in a period that partially overlapped with Subramanian's (2007) and Restrepo's (2013) samples, and the authors concluded that *Siliconix* was not associated with lower CARs. However, there are various methodological aspects that might explain that difference. First, Bates, Lemmon, and Linck include Delaware and non-Delaware targets in their sample even though *Siliconix* was not necessarily applied outside of Delaware. Second, the authors classified tender offers that were executed pursuant to a merger agreement as pure tender offers – even though the Delaware Chancery Court has held that the presence of a merger agreement triggers entire fairness review. See *Hartley v. Peapod, Inc.*, No. Civ.A. 19025-NC, 2002 WL 31957458, at *1 (Del. Ch. Feb. 27, 2002). And third, the post-*Siliconix* sample in

Communications, which suggested in dicta that the Chancery Court was likely to reverse *Siliconix* – and that, as a result, tender offers freezeouts would not continue to be exempted from entire fairness review. Consistent with the notion that enhanced judicial review matters, the results indicate that *Cox* reversed the effect of *Siliconix*: after the decision, the gains of the minority shareholders in tender offers increased relative to the gains in mergers.

Restrepo (2021) suggests that the combination of SC and MOM conditions provides a level of protection that is approximately similar to entire fairness review. When the Delaware Chancery Court held in its 2013 decision in *MFW* that a freezeout would no longer be subject to entire fairness if the controlling shareholder conditioned the transaction on SC and MOM approval, judicial review was relaxed but the use procedural protections increased;[19] and since the gains of the target shareholders remained approximately the same, it seems plausible to conclude, Restrepo argues, that the two forms of protection are roughly similar.

The empirical evidence also suggests that insiders of Chinese firms with U.S. cross-listings have exploited the enforcement barriers posed by the location of their firms. As mentioned above, previous studies have found that many of the Chinese companies that entered the U.S. public markets between 2000 and 2010 were fraudulent, which led U.S. authorities to delist or suspend the trading in the shares of those firms (Ang et al, 2016; Chen, 2017; Lang and McGowan, 2013; Masako et al., 2020).

However, despite these positive link between investor protection and investor welfare suggested by the empirical literature, and despite the radically different protections that investors in foreign cross-listed issuers receive in relation to domestic issuers (especially when the firm is located in a jurisdiction that, like China, creates serious barriers to enforcement), it is unclear whether investors in foreign cross-listed issuers in fact receive systematically lower returns in freezeouts. This paper contributes to producing such evidence.

Bates, Lemmon, and Linck (2006) (i.e., 2001-2003) is shorter than the post-Siliconix sample examined in Subramanian (2007) and Restrepo (2013) (i.e., 2001-2005). There are other papers that also examine the gains of the target shareholders in freezeouts, but those papers are based on samples well before *Siliconix* and they do not compare tender offers and mergers. See Dodd and Ruback (1977); DeAngelo, DeAngelo, and Rice (1984); and Holderness and Sheehan (1988).

[19] To be more precise, MOM conditions increased significantly. SCs were already very common by the time *MFW* was decided (see Subramanian, 2007; Restrepo, 2013; Restrepo and Subramanian, 2015).

4. Methodology

To examine the relationship between investor protection in a freezeout and the gains of the target shareholders, we compare the gains of foreign cross-listed issuers in these transactions with those of domestic issuers during the period 2000-2021. For a deal to be classified as a freezeout in our database, the buyer must hold at least 30% of the shares in the target prior to the announcement of the transaction. Although a shareholder that has more than 50% of the shares clearly has control, courts have held that a 30% shareholding can be enough to trigger control, so we use the threshold that yields a more comprehensive sample.[20]

We measure the gains of the target shareholders as the cumulative abnormal returns (CARs) of the company around the announcement of the freezeout, and we define the CARs as the difference between the daily return for the stock of the target relative to the return of the Center for Research in Securities Pricing (CRSP) index. We use two alternative windows to compute the CARs: a short window of five days around the date of the announcement of the transaction, and a long window of 30 days around the announcement. In all the estimations, we use the value-weighted CRSP index to adjust the raw returns, but the results are similar if we use the equal-weighted index.

The main independent variables of interest are location indicators for the issuers. We classify firms into one of three categories: "Restrictive Market," "Non-Restrictive Market," or "Domestic." Similar to the definition adopted by Nasdaq, the "Restrictive Market" category includes issuers located in jurisdictions that did not allow the PCAOB to conduct inspections of auditors located in that jurisdiction during the sample period. We think these inspections are a minimum level of protection for U.S. investors, so we use the "Restrictive Market" category as the baseline proxy for countries that expose investors to a particularly acute risk of exploitation. During our sample period, China and Hong Kong were classified as Restrictive Markets, but given the high number of Chinese issuers in the sample, those issuers are the most important jurisdiction in the category. The "Non-Restrictive Market" category includes all

[20] See, for example, *In re Cysive Inc. Shareholders Litigation*, 836 A.2d 531 (Del. Ch. 2003) (finding a 35% shareholder to be a controller). In some cases, the Delaware Chancery Court has gone even further, concluding that a shareholding below 30% can trigger control. See *Calesa Associates, L.P. v. American Capital, Ltd.*, 2016 WL 770251, at *10 (Del.Ch., 2016) (finding that a 25% shareholder can be a controlling shareholder); *In re Zhongpin Inc. Stockholders Litigation*, 2014 WL 6735457, at *9 (Del.Ch., 2014) (finding that a 17.3% shareholder can be a controlling shareholder, although that stake is "much smaller than a typical controller's"). However, control in those cases is more controversial.

other foreign issuers with a U.S. cross-listing (mostly, Canadian, European, and Israeli companies), and the "Domestic" category includes U.S. companies. We include freezeouts of U.S. companies in the sample as a benchmark for the analysis.

The remaining independent variables are controls for characteristics of the transaction and the target company. These variables include the target's size, profitability (return on equity or ROE), liquidity (liquid assets to total assets), leverage (the ratio of debt to equity), and industry (the one-digit standard industry classification (SIC) of the company). In addition, we control for general macroeconomic fluctuations by including year fixed effects in the model. We mitigate the concern that the differences in the gains of the target shareholders may result from financial characteristics rather than the freezeouts' legal regime not only by controlling for all these variables, but also by running the regressions using a matched sample (which is described in the following section).

The data for this project come from various sources. The list of transactions and the financial characteristics of the target companies come from Factset; stock market prices are from the Center for Research in Securities Prices (CRSP); and additional information about the deal processes come from SEC filings by the target company and the controller (especially 8-K, 6-K, 14D-9, 13-E, 13-D, and 14A filings). Only observations for which there was stock market prices available are included in the sample.

5. Results

Table 1 shows the distribution of the countries of origin of the sample firms. As mentioned above, there are two foreign jurisdictions in the "Restrictive Market" category (China and Hong-Kong); the rest of the observations fall within the "Non-Restrictive Market" category and the "Domestic" category. Among the foreign cross-listed firms, China is clearly the country with the largest representation in the sample, with approximately 11% of all the firms coming from that jurisdiction (and with a participation of 53% if only foreign issuers are considered). The next jurisdiction with most issuers is Canada, but even that country has a significantly lower participation than China (representing 3% of the entire sample and 13% of the foreign issuers).

Table 2 provides descriptive statistics. The statistics show that issuers in Restrictive Markets received significantly lower CARs than U.S. issuers in the sample period. Other foreign issuers also received lower returns, but those returns were higher than the ones received by issuers in Restrictive Markets and the differences with U.S. issuers were not statistically significant. These univariate results then provide preliminary support to the hypothesis that controlling shareholders of cross-listed issuers from Restrictive Markets (and especially Chinese issuers) exploit the less stringent regulatory environment to which they are subject to pay prices that are below what domestic targets typically receive.

Table 3 provides the baseline regression results. The first two columns show the results without any control and the next two columns include all the controls (all the financial controls displayed in the table plus industry and year fixed effects). In columns 1 and 3, the dependent variable is the CARs of the targets over a period of five days before and after the announcement of each transaction ($CARs_{(-5,+5)}$), and in columns 2 and 4, we compute the CARs using a 30-day window before and after ($CARs_{(-30,+30)}$). We use a short time window in columns 1 and 3 to avoid noise from potentially confounding events, but we repeat the regressions with the longer window in columns 2 and 4 to capture pre-announcement leakages of information and potential delays in the stock market reaction to the deals. The choice of the controls (size, profitability, liquidity, and leverage) is motivated by various considerations. The size of a deal is often negatively correlated with the premium paid in a merger (e.g., Schwert, 2000). Higher profitability may incentivize the buyers to pay more for the targets, which motivates the control for ROA. Leverage and liquidity complement this analysis because companies that are inefficiently run may have too little debt or too much cash (Jensen, 1986).

As shown in the table, the location variable indicates that investors in Restrictive Market issuers receive CARs that are 6-11 percentage points lower than the returns received by investors in domestic issuers – and this difference is statistically significant even after controlling for all observable characteristics. Investors in other cross-listed issuers also received lower CARs, but like in the univariate results, those differences were not statistically significant. These results therefore bolster the conclusion that differences in investor protection seem to enable controlling shareholders of Restrictive Market cross-listed issuers to pay less in their freezeouts.

In light of these results, we performed three sensitivity analyses. First, as mentioned before, to further mitigate the impact of observable differences between domestic and cross-listed issuers, we ran the regressions using a matched sample. To build this sample, we matched the foreign cross-listed issuers to their most similar domestic issuers in terms of all their observable characteristics. In the baseline estimations, we did not impose any specific caliper or common support condition, but the results are similar if we use a caliper of 0.25 times the standard deviation of the propensity score, which is a standard caliper (Rosenbaum and Rubin, 1985), or if we require common support (that is, if we drop the cross-listed observations whose propensity score was higher than the maximum or lower than the minimum propensity score of the domestic issuers). In the second sensitivity analysis, we adjusted the raw returns of the target companies by subtracting from them the equal-weighted CRSP index instead of the value-weighted index. The goal of this analysis is to ensure that our results are not driven by the weight that the companies that form the CRSP index receive when their value is considered. In the third analysis, we clustered the standard errors by industry or by year. The goal here is to account for the fact that the returns of the target companies within the same industry may be correlated with each other, as well as the fact that there might common factors that affect all the companies at similar points in time. The results are shown in Table 4, which shows that under all these analyses, the estimations remained consistent with the baseline estimations.

It is important to emphasize that, as shown in Table 1 and as mentioned earlier, most foreign cross-listed issuers come from China, so the Restrictive Market category is primarily formed by Chinese issuers. As a result, the results presented in this section are mainly driven by China. In fact, if we run the regressions classifying the foreign issuers as Chinese or non-Chinese rather than as belonging to the Restrictive or Non-Restrictive market categories, we obtain qualitatively similar results.

Of course, we do not claim to identify the causal effect of the relatively lax regulatory regime of Restrictive Markets on the CARs that investors receive in a freezeout. Although we take steps to mitigate the impact of observable factors on the results, there might be unobservable characteristics that affect the comparison. However, the results discussed above unveil an important pattern in the sense that they demonstrate that *systematic differences* in the returns of the shareholders (rather than just a few anecdotes) are behind the concerns about regulatory arbitrage expressed by other commentators. In addition, prior studies in which we exploited changes in the law indicate that the strength of the minority protections in a freezeout are in fact associated with the gains of the target shareholders (Subramanian, 2007; Restrepo, 2013; Restrepo and Subramanian, 2015; Restrepo 2021). Those studies thus suggest that the differences in legal regimes that we explore here are a reasonable explanation for the results.

Before closing this section, it is worth illustrating with a specific transaction (the freezeout of Sina Corp.) the weaker protections that shareholders often have in foreign cross-listed companies relative to Delaware corporations. Sina is a Chinese technology company incorporated in the Cayman Islands. It has four major business lines: Sina Weibo, Sina Mobile, Sina Online, and Sinanet. Sina has over 100 million registered users worldwide. Charles Chao is the founder, Chairman, and CEO of Sina. In November 2017, Mr. Chao executed a dual-class recapitalization that gave him control of 56% of the votes of Sina, up from 11% previously.

On July 6, 2020, Mr. Chao made an offer to acquire the remaining shares of Sina for US $41.00 per share in cash, which represented a 12% premium over the unaffected market price at the time. On the same day (July 6th), the board of directors of Sina convened to discuss the proposal from Mr. Chao. The board established a special committee of three directors (the "Special Committee") to evaluate the proposal: Mr. Song Yi Zhang (chairman), Mr. Yichen Zhang, and Mr. Yan Wang. Dissenting shareholders of Sina have alleged that all three of the members of the Special Committee were not independent from Mr. Chao.

In addition to its own operating assets, Sina held significant stakes in other public companies. At the time of the offer, Sina's stake in Weibo was worth approximately $43.30 per share. Sina's stake in TuSimple, another publicly-traded company, was worth approximately $24.84 per share. These two sources of value – based on trading prices in public markets – put the value of Sina at no less than $68 per share. Dissenting shareholders have alleged that the remaining parts of Sina were worth an additional $52 per share, bringing the total value of Sina to approximately $120 per share. The fact that Sina was trading far below any of these valuation numbers may reflect the market's expectation that the controller could take out the minority at a lowball price.

On August 31, 2020, the Special Committee requested an increase in the purchase price and a MOM condition from Mr. Chao. On September 11, Mr. Chao agreed to increase his offer to $43.00 per share (up from $41.00 per share), but rejected the Special Committee's request for a MOM condition. The Special Committee counter-offered at $45.00 per share, in exchange for giving up a MOM condition. On September 25, Mr. Chao responded with a "best and final offer" of $43.30 per share, with no MOM condition.

The merger agreement included a match right, which required Sina to notify Mr. Chao of any superior proposal, and "negotiate in good faith" with Mr. Chao for five business days before accepting any such superior proposal. Any subsequent superior proposal would trigger an additional five-day match right period. Mr. Chao did not have any commitment to sell his shares into any superior proposal that might emerge.

No such superior proposal emerged. On December 23, 2020, more than two-thirds of Sina shareholders (including the Mr. Chao) voted in favor of the Transaction. The Transaction closed on March 22, 2021.

The transaction illustrates several general characteristics of freezeouts at cross-listed companies: an offer price that provides a premium over market price but a significant discount to intrinsic value; a negotiation with a potentially conflicted Special Committee; the absence of a MOM condition; and no "pathway to success" for a third-party bidder during the post-signing process, due to Mr. Chao's match right and the absence of a commitment for Mr. Chao to sell into any higher offer. In addition, since this transaction involves an issuer from a Restrictive Market, investors litigating the case are likely exposed to the major enforcement hurdles described in Section 2.

6. Discussion

The "law and finance" literature documents a connection between investor protection and capital formation. The intuition underlying this empirical finding is that minority investors will not give their money to a controlled company if these investors can be taken out opportunistically. The results presented in this paper suggest that minority shareholders might anticipate over time that they will receive less in freezeouts of cross-listed issuers located in jurisdictions that offer low levels of investor protection, and therefore they will pay less for a minority position in those companies.

The possibility of an *ex ante* adjustment in the pricing of a minority position in controlled companies from countries with low levels of protection raises the important question of whether, as a policy matter, enhanced substantive or procedural protections are necessary. Clark (1986, p.506), for example, points out: "[O]nce the power of a controlling group to freeze out other shareholders becomes clearly established by case law or statute and the governing rules become widely known, shareholders can't raise the defeated-expectations argument anymore." Similarly, in the early 2000s, U.S. freezeouts executed as a tender offer exhibited similar underpricing relative to U.S. freezeouts executed as a merger, apparently due to inadequate procedural protections in the tender offer route. Specifically, Subramanian (2007) documented that minority shareholders in tender offer freeze-outs received 17% less, on average, compared to shareholders in merger freeze-outs. And, in response to these findings, Pritchard (2004) and others argued that the *ex ante* adjustment in the pricing of a minority position would provide a complete solution to less-than-adequate procedural protections.

The disconnect that we document here is analytically similar to the disconnect documented in this earlier doctrinal regime in the U.S. Instead of lower returns in U.S. tender offer freezeouts compared to U.S. merger freezeouts, we report lower returns in Restrictive Market freezeouts compared to U.S. freezeouts. Therefore, the same *ex ante* price adjustment response might reasonably apply. As summarized by Pritchard (2004): "Wealth transfers in this essentially self-contained, multi-period bilateral negotiation between majority and minority shareholders hardly present a compelling case for legal intervention … [M]inority shareholders generally did not acquire their minority status by accident. They invested in a public offering by a controlling shareholder, in which case the risk of 'unfair' expropriation was incorporated into the price that they paid for their shares."

However, it is unclear that minority investors will be able to fully appreciate the risks they face when investing in cross-listed issuers from Restrictive Markets. As a threshold matter, the differences in substantive protection afforded by U.S. law and by Restrictive Markets might not be obvious, since this is a fairly technical area. But even if the investors fully understand the law on the books (and even if they think that the law of Restrictive Markets protects them reasonably well), as discussed in Section 2, there are practical hurdles to enforcement in those markets that seem much more difficult to appreciate – and, therefore, to price ex ante.

In addition, Subramanian (2005) identifies two categories of efficiency loss from a regime that does not adequately protect minority investors. First, in the absence of adequate protections, the controller can freeze out the minority at a time when the market price of the target's stock is lower than its intrinsic value. This not only undermines the ability of minority investors to accurately price ex ante the risk of a low-premium freezeout, but also creates incentives for the controller to engage in freezeouts even when they are value-destroying. Opportunism of this kind becomes much more difficult when a freezeout is conditioned upon SC approval because the special committee will have access to non-public information. This means that the controller will have little or no informational advantage over the special committee and, as a result, he would be unable to exploit differences between market pricing and intrinsic value. In addition, even if the committee fails to prevent an opportunistic offer, entire fairness review might still prevent it.

Second, a controlling shareholder might go further, not only initiating the transaction when the market price is below intrinsic value, but also manipulating the company's market price downward in order to set a lower baseline for the freezeout price. For example, if the controller is considering implementing a one-time positive NPV (net present value) project, for which the only question is whether to implement it before or after the freezeout, and if the project is not completely transparent to the market place, the controller might rationally delay the investment until after the freezeout in order to reap the full benefits rather than sharing them with the minority. Moreover, the controller may engage in nonreversible value reductions because the loss from the reduction may be offset by the gain to the controller in the form of a lower freezeout price. Like the first efficiency loss identified by Subramanian (2005), these forms of behavior can affect the ability of minority investors to accurately price ex ante a low-price freezeout and can provide incentives for the controller to engage in value-destroying freezeouts. But in addition to those effects, a nonreversible value reduction is by definition an efficiency loss because it reduces the intrinsic value of the target company (Subramanian, 2005).

For these reasons, our results raise not only equitable concerns for minority shareholders, but also efficiency concerns for the capital markets overall. In this light, we call for a legislative or doctrinal response.

7. Conclusion

This paper examines the gains of minority shareholders in freezeouts of foreign cross-listed issuers and how those gains compare against the benchmark of freezeouts of domestic issuers. Consistent with the notion that controlling shareholders seem to exploit differences in investor protection across the jurisdictions in our sample, we find that minority shareholders in foreign issuers located in Restrictive Markets receive significantly lower returns than investors in U.S. issuers. In addition, we show that this result is mainly driven by Chinese issuers. These results raise important concerns in terms of fairness and for the efficient allocation of resources in the capitals market, so we call for greater investor protection in this area.

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Table 1
Home country of the sample foreign cross-listed issuers

The table shows the distribution of freezeouts of foreign cross-listed issuers by the country of origin of the issuer. The sample period is January 2000 through December 2021. The table shows the raw number of deals and the percentage of the sample represented by those numbers.

Country	Number	Percent
Restrictive Market		
China	44	11.17
Hong Kong	7	1.78
Non-Restrictive Market		
Bermuda	4	1.02
Canada	11	2.79
Greece	1	0.25
Indonesia	1	0.25
Israel	2	0.51
Italy	1	0.25
Monaco	2	0.51
Netherlands	1	0.25
Puerto Rico	2	0.51
Singapore	1	0.25
Switzerland	1	0.25
Taiwan	1	0.25
United Kingdom	4	1.02
Bermuda	4	1.02
Domestic		
United States	311	78.93

Table 2
Descriptive statistics

Table 1 presents descriptive statistics. The variables are defined in the appendix. $\Delta_{(RM - U.S.)}$ means differences between U.S. issuers and issuers from Restrictive Markets with a U.S. cross-listing. $\Delta_{(NRM - U.S.)}$ means differences between foreign issuers in Non-Restrictive Markets and U.S. issuers. The sample period is January 2000 through December 2021. The tests of statistical significance are *t*-tests. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Group	U.S. issuers			Restrictive Market			Non-Restrictive Market			Differences	
Statistic	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N	$\Delta_{(RM - U.S.)}$	$\Delta_{(NRM - U.S.)}$
$CAR_{(-5,+5)}$	0.19	0.18	311	0.12	0.11	51	0.15	0.17	32	-0.07**	-0.04
$CAR_{(-30,+30)}$	0.20	0.19	311	0.14	0.12	51	0.16	0.18	32	-0.06***	-0.05
Log(value)	0.24	0.24	311	0.13	0.21	51	0.19	0.23	32	-0.11	-0.04
Leverage	4.87	2.50	311	4.85	1.58	51	4.89	2.69	32	-0.02**	0.02*
Profitability	0.27	0.24	311	0.19	0.19	51	0.35	0.25	32	-0.08	0.08
Liquidity	-0.08	0.36	311	-0.02	0.22	51	-0.10	0.43	32	0.06***	-0.02

Table 3
Regression results

The table presents regressions estimates on the association between the location of the issuer and the gains of the target shareholders. All the regressions are estimated using ordinary least squares with heteroskedasticity-consistent standard errors. The variables are defined in the appendix and all the models include industry and year fixed effects in addition to the variables reported in the table. The *t*-statistics are in parentheses. * significant at 10%; ** significant at 5%; and *** significant at 1%.

Dependent variable	$CAR_{(-5,+5)}$	$CAR_{(-30,+30)}$	$CAR_{(-5,+5)}$	$CAR_{(-30,+30)}$
Model	(1)	(2)	(3)	(4)
Restrictive Market	-0.057***	-0.109***	-0.088***	-0.103**
	(-2.81)	(-3.34)	(-2.84)	(-2.49)
Non-Restrictive Market	-0.045	-0.045	-0.026	-0.016
	(-1.37)	(-1.04)	(-0.79)	(-0.38)
Log(value)			0.003	0.000
			(0.77)	(0.10)
Leverage			0.054	0.087
			(1.19)	(1.54)
Profitability			-0.058	-0.088**
			(-1.52)	(-2.01)
Liquidity			0.109*	0.111
			(1.70)	(1.54)
Controls	No	No	Yes	Yes
R-squared	0.014	0.024	0.177	0.216
N	394	394	394	394

Table 4
Sensitivity analyses

The table presents sensitivity analyses on the association between the location of the issuer and the gains of the target shareholders. Models 1 and 2 are based on a matched sample. In models 3 and 4, we adjusted the raw returns using the equal-weighted CRSP index instead of the value-weighted index. In models 5 and 6, we cluster the standard errors by industry, and in models 7 and 8 we cluster them by year. The variables are defined in the appendix and all the models include industry and year fixed effects in addition to the variables reported in the table. The *t*-statistics are in parentheses. * significant at 10%; ** significant at 5%; and *** significant at 1%.

Analysis	Matched sample		Equal-weighted CARs		S.D. clustering by industry		S.D. clustering by year	
Variable	$CAR_{(-5,+5)}$	$CAR_{(-30,+30)}$	$CAR_{(-5,+5)}$	$CAR_{(-30,+30)}$	$CAR_{(-5,+5)}$	$CAR_{(-30,+30)}$	$CAR_{(-5,+5)}$	$CAR_{(-30,+30)}$
Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Restrictive Market	-0.109**	-0.141**	-0.088***	-0.105**	-0.088***	-0.103***	-0.088**	-0.103***
	(-2.23)	(-2.19)	(-2.84)	(-2.52)	(-3.96)	(-4.15)	(-2.81)	(-2.88)
Non-Restrictive Market	-0.061	-0.040	-0.026	-0.035	-0.026	-0.016	-0.026	-0.016
	(-1.49)	(-0.80)	(-0.79)	(-0.84)	(-0.86)	(-0.45)	(-0.64)	(-0.26)
Log(value)	-0.003	-0.018*	0.003	0.002	0.003	0.000	0.003	0.000
	(-0.49)	(-1.84)	(0.77)	(0.49)	(0.76)	(0.14)	(0.55)	(0.07)
Leverage	-0.012	0.094	0.054	0.095	0.054	0.087	0.054	0.087
	(-0.15)	(0.89)	(1.19)	(1.65)	(1.54)	(1.34)	(1.25)	(1.61)
Profitability	-0.039	-0.039	-0.058	-0.086**	-0.058*	-0.088*	-0.058*	-0.088*
	(-0.43)	(-0.39)	(-1.52)	(-1.98)	(-2.20)	(-2.06)	(-1.76)	(-1.84)
Liquidity	0.088	0.112	0.109*	0.129*	0.109	0.111	0.109	0.111
	(0.84)	(0.89)	(1.70)	(1.76)	(1.75)	(1.07)	(1.71)	(1.07)
R-squared	0.373	0.353	0.177	0.155	0.177	0.216	0.177	0.216
N	145	145	394	400	394	394	394	394