Post-*Siliconix* Freeze-Outs: Theory, Evidence & Policy

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ABSTRACT: At approximately the same time that the Sarbanes-Oxley Act increased the costs associated with being a public company, important Delaware case law created a difference in the standard of judicial review for the two basic methods of freezing out minority shareholders. While a freeze-out executed as a statutory merger is subject to stringent "entire fairness" review, the Delaware Chancery Court held in *In re Siliconix Shareholders' Litigation* that a freeze-out executed as a tender offer is not. This paper presents the first systematic empirical evidence on post-*Siliconix* freeze-outs. Using a new database of all freeze-outs executed during the current doctrinal regime, I find that a controlling shareholder pays less to the minority shareholders, on average, when it uses a tender offer compared to a merger. This difference between tender offers and mergers seems to increase with the size of the controller's pre-deal stake. These findings introduce a puzzle as to why more than two-thirds of post-*Siliconix* freeze-outs still proceed through the traditional merger route. I present some evidence that controllers are more likely to choose a merger when they hold a relatively small controlling stake, in order to avoid supermajority approval from the minority that would be required in a tender offer. I also present some evidence that a freeze-out is more likely to be executed as a tender offer when the controller's outside counsel has substantial M&A experience. These findings bolster arguments for convergence in judicial standards of review between tender offer and merger freeze-outs, and provide guidance on how such convergence might best be achieved.

JEL classifications: G30, G34, K22

Post-*Siliconix* Freeze-Outs: Theory, Evidence & Policy

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1. Introduction

Due at least in part to the general decline of the stock market since 2000, as well as the increased cost associated with being a public company under the Sarbanes-Oxley Act of 2002, freeze-outs have been on the rise. Between January 2000 and December 2003, 38 controlling shareholders per year, on average, have frozen out their minority shareholders, nearly three times the rate reported by Coates (1999) for the period 1985-1996. At approximately the same time that freeze-out activity began increasing, important Delaware case law created a difference in the standard of judicial review for the two basic methods of freezing out minority shareholders. While a freeze-out executed as a statutory merger is subject to stringent "entire fairness" review, the Delaware Chancery Court held in *In re Siliconix Shareholders' Litigation* that a freeze-out executed as a tender offer is not. Academic commentators and practitioners have debated whether and to what extent this difference has created meaningful differences in practice, and if so, how judges and policymakers should respond.

This paper presents the first systematic empirical evidence on post-*Siliconix* freeze-outs. Using a new database of all non-short-form freeze-outs that were announced in the current doctrinal regime (n=96), I find that a controlling shareholder pays less to the minority shareholders, on average, when it uses a tender offer rather than a merger. This difference between tender offers and mergers seems to increase with the size of the controller's pre-deal stake. These findings introduce a puzzle as to why more than two-thirds of post-*Siliconix* freeze-outs still proceed through the traditional merger route. I present some evidence that controllers are more likely to choose a merger when they hold a relatively small controlling stake, in order to avoid supermajority approval from the minority that would be required in a tender offer. I also present some evidence that the identity of the controller's outside legal counsel influences the choice of transactional form. Specifically, when the controller's outside counsel has

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substantial M&A experience, the freeze-out is more likely to be executed as a tender offer. These findings bolster arguments for convergence in judicial standards of review between tender offer and merger freeze-outs, and provide guidance on how such convergence might best be achieved.

The remainder of this paper proceeds as follows. Part 2 provides background on freeze-out mechanics, describes the recent developments in the Delaware case law on freeze-outs, and summarizes the academic and practitioner literature commenting on these developments. Part 3 develops a theory of freeze-outs that yields four testable hypotheses. Part 4 tests these hypotheses against a new database of post-*Siliconix* freeze-outs. Part 5 discusses potential policy implications of these findings. Part 6 concludes.

2. Background

A freeze-out (also known, with some occasional loss of precision, as a "going private merger," a "squeeze-out," a "parent-subsidiary merger," a "minority buyout," 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. The traditional route for executing a freeze-out uses the process outlined by the Delaware Supreme Court in *Weinberger v. UOP*[1] and *Kahn v. Lynch Communication Systems*:[2] the target board establishes a special committee (SC) of directors who are independent from the controller; the SC hires bankers and lawyers to advise it; and the SC negotiates with the controller over the terms of the deal, most importantly the price to be paid to the minority shareholders and whether the deal will include a non-waivable majority-of-the-minority (MOM) closing condition. If the controller and the SC reach agreement, the deal is submitted for the necessary board and shareholder approvals. If approved, the transaction is typically executed as a statutory merger or a two-step tender offer (that is, a first-step tender offer followed by a short-form merger), though occasionally it is structured as a reverse stock split or an asset acquisition by the controlling shareholder.

An alternative to the traditional route is a tender offer directly to minority shareholders. In this route, the controller announces the tender offer and seeks to get to 90% voting control.

[1] 457 A.2d 701, 709 n.7 (Del. 1983).
[2] 638 A.2d 1110 (Del. 1994).

Typically the target board will appoint an SC of independent directors to evaluate the transaction, negotiate with the controller, and issue a 14D-9 recommendation to minority shareholders (approve, reject, neutral, or unable to take a position). If the controller gets to 90% voting control, it then typically executes a short-form merger, which does not require a shareholder vote, in order to eliminate the remaining (non-tendering) minority shareholders. Because 90% is the critical threshold, the controller often conditions its tender offer on getting to 90% control (a "90% condition").

2.1. Recent judicial developments

Freeze-outs are generally subject to "entire fairness" review by the Delaware courts, a stringent standard of review, because of their self-dealing nature (self-dealing because the controller is the buyer and typically dominates the seller's board). Even procedural protections such as the use of a special committee or a MOM condition only serve to shift the burden of proof on entire fairness to the plaintiff.[3] In June 2001, however, the Delaware Chancery Court held in *In re Siliconix Inc. Shareholders Litigation*[4] that entire fairness review does not apply to tender offer freeze-outs, "unless actual coercion or disclosure violations are shown," because the Delaware corporate code does not provide a statutory role for the target board in such an offer. Just one month after *Siliconix*, the Delaware Supreme Court in *Glassman v. Unocal Exploration Corp.*[5] held that a short-form merger is also not subject to entire fairness review. Taken together, *Siliconix* and *Glassman* allow a controlling shareholder to avoid entire fairness review by executing its freeze-out as a tender offer followed by a short-form merger.[6] The result is that the Delaware courts now afford different standards of judicial scrutiny to transactional forms that achieve the same result in practice, namely, the elimination of the minority shareholders.

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[3] Kahn v. Lynch Communication Systems, Inc., 638 A.2d 1110 (Del. 1994).
[4] 2001 WL 716787 (Del. Ch. 2001).
[5] 777 A.2d 242 (Del. 2001).
[6] *See, e.g.*, Next Level Communications Scheduled 14D-9 (filed Jan. 23, 2003) ("Q: Why would Motorola launch an unsolicited tender offer, as opposed to discussing the matter and negotiating with Next Level's Board of Directors? A: By making a tender offer directly to stockholders, Motorola is attempting to avoid having to negotiate with Next Level's Independent Directors, who have a fiduciary responsibility to protect you. . . . Under Delaware case law, if Motorola were to negotiate a transaction agreement with the Independent Directors, Motorla would have a legal duty to deal 'fairly' with the minority stockholders and to pay a 'fair price' for your shares. Through the unsolicited tender offer, Motorola is trying to avoid its legal duty to pay you a fair price for your shares in any negotiated transaction and to treat you fairly as minority stockholders.").

One year after the *Siliconix*/*Glassman* combination, the Delaware Chancery Court in *In re Pure Resources* held that a tender offer is not coercive, and therefore the *Siliconix* safe harbor applies, only if the offer is subject to a non-waivable majority of the minority tender condition; the controller guarantees to consummate a prompt §253 short-form merger at the same price if it obtains more than 90% of the shares; and the controller makes no "retributive threats" in its negotiations with the special committee.[7] The court confirmed, however, that if these conditions are met a freeze-out tender offer is not subject to entire fairness review.

2.2. Academic and practitioner commentary

Conventional wisdom among practitioners suggested that these doctrinal developments would have a significant impact on freeze-out transactional form and outcomes. According to the *Wall Street Journal*, "A couple of major court decisions handed down last year . . . essentially permit those big holders to buy the minority investors out on the cheap."[8] And the *Corporate Control Alert* stated: "The current thinking on minority buyouts, many lawyers say, boils down to two words: tender offer."[9] Academic commentators have divided on how judges and policymakers should respond. At one end of the spectrum, Cannon (2003) and Resnick (2003) argue for doctrinal convergence through entire fairness review for tender offer freeze-outs. Gilson & Gordon (2003) propose a middle-ground approach that eliminates entire fairness review if the controller has complied with the procedural protections identified in *Pure Resources* and the SC has veto power over the transaction, but imposes entire fairness review if the controller goes directly to shareholders through a tender offer without gaining SC approval first. Aronstam, Balotti & Rehbock (2003) similarly propose a hybrid approach, urging a "limited fairness hearing" for freeze-out tender offers, or an amendment to the Delaware appraisal statute to require the controller to pay all minority shareholders the appraised valued of their shares.

At the other end of the spectrum, some commentators defend the *Siliconix*/*Glassman* doctrinal contour. Pritchard (2004) argues that the gap in standards of review represents a one-

[7] In re Pure Resources Shareholders Litigation, 808 A.2d 421 (Del. Ch. 2002).
[8] Robin Sidel, *Takeover Targets Force Up Offers in 'Minority Squeeze-Out' Deals*, WALL ST. J. (May 10, 2002) at C3.
[9] David Marcus, *Cleaning Up Your Corporate Structure*, CORPORATE CONTROL ALERT, at 20 (July 2003).

time wealth transfer from minority shareholders to controllers that will be solved *ex ante* through lower prices that investors will pay for a minority stake. Pritchard (2004) and Abramczyk, Cincilla & Honaker (2003) argue that minority shareholders have adequate protections against coercive tender offers even in the absence of entire fairness review. To support this view, some commentators point to the fact that target boards generally establish a special committee to negotiate with the controller even if the controller proceeds via tender offer. As illustrations, practitioners point to Intimate Brands' negotiation with its controlling shareholder Limited; TD Waterhouse's negotiation with its controller Toronto-Dominion Bank; and Prodigy Communications' negotiation with its controller SBC Communications. All three of these deals were post-*Siliconix* freeze-outs executed through a tender offer. In all three transactions, the target established a special committee of independent directors to negotiate with the controller. And in all three, the special committee was able to negotiate a substantial increase over the controller's initial offer. This anecdotal evidence suggests that a special committee might have as much bargaining power against the controlling shareholder in a freeze-out tender offer as it does in a freeze-out merger.

The debate on the implications of the *Siliconix*/*Glassman* mechanism for freezing out minority shareholders has been hindered by the absence of any systematic empirical evidence. Basic questions remain unanswered: What fraction of freeze-outs are executed as mergers versus tender offers? If both transactional forms continue after *Siliconix*, how do controllers decide which to use? Are outcomes different by transactional form? In the next Part I formalize my approach to these questions by developing a theory of freeze-outs that yields specific predictions and testable hypotheses. In Part 4 I test these hypotheses against a new database of all post-*Siliconix* freeze-outs.

3. A theory of freeze-outs

In this Part I develop a theory of freeze-outs that introduces three factors: the special committee's bargaining power; the shareholder approval requirement; and lawyer effects. I discuss each of these in turn.

3.1. Special committee bargaining power

All else equal, the SC may have more bargaining power against a controlling shareholder in a merger freeze-out than in a tender offer freeze-out for three reasons. The first reason is the difference in the standard of judicial review. Entire fairness review for freeze-out mergers may increase price *ex post* through a judicially-mandated payout to the minority, or *ex ante* due to the "shadow" of a judicially mandated-payout (cf. Mnookin & Kornhauser 1979), or both. The second reason is the time available for negotiations. Merger freeze-out negotiations can last indefinitely, in theory, and typically last two to three months, while tender offer freeze-out negotiations are limited by the fact that the SC must issue its 14D-9 recommendation to minority shareholders within 10 days of the initiation of the tender offer.[10] In a merger, therefore, the SC may have more time to assess the transaction, seek out other potential bidders,[11] and make counter-offers, all of which may increase its overall bargaining power against the controller. The third reason, related to the second, is the SC's ability to veto the transaction.[12] While a merger, for all practical purposes, cannot proceed without SC approval, a tender offer freeze-out does not require SC approval and, in fact, is often initiated by the controller even before the SC is formed.

Differences in bargaining power should create differences in outcomes. As described by a senior partner at a major New York City law firm:

> You can debate whether you do better economically in *Siliconix*. I happen to think you do. Because I think what you're doing in *Siliconix* is negotiating with the market, you're not negotiating with the special committee, in the sense that as long as your price will clear enough of the market to get to 90%, you win. And

[10] This timing pressure is mitigated somewhat by the fact that a SC can issue a 14D-9 with no recommendation, stating that it has had insufficient time to assess the transaction, and then amend later once it has had time to do so. However, this ability to delay against a tender offer freeze-out is limited by the fact that the controller's tender offer only needs to stay open for 20 business days under the Williams Act.

[11] Although most controlling shareholders make clear their unwillingness to sell to other bidders, and a shareholder cannot be compelled to sell its stock, *see* Mendel v. Carroll, 651 A.2d 297 (Del. Ch. 1994), some controlling shareholders are willing to sell to a higher bidder, typically with the payment of a breakup fee. *See, e.g.*, Westerbeke Corp. Press Release (May 5, 2003) ("Pursuant to the terms of the merger agreement, Westerbeke is free to seek and consider other acquisition proposals for the sale or merger of Westerbeke through June 12, 2003. . . . In the event that the merger agreement is terminated to accept a third party proposal or under certain other circumstances, Westerbeke has agreed to pay expenses of up to $75,000 to Mr. Westerbeke.").

[12] *See, e.g.*, WFS Financial Press Release (Sept. 26, 2002) ("WFS Financial announced today that it had received notice from Westcorp that the proposal to acquire the outstanding 16% minority interest of WFS has been withdrawn. . . . In its notice, Westcorp indicated that it had withdrawn that proposal and was terminating further discussions with the independent director special committee of WFS because the two special committees were unable to reach an agreement on a mutually acceptable exchange ratio for the proposed transaction.").

> the market is not as effective a negotiator as a special committee – it doesn't have the same discipline. . . . If you were to ask me, from a practical point of view, is there a difference in the leverage, the answer is vast. If this is a traditional negotiated transaction, the special committee has a lot more leverage.[13]

A partner at another major New York City law firm similarly states:

> By going through the special committee [i.e., merger] process, you are voluntarily giving a lot of leverage to the target company. . . . The significant tactical difference is that the special committee in a tender offer has ten business days to work its magic, to come out with its recommendation. That makes the negotiation process far more truncated. They are forced to make their recommendation, frankly, on less information. . . In addition, the special committee has no ultimate authority. It makes an important recommendation, but it has no ultimate authority.[14]

The testable hypotheses, then, can be stated as follows:

H1: Controlling shareholders pay more in statutory merger freeze-outs than in tender offer freeze-outs.

3.2. Shareholder approval requirement

A second factor that might influence the price paid to minority shareholders is the approval required from minority shareholders. In assessing the costs and benefits of the *Siliconix* mechanism versus the traditional merger route, academic commentators to date have not noted important differences in the minority approval required across transactional forms. Specifically, the level of minority shareholder approval is determined by which of three transaction structures is used: a merger freeze-out without a majority-of-the-minority (MOM) condition; a merger freeze-out with a MOM condition; or a tender offer freeze-out. In this Part I examine each of these in turn.

First, a merger freeze-out without a MOM condition requires little or no approval from the minority. If the controller holds more than 50%, it can unilaterally approve the transaction by

[13] Telephone Interview with Practitioner A (Feb. 20, 2004).
[14] Telephone Interview with Practitioner B (Mar. 4, 2004).

voting its shares in favor of the merger.[15] If the controller holds less than 50%, it needs minimal approval from the minority. For example, a 40% controlling shareholder would require an additional 10% of shares outstanding, or 17% of the minority (10% out of the remaining 60%) in order to approve the transaction.[16]

Second, a merger freeze-out with a non-waivable MOM condition, as urged by the Delaware Supreme Court in *Weinberger* and *Kahn v. Lynch*, requires 51% of the minority shareholders to approve the transaction, regardless of the controller's pre-deal stake.[17] For example, if the controller holds 40% initially, 51% of the minority, or 31% of the total outstanding shares, must support the freeze-out. If the controller holds 80% initially, again 51% of the minority, which this time amounts to 11% of the total outstanding shares, must support the transaction.

Finally, the level of minority shareholder support required in a tender offer freeze-out is inversely correlated with the controller's pre-deal stake, because the controller must get to 90% voting control in order to then execute a short-form merger. For example, if the controller holds 40%, it needs another 50% of shares outstanding, or 83% of the minority shares outstanding (50% out of the 60% of total shares held by the minority) in order to achieve the 90% voting control that allows it to execute a short-form merger. If instead the controller already holds 85%, then it only needs another 5% of shares outstanding, or 33% of the minority shares (5% out of

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[15] *See, e.g.*, Balanced Care Schedule 14A (July 19, 2002) ("For the merger to occur, the merger agreement must be adopted and the transactions it contemplates, including the merger, approved by the holders of a majority of the outstanding shares entitled to vote on the merger. IPC owns approximately 53% of our outstanding common stock. IPC has informed us that it intends to vote in favor of adoption of the merger agreement and approval of the transactions its contemplates, including the merger, and you should therefore expect that each of these will be approved at the special meeting regardless of the votes of any other stockholders.").

[16] *See, e.g.*, Storage USA 8-K (Nov. 5, 2001) ("As of the record date, Security Capital beneficially owned 11,765,654 shares, or approximately 41.3% of our common stock. Security Capital has informed us that it intends to vote its Storage USA shares in favor of the purchase agreement and the Transactions. Storage USA's directors and executive officers own approximately 2.3% of our common stock and to our knowledge they intend to vote their Storage USA shares in favor of the purchase agreement and the Transactions. Accordingly, the affirmative vote of holders of an additional 1,815,973 shares, which equals approximately an additional 6.4% of our outstanding shares of common stock, will be sufficient to approve the purchase agreement and the Transactions.").

[17] *See, e.g.*, Oriole Homes Corp. 8-K (filed Sept. 11, 2002) ("The combined voting power of the Levy Group and the Loeb Group is sufficient to satisfy the statutory approval requirement. In addition to the statutory approval requirement, the Merger Agreement provides that it is a non-waivable condition to our obligation to consummate the Merger that the Merger Agreement and the Merger are approved by a majority of the shares of Class A Common Stock and Class B Common Stock not beneficially owned by the Levy Group, voting together as a single class, that are cast in favor of or against approval of the Merger Agreement and the Merger at the Annual Meeting.").

the total 15% held by the minority) to get to 90%.[18] In general, the controlling shareholder in a tender offer freeze-out must obtain (90-*k*) percent of the total shares outstanding, or (90-*k*)/(100-*k*) percent of the minority shares outstanding, where *k* is the controller's pre-deal stake.

If minority shareholders' reservation prices for their shares are normally distributed, then the supply curve for minority shares is upward sloping. The controller cannot price discriminate against this supply curve because all shareholders of the same class must receive the same consideration in a merger, and SEC Rule 14d-10 requires the controller to pay the same price to all shareholders who sell into a single tender offer. This analysis yields the following hypothesis:

> H2: The price paid to minority shareholders increases as the required level of minority support increases.

Between Hypotheses H1 and H2, it cannot be resolved at the level of theory as to whether SC bargaining power or the minority approval requirement is the binding constraint. The answer may depend on the transactional form used: for example, if the difference between tender offers and mergers is sufficiently large, then the level of minority approval required may be the binding constraint in a tender offer but not in a merger. Put more simply, the critical hurdle for the controlling shareholder may be the special committee in a merger freeze-out, and minority approval in a tender offer freeze-out. This possibility suggests a potential interaction between Hypotheses H1 and H2, which I test empirically in the next Part.

Finally, while Hypothesis H1 and H2 take transactional form to be exogenous, the analysis in this Part suggests that transactional form may in part be a function of the controller's pre-deal stake. Specifically, the approval required from minority shareholders in a tender offer freeze-out suggests the following hypothesis:

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[18] Of course, a MOM condition would set a 50% floor on the minority approval needed in a tender offer freeze-out. *See, e.g.*, TD Waterhouse Group 14D-9 (Oct. 11, 2001) ("The Special Committee noted that because of the Majority of the Minority Condition, the Revised Offer cannot succeed unless a majority of the publicly-owned Shares are tendered. Absent that condition, due to TD Bank's ownership of 88% of the Shares, the Purchaser and TD Bank would be able to attain ownership of 90% of the Shares even if only 16.6% of the Shares they do not already own were tendered in response to the Offer or the Revised Offer.").

H3: The likelihood of using a tender offer increases with the controller's pre-deal stake.

Hypothesis H3 highlights the importance of jointly testing Hypotheses H1 and H2. For example, if all large controllers proceeded via tender offer and all small controllers proceeded via merger (i.e., an extreme form of H3), then we might observe controllers paying less in tender offer freeze-outs not because of the SC's lesser bargaining power (H1), but rather because of the lower shareholder approval required in a tender offer relative to a merger freeze-out with a MOM condition when the controller is large (H2). In the next Part I attempt to distinguish these two potential effects through the use of multivariate analysis.

3.3. Lawyer effects

A third factor is the role of lawyers. Academic and practitioner commentary to date assume that legal counsel will choose the optimal transactional form in freeze-outs, which in turn assumes that information costs and lawyer agency costs are small. Interviews and informal conversations with experienced New York City practitioners suggest that these assumptions may not be correct. For example, one senior New York City practitioner quoted above states that:

> All things being equal, which they never are, I would go the *Siliconix* route nine times out of ten. And I think that's where most of the sophisticated M&A guys I talk to are. . . . But there may be lack of awareness on the part of many lawyers of the availability and value of the *Siliconix* structure. . . . Old habits die slowly. People who do this once every four years, don't keep up with the literature and would just as soon do it the old way. And since it's not wrong – no Delaware lawyer is going to say it's a bad way to do it – there's a huge amount of inertia here.[19]

A variation on this theme is the possibility that certain lawyers and law firms are less confident in recommending cutting-edge legal mechanisms to their clients. According to the other New York City law firm partner quoted above:

> In the current environment, I would say to a controlling stockholder, "it is very hard to see any reason to go the special committee route rather than the *Pure Resources* [tender offer] route." But I believe there may be lawyers, who, when they observe some reluctance on the part of their controlling stockholder clients in

[19] Practitioner A Interview.

> acting unilaterally [through a tender offer] do not firmly enough impress upon them the benefits of the *Pure Resources* structure over the special committee structure. I think that certain New York City lawyers are more willing to be forceful in their advice to a client.[20]

These practitioner impressions yield the following hypothesis:

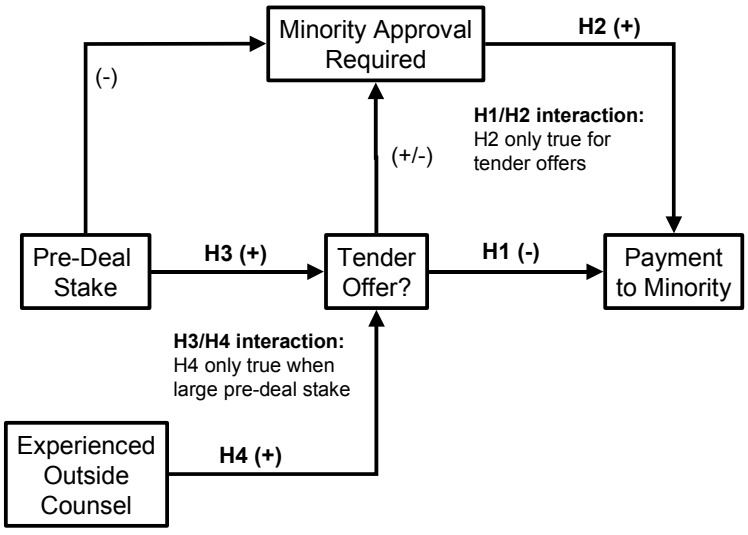
H4: The likelihood of using a tender offer increases when outside counsel has substantial M&A experience.

As above, there may be an interaction between Hypotheses H3 and H4: when the controller holds a relatively small stake, outside counsel may be likely to recommend a merger freeze-out, regardless of its M&A experience, in order to avoid supermajority approval from the minority. Only when the controller's stake is relatively large, and a tender offer freeze-out becomes more viable (H3), might we expect to see experienced law firms recommending tender offers at a higher rate than other firms.

3.4. Summary

Figure 1 summarizes the hypotheses developed in this Part, with +/- signs indicating the directions of the predicted correlations:

Figure 1: Influence Diagram & Summary of Hypotheses



[20] Practitioner B Interview.

4. Evidence

4.1. Methodology

I now test the hypotheses developed in Part 3 against a new database of all freeze-out transactions announced and resolved since *Siliconix*. I begin with all transactions coded as "Acquisitions of Remaining Interest" in Thomson Financial Corporation's Mergers & Acquisitions database, announced between June 19, 2001, the date of the Delaware Chancery Court's opinion in *Siliconix*, and December 31, 2003. Although TFC uses a 50% cutoff to distinguish acquisitions of remaining interests from acquisitions of a controlling interest, as a matter of Delaware corporate law (as well as real-world practicality) a shareholder with as little as a 35% holding can be a controlling shareholder.[21] I therefore supplement TFC's remaining-interest category with transactions in which the acquirer held 35-50% when the freeze-out was initiated. I exclude transactions in which the acquirer held 90% or more of the target's voting shares, because such transactions can be executed as short-form mergers that do not require a shareholder vote.[22] I also exclude remaining-interest acquisitions that are the second step of a third-party tender offer, because the second step is invariably at the same price as the first step and the first step was negotiated at arms-length.[23] The final database includes 96 freeze-outs.

For each transaction, I examine SEC filings by the controller and the target company (primarily 8-K, 14D-9, 13E-3, 13D, and 14A filings), news reports, and company press releases to collect data on the bargaining process, such as the dates and sequence of offers and counter-offers, whether a special committee of independent directors was formed to assess the transaction, and the terms of the final agreement, if one was reached. Stock price data for each target company are taken from the Center for Research in Securities Pricing (CRSP) database. The controller's outside counsel in each transaction is identified using the contact information

[21] *See, e.g.*, In re Cysive Inc. Shareholders Litigation, 836 A.2d 531 (Del. Ch. 2003) (finding a 35% stockholder to be a controller).
[22] *See, e.g.*, DEL. GEN. CORP. L. §253; RMBCA §11.05.
[23] There is a gray area in distinguishing an arms-length transaction from a freeze-out if there is delay between the first and second steps of the transaction. *See, e.g.*, Cede & Co. v. Technicolor, 684 A.2d 289 (Del. 1996). As a practical matter, most arms-length acquirers today wish to execute the second-step tender offer as quickly as possible in order to gain 100% of the anticipated economic benefit, to avoid uncertainty in applying dissenters' appraisal rights, to eliminate potential plaintiffs, to delist from the stock exchange, and to deregister under the 1934 Act. (Subramanian 2003a) Perhaps as a result, self-dealing and arms-length transactions were clearly distinguishable in my database, with no transactions in this potential gray area.

from the target's 14D-9 filing in a tender offer or the target's 14A filing in a merger, or from the acquirer's 13D filing. Because 14D-9 and 14A filings are not required in unsuccessful freeze-outs, I am unable to identify the controller's outside counsel in nine freeze-outs.

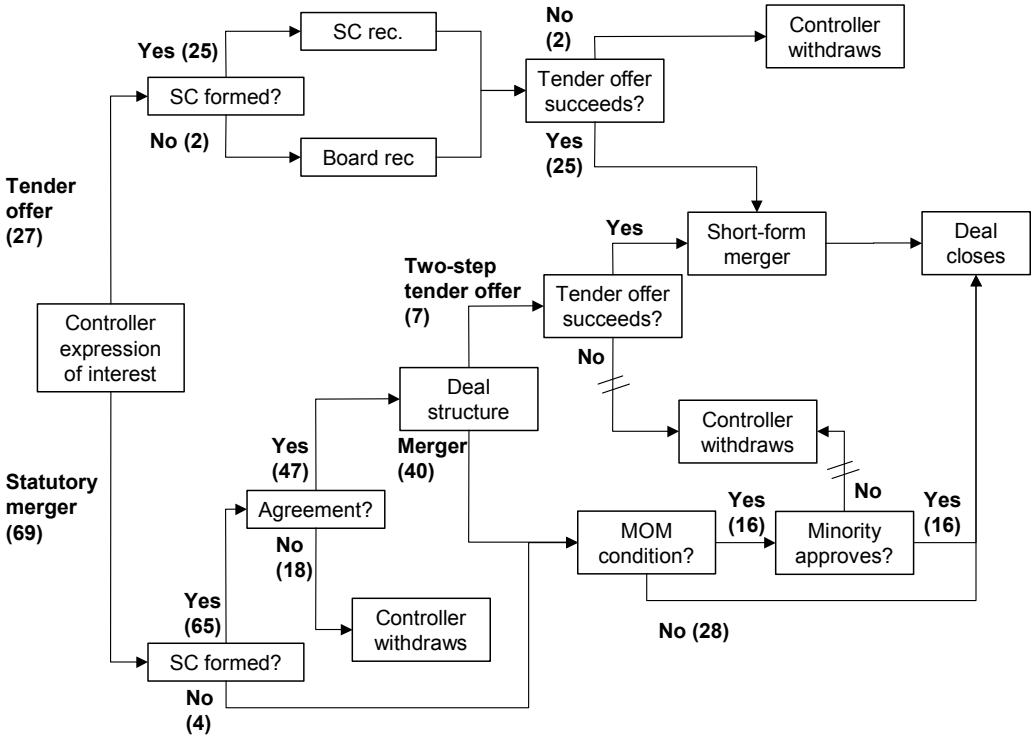
I classify each freeze-out as either a statutory merger or a tender offer. I classify seven merger freeze-outs that were executed as two-step tender offers as mergers, because the Delaware Chancery Court has held that these transactions are subject to entire fairness review.[24] Though admittedly a closer call, I also classify two freeze-outs that were executed as reverse stock splits as mergers, because the requirement of board action that seems to distinguish mergers from tender offers is met, and because the Chancery Court has subjected reverse stock splits to fairness review in other (non-freezeout) contexts.[25] The findings reported in this Part remain unchanged if I exclude reverse stock splits from the analysis.

4.2. Summary statistics

Figure 2 shows the breakdown of the transactions in the sample based on the transaction form used, the resulting negotiation between the controller and the target, and the outcome of the negotiation.

[24] Hartley v. Peapod, C.A. No. 19025 (Del. Ch. Feb. 27, 2002).
[25] Applebaum v. Avaya, 805 A.2d 209 (Del. Ch. 2002).

Figure 2: Freeze-out Roadmap (number of post-Siliconix transactions)



At the highest level, Figure 2 shows that 72% of post-*Siliconix* freeze-outs are still executed through mergers, and, conversely, only 28% of deals have taken advantage of the "get-out-of-jail-free card" (Gilson & Gordon 2003) and "fire sale" (Pritchard 2004) that *Siliconix* seems to provide. This split represents a substantial increase over the pre-*Siliconix* era: using the same methodology I find that only 9 out of 111 freeze-out transactions (8%) were executed as tender offers in the 30 months prior to *Siliconix* ($p<0.001$).[26] While some practitioners trace the roots of the *Siliconix* decision back to the Delaware Supreme Court's opinion in *Solomon v. Pathe Commmunications*[27] in 1996 (e.g., Wolfe 2002; Abramczyk, Cincilla & Honaker 2003), the sharp increase in tender offer incidence after June 2001 suggests that *Siliconix* provided a clearer articulation of the tender offer route than had existed previously. This responsiveness to Delaware M&A case law is consistent with Coates & Subramanian (2000), which presents evidence suggesting that practitioners changed the nature of deal protection devices in response

[26] This calculation counts seven tender offer freeze-outs announced by ThermoElectron on a single day (January 31, 2000) as a single freeze-out. If these seven transactions are counted separately, the fraction of tender offer freeze-outs in the thirty months prior to *Siliconix* increases to 13% (15 out of 117), still substantially lower than the 28% rate for tender offers in the thirty months after *Siliconix*.

[27] 672 A.2d 35 (Del. 1996).

to certain Delaware deal protection decisions. Still, the finding on post-*Siliconix* choice of transactional form is in tension with the common assumption in the academic literature that practitioners have made frequent use of the *Siliconix* mechanism to avoid entire fairness review, and with some practitioner claims that virtually all freeze-outs since *Siliconix* have been executed via tender offer.[28] I explore this point in Part 4.4 below.

Examining further the twenty-seven deals that were executed via tender offer, in only two situations (both cases in which there were no independent directors) did the target not establish a special committee of independent directors to assess the transaction, negotiate with the controller, and provide a recommendation to the minority shareholders. This finding supports the point made by Pritchard (2004) and Abramczyk, Cincilla & Honaker (2003) that minority shareholders in a tender offer freeze-out still (almost always) have a bargaining agent in the form of a special committee. The question remains, however, whether the SC can bargain as effectively in the tender offer context as in a merger. A final point on the upper half of Figure 2 is that the consummation rate for tender offer freeze-outs is high: 25 out of 27, or 93%, compared to 51 out of 69 (74%) for merger freeze-outs.

Turning to the lower half of the Figure 2 roadmap, the general picture of the merger process seems to be vigorous bargaining between the SC and the controller, indicated both by the high rate of SC formation (65 out of 69 deals, or 94%) and the high rate of impasse between the controller and the SC (18 out of 65 deals, or 28%). In contrast, conditional on SC approval, minority shareholder approval seems to be a non-binding constraint: only 36% of one-step merger deals (16 out of 44) were subject to a MOM condition, and all deals that were subject to a MOM condition received the requisite minority shareholder support. I return to this point in Part 5 below.

[28] For example, a partner at a major New York City law firm states: "I am not sure I can think of a going-private deal since *Pure Resources* [in August 2002] that has been done the old-fashioned way of negotiating a one-step merger agreement with a special committee of the target." David Marcus, *Cleaning Up Your Corporate Structure*, CORPORATE CONTROL ALERT, at 20 (July 2003). In fact there have been 33 of these "old fashioned" deals since *Pure Resources*, and (as shown in Figure 2) 69 since *Siliconix*. *Cf.* Pure Resources, 808 A.2d at 443 ("The absence of convincing reasons for this disparity in treatment inspires the plaintiffs to urge me to apply the entire fairness standard of review to Unocal's offer. Otherwise, they say, the important protections set forth in the *Lynch* line of cases will be rendered useless, as *all controlling shareholders* will simply choose to proceed to make subsidiary acquisitions by way of a tender offer and later short-form merger.") (emphasis added).

Table 1 provides further summary statistics, for all freeze-outs and broken down by transactional form.

[insert Table 1 about here]

Table 1 shows that 60% of freeze-out targets are Delaware corporations, higher than Delaware's overall market share of approximately 50% among U.S. publicly-traded companies (Subramanian 2002, Bebchuk & Cohen 2003). Delaware's larger market share among freeze-outs may be due to its more well-developed case law, which might promote freeze-outs, or because companies that contemplate moving between public and private status are more likely to incorporate in Delaware, or both.

On controlling shareholder characteristics, Table 1 shows that 6% are private equity buyers, with the remaining controllers split roughly evenly between individuals (or family groups) and corporate parents. Examining differences by transactional form, corporate parents are over-represented in the tender offer arena. Table 1 also shows that tender offers are larger deals than mergers. These two findings might be related, in that corporate parents may be more likely to hold controlling stakes in larger companies. Outside counsel with substantial M&A experience are also over-represented among tender offers, relative to mergers.

On deal characteristics, less than 20% of freeze-outs overall, including tender offer freeze-outs, involve stock rather than cash. This finding is inconsistent with Gilson & Gordon's claim that most post-*Siliconix* freeze-out tender offers have been for stock,[29] and also reveals that the disclosure of the bankers' valuation opinion, as urged in *Pure Resources*, is redundant for the 80% of freeze-outs that are subject to the same requirement under SEC Rule 13e-3.

On offer conditions, all but one tender offer freeze-out (96%) included a back-end guarantee at the same price as the initial offer.[30] More interestingly, Figure 2 shows that only 36% of all

[29] Gilson & Gordon at 785 n.172.

[30] *See, e.g.*, RDO Equipment SC-TO-C filed by Ronald D. Offutt (Dec. 17, 2002) ("If the conditions to his offer were satisfied and the offer completed, Mr. Offutt stated that he would subsequently effect a 'short-form' merger of the Company with his acquisition entity. In this merger, the remaining Company stockholders would receive the same price paid in the tender offer, except for those stockholders who elected to exercise their appraisal rights under Delaware corporate law."). One back-end guarantee in the sample was not airtight. *See* SBC Communications Schedule SC-TO-T ("Q: If SBC Internet consummates the tender offer, what are its plans with respect to all the

one-step merger freeze-outs (16 out of 44) include a MOM condition, and Table 1 shows that this proportion increases to only 45% when 90% conditions in two-step merger freeze-outs are included as well. This low incidence is consistent with the fact that current Delaware doctrine shifts the burden on entire fairness with either a SC process or a MOM condition. Because the vast majority of post-*Siliconix* merger freeze-outs went through a SC process, there is no further inducement in these deals for the controller to provide a MOM condition. This analysis supports the argument by Allen, Jacobs & Strine (2001) that greater judicial deference to freeze-outs that include a MOM condition might in fact lead to greater procedural protections for the minority.

On outcomes, Table 1 shows that freeze-out tender offers close in 100 days on average, compared to 194 days for mergers. This timing difference is consistent with conventional wisdom among practitioners that tender offers can serve to get cash to minority shareholders more quickly.[31] In tender offer freeze-outs, 74% of minority shareholders, on average, tendered in to the front-end tender offer, though this statistic masks variation ranging from 20% of minority shares tendered (IIC Industries) to 99% (National Home Centers). Note that the average tender is lower than the supermajority needed for a controller with less than a 62% stake in the target.[32]

This last finding has implications for the potential interaction between Hypotheses H1 and H2. Because Figure 2 shows that all merger freeze-outs that are approved by the SC eventually closed, the minority approval requirement (when it exists) may not be a binding constraint for merger freeze-outs. In contrast, when the controller proceeds via tender offer, the relatively low

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shares that are not tendered in the offer? A: If we consummate the tender offer, we intend to cause a merger to occur between Prodigy and SBC Internet . . . SBC Internet *presently intends* that the cash consideration paid in the merger will be the same as paid in the tender offer.") (emphasis added). I record this deal as having a back-end guarantee because, absent a change in circumstances, a lower price would have invited a fair price claim. Delaware law seems to require "the statement of intent to be sufficiently clear as to expose it [the controller] to potential liability in the event that it were to obtain 90% and not consummate the short-form merger at the same price." *See* Pure Resources, 808 A.2d 421, 447 n.51.

[31] *See, e.g.*, WorldPort Communications SC-TO-T (filed Dec. 23, 2002) ("Q: Why is [the controlling shareholder] not seeking approval of its offer from WorldPort's independent directors? A: We want to begin to realize the benefits of taking WorldPort private as soon as possible and believe that making a tender offer directly to WorldPort stockholders will be significantly faster than making a proposal for consideration by WorldPort's independent directors and negotiating a merger agreement with those directors. We believe that the WorldPort stockholders are capable of evaluating the fairness of the Offer. We also note that over 80% of the shares not owned by us would need to be tendered to satisfy the Minimum Condition. Accordingly, we are not seeking to negotiate our Offer with WorldPort.").

[32] A controller with a 62% stake needs 28% out of the remaining 38% (=74% of the minority) in order to achieve 90% control.

average tender suggests that minority approval may be a binding constraint in some deals in determining the final freeze-out price.

Anecdotal evidence supports the possibility that minority approval is a binding constraint in tender offer freeze-outs. For example, in February 2002, the KPN Group announced a tender offer at $2.25 cash per share for the remaining 47% of EuroWeb International that it did not own. As a 53% controller KPN needed 79% of the minority to tender (37% out of the remaining 47%) in order to achieve 90% voting control that would allow it to execute a short-form merger. EuroWeb formed a SC that recommended against the proposal, and a slim majority of the minority (55%) tendered into the offer.[33] Still needing another 24% of the minority to tender, KPN increased its offer to $2.70 per share. The SC recommended against this sweetened offer, and in April 2002 the KPN tender offer expired with insufficient shares tendered.[34]

In short, the summary statistics presented in Figure 2 and Table 1 suggest that the minority approval requirement (H2) might be the binding constraint in tender offer freeze-outs, and SC bargaining power (H1) might be the binding constraint in merger freeze-outs in determining deal price. I test this possible interaction in the multivariate analysis below.

Finally, Table 1 reveals large differences in the outcome of the bargaining process between tender offers and mergers. Consistent with Hypothesis H1, Table 1 shows that negotiated prices, as measured by increases over controllers' first offers and premiums over pre-deal market prices, are higher, on average, when the controller uses a merger compared to a tender offer. These differences are statistically and economically significant: a 10.9% difference in increases over first offers, and 17-30% differences in premiums. I explore these differences in more detail in Part 4.3 below.

4.3. Outcomes

I now examine the outcomes of freeze-out negotiations between the controller and the special committee in more detail, taking the transactional form used by the controller as exogenous. Although quantitatively assessing the effectiveness of the special committee against the

[33] *See* EuroWeb International 13E-3/A (filed March 20, 2002).
[34] EuroWeb remains a public company today. As of March 31, 2004 the Euroweb stock price was $4.95.

controller is inherently difficult, I use two measures that have some intuitive appeal and that are often cited by the special committee itself in its communications to shareholders advocating the transaction: first, the percentage increase from the controller's first offer to the controller's final offer; and second, the premium paid by the controller over the pre-deal market price of the stock, using baseline dates one day prior, one week prior, and four weeks prior to the announcement of the transaction.[35]

4.3.1. Increases over controller's first offer

I first examine the percentage increase from the controller's first offer to the controller's final offer. I define the first offer as the first formal offer that the controller makes to the target board. This offer is sometimes disclosed publicly at the time it is made, through a press release and 8-K filing by the target company, though more often it is disclosed after the transaction is announced in the company's Schedule 14A filing. In five transactions the controller proposed a price range as its first offer;[36] in these cases I use the midpoint of the range as the first offer. Interestingly, in no case did the SC make the first offer, although in some transactions there were substantial discussions between the controller and the SC before the controller made its offer. Four transactions provide insufficient information in the target's SEC filings in order to be able to determine the controller's first offer. These transactions are omitted from the results reported in this Part.

I define the final offer as the final agreed price at which the transaction closes. Because a final offer requires a completed transaction, I exclude failed transactions from the analysis. The first offer and final offer for freeze-outs using stock are the proposed and agreed upon stock exchange ratios. This approach avoids having to convert exchange ratios into cash equivalents,

[35] *See, e.g.*, National Home Centers, Schedule 14D-9 (filed August 14, 2001) ("The Offer Price represents a 22% premium over the $1.15 closing price per share of NHC common stock on October 4, 2001, the last trading day prior to the public announcement by NHC of the Offer Price. Based upon the course of discussions with the Purchaser, including the fact that Mr. Newman [the controlling shareholder] raised his initial proposed offer price from $1.20 per share, the Special Committee and the Board believed that the Purchaser would not be willing to pay more than $1.40 per Share."); Lexent Press Release (dated July 10, 2003) ("[Minority shareholders] will receive $1.50 per share in cash, an increase of $0.25 or 20% of the initial offer of $1.25 per share and an increase of 65% over the closing price of $0.91 on February 14, 2003, the date Lexent announced the Buying Group's initial offer of $1.25 per share.").

[36] *See, e.g.*, RDO Equipment Press Release (Dec. 16, 2002) ("Mr. Offutt [the controller] stated in his letter that he has not yet finally decided the offering price he is willing to pay for the Company shares he does not own. However, he has indicated that he is currently considering an offer in a range of $5.22 to $5.66 per share.").

which may introduce noise due to stock price fluctuations during the negotiation. So, for example, if the controller increases the exchange ratio in a stock freeze-out from 0.50 shares to 0.55 shares, this is recorded as a 10% increase rather than converting 0.50 shares and 0.55 shares to cash equivalents on the dates that these offers were made.

As a starting point, Table 1 shows a large and statistically significant difference in the percentage increase from the first offer to the final offer based on the transactional form used: when the freeze-out is structured as a merger, the controller increases its offer by 18.1% on average, compared to 7.2%, on average, when the freeze-out is executed as a tender offer. Median increases are equally striking: 11.6% for mergers, compared to 4.2% for tender offers. These findings are consistent with Hypothesis H1. Figure 3 provides additional detail behind the aggregate statistics reported in Table 1.

Figure 3: Increases over First Offer by Transaction Form

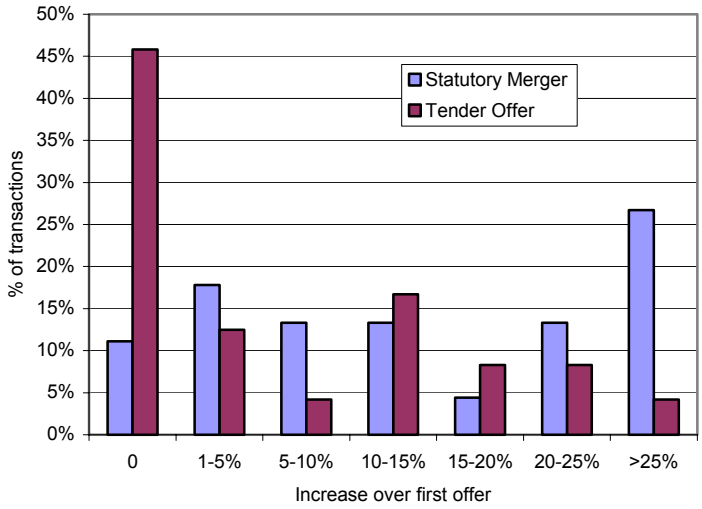

Figure 3 shows that nearly half of all controlling shareholders (11 out of 24) who execute successful tender offer freeze-outs do not increase their first offers. This basic finding is in tension with academic claims that special committees have bargaining power in tender offer freeze-outs. In addition, only 13% of controllers (3 out of 24) increased their first offers by more than 20% in tender offer freeze-outs, and only 4% (1 out of 24) increased their first offers by more than 25%. Figure 3 reveals a different picture when the freeze-out is structured as a

merger. In this case, more than half of all controllers (26 out of 45) increase their first offers by at least 10%, and more than one quarter of controllers (12 out of 45) increase their first offers by more than 25%. These findings are consistent with the view that SC's have greater bargaining power against the controller in freeze-out mergers than in freeze-out tender offers.

Analysis of SC recommendations in tender offer freeze-outs sheds additional light on the SC's bargaining power against the controller. Among the 27 tender offer freeze-outs in the sample, the SC approved the final offer price in 18 deals (67%), remained neutral in three deals (11%), and recommended against the final offer price in four deals (15%). As indicated in Figure 2, in the remaining two transactions the target board did not create an SC to negotiate with the controller. The controller successfully completed its freeze-out in all 21 deals in which the SC approved the final offer price or remained neutral. In the four deals in which the SC recommended against the final offer price, the controller was successful in two deals and was unsuccessful in two deals. This last finding indicates that SC approval is not a prerequisite for the controller's success in a tender offer freeze-out. If, as an empirical matter, controllers were generally unsuccessful when the SC recommended against the transaction, the SC recommendation would become valuable to the controller in a way that might give the SC de facto veto power, or at least greater bargaining power, against the controller. Instead, the 50% success rate for controllers even without SC approval suggests that SC's in tender offer freeze-outs do not have veto power, unlike SC's in merger freeze-outs. This difference may provide at least part of the explanation for the differences in outcomes reported in Table 1 and Figure 3.

In order to jointly examine Hypotheses H1 and H2, Table 2A presents statistics on first offers, divided by the transactional form used and the level of support required from minority shareholders.

[insert Table 2A about here]

The columns of Table 2A distinguish tender offer freeze-outs from merger freeze-outs. The rows of Table 2A distinguish whether the controller needs "high" or "low" support from minority shareholders. I classify tender offer freeze-outs as requiring "high" approval when the controller holds a below-median pre-deal stake in the target. The median pre-deal stake among

the sample of successful tender offer freeze-outs (n=25) is 73.0%. I define merger freeze-outs as requiring "high" approval when the deal includes a MOM condition (in a one-step merger) or a 90% condition (in a merger executed as a two-step tender offer).

Consistent with Hypothesis H1 and the data presented in Figure 3, Table 2A shows that controlling shareholders make fewer concessions, as measured by increases over first offers, in tender offer freeze-outs than in merger freeze-outs. With respect to Hypothesis H2, the evidence is mixed. In tender offer freeze-outs, the evidence is directionally consistent with Hypothesis H2: controllers make larger concessions to the SC when it needs large support from minority shareholders. In merger freeze-outs, however, there is no statistically significant difference based on the level of minority support required; in fact, merger freeze-outs without a MOM condition yield directionally greater increases than merger freeze-outs with a MOM condition. One possible interpretation of this latter finding is that Hypothesis H2 is not a binding constraint in merger freeze-outs, because the SC does all the "work" to push up the price and the SC's bargaining power does not depend on the level of minority support needed. Another possibility, not necessarily mutually exclusive, is that a controlling shareholder may pay more in order for the SC to abandon the MOM condition. That is, the SC may bargain away a MOM condition in exchange for a higher price from the controller. This possibility, if correct, would be consistent with Coates & Subramanian (2000), which finds a correlation between deal protection devices such as break-up fees and higher premiums in third-party (arms-length) acquisitions.

Of course, one concern with the analysis of outcomes thus far is that first offers may be endogenous to final offers. For example, because Figure 3 shows that first offers are more likely to "stick" in the case of a tender offer, a controller who knows this fact may be more likely to offer closer to its best price as a first offer. If first offers are endogenous, then increases over first offers do not provide an accurate measure of the controller's concession to the special committee. To attempt to address this concern, I now turn to evidence on deal premiums relative to the targets' pre-deal market price.

4.3.2. Premiums over pre-deal price

In contrast to first offers, pre-deal market prices are relatively exogenous to the negotiation process between the controller and the target's special committee. However, using premiums

over market price as a measure of the SC's bargaining power suffers from other drawbacks because the minority stock in companies with a controlling shareholder is often thinly traded; in fact it is this point that often motivates the controller to freeze out the minority in the first place. In this Part I present data on premiums paid in freeze-out transactions over the pre-deal market price, again divided between tender offer and merger freeze-outs. Because market prices fluctuate, and because, more specifically, the pre-deal stock price may increase due to rumors of an impending freeze-out, I use three baseline dates: one day prior to the announcement date of the deal; one week prior to the announcement date; and four weeks prior. I adjust the premium received for market movements between the three baseline dates and the announcement date, using the CRSP value-weighted index. Tables 2B, 2C, and 2D present summary statistics.

[insert Tables 2B, 2C & 2D about here]

The results reported in Tables 2B-2D all demonstrate a pattern that is directionally consistent with Hypotheses H1 and H2. In each table, mean and median premiums are lower in tender offers than in mergers, for both "low" and "high" levels of minority approval and overall. This finding is consistent with Hypothesis H1. Further, Tables 2B-2D all show that, for a given transactional form, mean and median premiums are higher when the controller requires a high level of minority shareholder support, consistent with Hypothesis H2. Visually, premiums are increasing in the south and easterly direction in all three tables 2B-2D.

The findings reported in Tables 2A-2D also provide some evidence on the endogeneity of first offers to final outcomes. Putting together the findings from Tables 2A and 2B, I estimate that the average first offer in a tender offer freeze-out represents a 25% premium over the pre-deal market price, and the average first offer in a merger freeze-out represents a 28% premium over pre-deal market price.[37] This finding is inconsistent with the theory that first offers are endogenous to final outcomes, which would predict that controllers in freeze-out tender offers should make higher first offers, relative to pre-deal market price, because such offers need to be

[37] Consider a target company with a pre-deal stock price of $100, and a controller with an above-median stake. Using the premium data from Table 2B, the predicted final outcome in a tender offer freeze-out would be $133.80 per share and the predicted outcome in a statutory merger freeze-out would be $151.00. Table 6A then permits working back to average first offers: $124.81 for the tender offer (=$133.80 / 1.072) and $127.86 (= $151.00 / 1.181) for the statutory merger, implying premiums of 25% and 28%, respectively, for first offers. Results are directionally the same if I use premiums from Tables 2C or 2D instead.

increased by less. This finding also highlights the bargaining power that a controller has in a freeze-out tender offer: the controller starts lower, *and* increases its offer by less, compared to a controller in a merger freeze-out.

In the next Part I control for other factors that might influence the bargaining process between the controller and the special committee in freeze-outs.

4.3.3. Multivariate analysis

I now control for target characteristics, controlling shareholder characteristics, and deal characteristics that might influence the bargaining relationship between the controller and the special committee. For the dependent variable I use the four outcome measures as described above: the percentage increase over the controller's first offer, and premiums paid over the pre-deal market price of the stock one day prior, one week prior, and four weeks prior to the deal announcement date, adjusted for market movements over these periods.

To test Hypothesis H1, I include a dummy variable TENDER, set to 1 if the freeze-out is executed as a tender offer. Hypothesis H1 predicts that the TENDER coefficient will be statistically significant and negative. To test Hypothesis H2, I include a scalar variable MINREQ, which measures the percent of minority shares that the controller needs in order to close the transaction. MINREQ ranges from 0 for merger freeze-outs without a MOM in which the controller holds more than 50% of the voting shares, to 50 for mergers with a MOM condition, to more than 80 for some tender offer freeze-outs made by relatively small controlling shareholders. Hypothesis H2 predicts that the MINREQ coefficient will be statistically significant and positive.

I also include several controls. First, I include a dummy variable DEINC, set to 1 for targets incorporated in Delaware. Although other states generally follow Delaware corporate law on most issues involving fundamental transactions (e.g., Subramanian 2003b), Delaware targets may be different from targets in other states which have not yet explicitly articulated a standard of review for freeze-out transactions executed through tender offer. Because this difference between Delaware and non-Delaware targets is potentially important, I also run the model on Delaware targets only. Second, I control for the identity of the controlling shareholder, using the

same categories as reported in Table 1. Third, I control for other deal characteristics, such as the size of the deal (LNVAL, defined as the natural log of deal value) and whether the consideration is stock or cash (STOCK, set to 1 for stock deals).

All models are run as ordinary least squares (OLS) regressions. Because Cook-Weisberg tests indicate heteroskedasticity, I report White-corrected standard errors. The results are reported in Tables 3A & 3B.

[insert Tables 3A & 3B about here]

In Table 3A, the TENDER coefficient is negative and statistically significant in all models, providing strong support for Hypothesis H1. In Table 3B the TENDER coefficient continues to be negative in all models but is only statistically significant in two out of four regressions. The weaker results in Table 3B may be due at least in part to the smaller sample size. In Table 3A, the difference in outcomes between tender offer and merger freeze-outs is economically meaningful. Using the method of recycled predictions and the coefficients from Model #4 in Table 3A, I estimate that the average premium paid over the target's stock price four weeks prior to deal announcement decreases from 56.8% to 21.3% when a controller uses a tender offer rather than a merger. Using the median transaction value of $14.5 million from Table 1, this difference implies that controllers who executed their freeze-outs as mergers paid an extra $3.2 million to the minority, on average.

In contrast to these findings on Hypothesis H1, the results in Tables 3A and 3B do not support Hypothesis H2. The MINREQ coefficient is not statistically significant in any of the models, and has a negative sign (inconsistent with H2) in several regressions. In unreported regressions I use non-linear transformations of MINREQ and calculate MINREQ as a fraction of shares outstanding rather than the fraction of minority shares, and also do not obtain statistically significant results.

While the results in Tables 3A-3B do not support Hypothesis H2 on its own, a potential interaction between Hypotheses H1 and H2 still remains possible. As described in Part 3, Hypothesis H2 might be a binding constraint only for tender offers. In order to test this possibility, I replace the dummy variable TENDER with a new variable TENDER*CONTROL,

in which CONTROL is defined as the controlling shareholder's pre-deal stake in the target, above the threshold stake of 35%. For tender offers, CONTROL represents a monotonic transformation of MINREQ that tests the hypothesis that the difference in outcomes between tender offer freeze-outs and merger freeze-outs increases as the level of necessary minority support declines. As in Table 3 I run the model on all targets in the sample and also on Delaware targets only. The results are reported in Table 4.

[Insert Tables 4A & 4B here]

The results in Table 4A and 4B generally support the H1/H2 interaction. The TENDER*CONTROL coefficient is negative and statistically significant in all models, at at least 90% confidence. This finding is consistent with the joint hypothesis that controllers pay less in tender offers relative to merger freeze-outs, and this difference increases with the controller's stake. One intuitive explanation for this finding is that when the controller is relatively small, the supermajority approval needed from the minority in a tender offer provides built-in protection that compensates for the SC's lower bargaining power. In contrast, when the controller is large, the controlling shareholder can more effectively "turn the screws" against the SC because it does not need supermajority approval from the minority. To use the vocabulary introduced by Vice Chancellor Strine in *Pure Resources*,[38] bigger gorillas seem to take more of the bananas in tender offer freeze-outs.

Examining other variables, the coefficient for private equity controlling shareholders is statistically significant but not consistent in sign across models. This may be a spurious correlation due to the relatively small number of private equity controlling shareholders in the sample (Table 1). No other variables are statistically significant at 95% confidence in any of the models reported in Tables 4A or 4B.

[38] *See* Pure Resources 808 A.2d 421, 435 ("In colloquial terms, the Supreme Court saw the controlling stockholder as the 800-pound gorilla whose urgent hunger for the rest of the bananas is likely to frighten less powerful primates like putatively independent directors who might well have been hand-picked by the gorilla (and who at the very least owed their seats on the board to his support).").

4.3.4. Time trend analysis

The finding that controlling shareholders pay less in tender offer freeze-outs than in statutory merger freeze-outs may be surprising in view of the fact that few, if any, barriers exist to choosing one transactional form or the other. Therefore, one might expect statutory merger freeze-outs to be negotiated in the "shadow" of a tender offer freeze-out. Here the somewhat byzantine Delaware case law requires a careful dance by the controller in its negotiations with the SC: while the controller cannot threaten a tender offer freeze-out as a means of forcing the SC to accept the offer on the table,[39] it is free to break off negotiations with the SC and simply commence a tender offer directly to the minority.[40] If the controller and the SC know this fact, one might expect outcomes in merger freeze-outs to be statistically indistinguishable from outcomes in tender offer freeze-outs. The evidence presented in the previous Part is inconsistent with this prediction.

As a potential variation on this theme, we might expect to see convergence in outcomes between tender offer freeze-outs and merger freeze-outs as lawyers and law firms become more comfortable with the tender offer mechanism, and a tender offer therefore becomes a better understood implicit threat in the freeze-out merger negotiations.[41] To test this theory, I include in the Table 3 models a new interaction variable TENDER*LTREND, in which LTREND is calculated as the natural log of the number of days between the *Siliconix* decision and the deal announcement date. If merger freeze-outs are increasingly negotiated in the shadow of a tender offer freeze-out, as controlling shareholders and/or their legal counsel become more aware of the benefits of the tender offer route, the coefficient for the new TENDER*LTREND variable should be statistically significant and positive. However, in unreported regressions, I find that this new interaction variable, as well as standard transformations, is not stable in magnitude or sign, and is not statistically significant.

An alternative possibility is that merger freeze-outs are not negotiated in the shadow of a tender offer freeze-out, either because a tender offer freeze-out is not a viable substitute for

[39] *See, e.g.,* Kahn v. Lynch, 638 A.2d 1110 (Del. 1994).
[40] *See, e.g.,* In re Siliconix Shareholders' Litigation, 2001 WL 716787 (Del. Ch. 2001).
[41] I thank Jeff Gordon for this hypothesis.

certain types of deals, or because certain law firms are not aware of the benefits of the tender offer route, or both. I examine this possibility in the next Part.

4.4. Transactional form

I now turn to the determinants of transactional form between mergers and tender offers. The theory developed in Part 3 predicts that the likelihood of using a tender offer should be increasing in the controller's stake (H3), and that outside counsel with significant M&A experience should be more likely to use a tender offer (H4). Following Coates (2001), I use the number of prior M&A transactions as a proxy for the M&A experience of the controller's outside counsel. Specifically, I use the Thomson Financial Corporation M&A database to tabulate the number of deals in which each law firm was either an advisor to the acquirer or the target, for all arms-length mergers and acquisitions of U.S. public companies during the period 1990-2003. I classify the fifteen law firms that have advised on the largest number of deals as "experienced" M&A law firms.[42]

4.4.1. Summary statistics

Table 5A presents summary statistics on the incidence of tender offer freeze-outs, divided by the controller's pre-deal stake and the M&A experience of the controller's outside counsel. Because preliminary analysis of the data suggests an inflection point at 70% control, I divide the sample between below and above 70% control. Table 5B presents the same summary statistics for Delaware targets only.

[insert Tables 5A & 5B about here]

Overall, Tables 5A and 5B support Hypotheses H3 and H4. Examining all deals in the sample, Table 5A shows that 45% percent of controllers with high control executed their freeze-outs via tender offer, compared to 17% of controllers with low pre-deal control. This difference is statistically significant at 95% confidence and supports Hypothesis H3. On the M&A

[42] In descending order, these law firms are (number of deals in parentheses): Skadden, Arps, Slate, Meagher & Flom (793), Sullivan & Cromwell (670), Simpson, Thacher & Bartlett (503), Shearman & Sterling (448), Dewey Ballantine (448), Morris, Nichols, Arsht & Tunnell (440), Wachtell, Lipton, Rosen & Katz (428), Fried Frank (352), Richards, Layton & Finger (327), Cravath, Swaine & Moore (312), Davis, Polk & Wardwell (275), Latham & Watkins (274), Gibson, Dunn & Crutcher (263), Cleary Gottlieb (257), and Jones Day (236).

experience of the controller's outside counsel, Table 5A shows that 57% of deals with experienced outside counsel were executed via tender offer, compared to 21% of deals with less experienced outside counsel. This difference is also statistically significant at 95% confidence and supports Hypothesis H4.

When Delaware targets only are examined, Table 5B shows that these differences become more pronounced and statistically stronger, consistent with the view that *Siliconix* provides a clearer path in Delaware than it does in other states. Specifically, among the eleven Delaware freeze-outs that were executed by a large controller advised by experienced outside counsel, all but one (91%) were executed via tender offer. This finding might provide a reconciliation between New York City practitioners' impressions that virtually all freeze-outs are executed via tender offer, and the evidence presented in this paper that more than two-thirds are not.

Interestingly, the one exception among the eleven deals in this category was Samuel Heyman's freeze-out of the minority shareholders of International Specialty Products (ISP) in July 2002. Heyman has established a reputation over the past three decades as a tough bargainer in the takeover arena. For example, according to Bruck (1989:287), even junk bond king Michael Milkin, at the height of his power at Drexel Burnham Lambert in the mid-1980s, was willing to "take a beating" from Heyman in deal financing negotiations. Heyman's reputation, then, may have given him considerable bargaining power against the ISP special committee despite going through the merger route. Consistent with this view, Heyman increased his first offer by only 3% (from $10.00 to $10.30) in order to gain SC approval.[43]

Overall, the differences in tender offer incidence between experienced and less experienced firms are larger and statistically stronger when the controller holds a large stake, suggesting a

[43] The end-game is particularly interesting: "On November 4, 2002, the Majority Stockholder authorized his legal advisors to indicate his potential willingness to increase the per share merger consideration to $10.30 per share [from $10.25]. In a meeting on that day, the special committee discussed the fairness of the proposal to ISP's minority stockholders and agreed to reject the proposal of $10.30 per share, but to inform the Majority Stockholder's representative that . . . it would consider recommending the proposal at $10.35 per share. The Majority Stockholder's representative stated that the Majority Stockholder would not accept that share price, and that if the special committee could not recommend the proposed transaction at $10.30 per share that the Majority Stockholder would withdraw the offer. . . . On November 6, 2002, the special committee met to discuss the Majority Stockholder's response to the special committee's attempts to increase the offer price of $10.30 per share. . . . On November 7, the parties announced that the Majority Stockholder and the special committee had reached an agreement with respect to the merger at a price of $10.30 per share in cash, subject to approval by ISP's board of directors." *See* International Specialty Products Schedule 13D.

potential interaction between Hypotheses H3 and H4. I test this possibility, and control for other factors that might influence transactional form, in the multivariate analysis presented in the next Part.

4.4.2. Multivariate analysis

I now run a multivariate regression to control for other factors that might influence choice of transactional form. The dependent variable is TENDER, set to 1 if the controller executed the freeze-out through a tender offer, and 0 if the controller executed the freeze-out through a statutory merger. To test Hypothesis H3, I include a continuous variable TMINREQ, which measures the percent of minority shares that would be needed in a tender offer freeze-out. TMINREQ is inversely correlated with the controller's pre-deal stake, as described in Part 3.2. Hypothesis H3 predicts that the coefficient for TMINREQ should be statistically significant and negative.

To test Hypothesis H4, I model law firm experience in three ways. In one specification I include a dummy variable EXPERIENCED?, set to 1 if the controller's outside counsel has substantial M&A experience as defined above. In a second specification I include the continuous variable EXPERIENCED?*CONTROL, to test a potential interaction between Hypotheses H3 and H4. In a third specification I include the dichotomous variable EXPERIENCED?*HIGHCONTROL?, in which HIGHCONTROL? equals 1 for deals in which the controller's pre-deal stake is 70% or more. This third specification makes use of the inflection point suggested in Table 5 and provides a discontinuous test of the H3/H4 interaction. The prediction is that all of these variables will be positive and statistically significant.

In order to further test Hypothesis H4, I include a continuous variable LTREND in certain specifications, defined as in the previous Part. If law firms learned over time about the benefits of the tender offer mechanism, LTREND should be statistically significant and positive as well.

As in the previous Part I include controls for Delaware incorporation, the identity of the controller, the size of the transaction, and the consideration used. The model is run as a probit regression, though results are virtually identical if I run the model as a logit. The results are reported in Tables 6A and 6B.

[insert Tables 6A & 6B about here]

The results generally support Hypothesis H3. The TMINREQ coefficient is negative in all but one model and is statistically significant in three out of four models in Table 6A. The results provide some, though weaker, support for Hypothesis H4 and the interaction between H3 and H4. In Model #2, the EXPERIENCED? dummy variable is positive in both Table 6A and 6B, consistent with H4, though it is statistically significant at 90% confidence only in Table 6B. In Model #3, EXPERIENCED*CONTROL again is positive in both models and statistically significant at 90% confidence in Table 6B. The strongest results are in Model #4, in which the EXPERIENCED?*HIGHCONTROL? dummy variable is significant at 90% confidence in Table 6A and at 95% confidence in Table 6B. Overall, the results suggest that experienced law firms have a stronger inclination toward tender offers when the target is incorporated in Delaware, again consistent with the intuition that *Siliconix* provides a clearer path for Delaware targets than it does for targets in other states.

The coefficients for LNVAL are positive in all models, and statistically significant in five out of eight models. One possibility is that tender offers entail higher fixed costs than mergers, and so a tender offer becomes more likely as these fixed costs can be amortized over a larger deal value. Another possibility is that controllers are more likely to hire experienced outside counsel in larger deals, and experienced counsel are more likely to recommend the tender offer route.[44] In this second scenario the LNVAL coefficient would be capturing some of the influence of outside counsel in the transaction form decision. In unreported regressions I exclude LNVAL from the Table 6 model; in these regressions the coefficients for EXPERIENCED?, EXPERIENCED?*CONTROL, and EXPERIENCED*HIGHCONTROL? are all statistically significant in the predicted direction, at 95% in the Table 6A models and at 99% in the Table 6B models.

However, the results on law firm experience are generally less robust than the other findings presented in this paper. In unreported regressions, I classify firms as "experienced" if they are among the top ten in M&A experience, or the top twenty, rather than the top fifteen. I also use continuous variables EXPERIENCE and LOG(EXPERIENCE), which simply measure the

[44] I thank Ron Gilson for this hypothesis.

number of M&A transactions that each buy-side law firm worked on during the period 1990-2003. In these alternative specifications, the EXPERIENCE coefficients are generally positive, consistent with Hypothesis H4, but generally not statistically significant at any conventional level. One possible interpretation of these (non)findings is that law firm network and learning effects operate among a particular set of New York City and Wilmington, Delaware law firms, rather than being more continuous.

In addition to the fragility of the law firm result, I cannot rule out the possibility that a controller is more likely to hire experienced outside counsel when it knows that it will execute its freeze-out via tender offer – that is, a client-driven effect rather than a lawyer-driven effect. In order to attempt to isolate the causal chain running from choice of outside counsel to transactional form chosen, I use a two-stage instrumental variable (IV) approach. Following the methodology introduced by Maddala (1983:246) and illustrated by Comment & Schwert (1995), I first run a probit regression to predict whether the controller will choose outside counsel that has substantial M&A experience. In the second-stage regression I replace the dummy variable EXPERIENCED? with predicted values from the first-stage model. In these regressions (unreported), I find that the coefficients for EXPERIENCED?, EXPERIENCED*CONTROL, and EXPERIENCED*HIGHCONTROL? are consistently positive, as in Table 6, but they are not statistically significant at any conventional level. I therefore cannot rule out the possibility that the apparent connection between experienced outside counsel and transactional form is in fact driven by client selection of outside counsel.

The STOCK coefficient is negative in all models and statistically significant in Model #1. This result presents something of a puzzle. Historically this finding might have been explained by the fact that the time required for stock registration would have eliminated one of the primary benefits of a tender offer, namely, speed, as reported in Table 1. However, the SEC's Reg. M-A release, issued in January 2000, sought to level the playing field between stock exchange offers and cash tender offers by allowing exchange offers to begin before the registration statement became effective. One possible explanation for the result in Tables 6A and 6B is that Reg. M-A did not truly level the playing field between stock and cash offers. Another possible explanation is that practitioners have not completely adapted to the new regime that Reg. M-A provides.

4.5. Discussion

At the highest level, the evidence presented in this paper rejects the assumption in most academic and practitioner commentary that many if not most post-*Siliconix* freeze-outs are executed via tender offer. To the contrary, I find that more than two-thirds of freeze-outs in the current doctrinal regime are still executed through the traditional merger route. This divide in transactional form provides the basis for a natural experiment between tender offer and merger freeze-outs in the post-*Siliconix* era. The evidence from this natural experiment provides new insights on both deal outcomes and choice of deal form.

On outcomes, I find strong evidence that controlling shareholders are able to pay less in tender offer freeze-outs than in statutory merger freeze-outs. Interviews as well as informal conversations with New York City and Delaware lawyers indicate that this finding is consistent with practitioner experience. For example, reacting to an earlier version of this paper presented at a panel discussion at the Harvard Law School, Jim Morphy, head of the M&A practice at Sullivan & Cromwell, stated:

> In a tender offer the controlling stockholder, in effect, says to the other stockholders, "Here is my offer: the stock was trading at $6.25, I'm willing to pay you $8.00. That's your choice – you can have $8.00 or you can have $6.25." Because it is difficult for stockholders, as a group, to bargain collectively, the tendency if you are a stockholder is to take the $8.00. Someone might have a mathematical analysis of how this all works but that is essentially what takes place in the absence of an effective bargaining agent like a special committee. In the merger scenario, given the difference in statutory and legal standards, the special committee is not as easily by-passed by the controlling stockholder. Therefore its choice is not between $6.25 and $8.00. Armed with information and sufficient authority, it can go out and negotiate for something better.

Despite this consistency with practitioner experience, the finding on deal outcomes is in tension with some academic and judicial commentary that minority shareholders have equivalent protections in freeze-out tender offers and mergers. For example, in *Siliconix* itself, Vice Chancellor Noble reasoned that "as long as the tender offer is properly pursued, the free choice of the minority shareholders to reject the tender offer provides sufficient protection." The evidence presented in this paper suggests that this is not the case, at least as measured against the benchmark of the freeze-out merger process.

These findings on deal outcomes also introduce a puzzle: why would controlling shareholders ever proceed via statutory merger? On this question the evidence is less clear. I present some evidence that controllers are more likely to proceed via merger when they hold a relatively small stake, presumably in order to avoid high minority shareholder approval that would be required in a tender offer. I also present some evidence that controllers are more likely to proceed via tender offer when the controller's outside counsel has substantial M&A experience, particularly if the target is a Delaware corporation. Of course, these results on law firm experience cannot, on their own, demonstrate the direction of causation, and it remains possible that clients who were predisposed to go through the tender offer route were more likely to hire outside counsel with more M&A experience. However, informal discussions with New York City practitioners suggests that the causation runs from law firms to transactional form, that is, a lawyer-driven effect rather than a client-driven effect, in which certain law firms, primarily headquartered in New York City, are more aware of, or comfortable with, "cutting edge" freeze-out techniques.[45] If correct, this causal relationship suggests that some controlling shareholders paid more than they had to in their freeze-out transactions because of their choice of outside counsel.

This conclusion is generally consistent with Coates (2001), which finds a difference between Silicon Valley and New York City law firms in the installation of takeover defenses at IPO firms during the period 1991-1992, but convergence between Silicon Valley and New York City firms by 1998. In fact, this study and Coates (2001) represent bookends that portray a similar picture: at both entry (IPO) and exit (freeze-out) from public status, new corporate law practices (takeover defenses, tender offer freeze-outs) seem to disseminate slowly across law firms. Coates (2001) infers that the new practice in question (takeover defense) was beneficial to principals from the fact that the incidence of defenses increased over time. This paper presents more direct evidence on the question of optimality for clients by examining deal outcomes. Assuming that controlling shareholders would generally prefer to pay less rather than more when freezing out the minority, the evidence presented here suggests that firms with more M&A experience were more effective in achieving this goal.

[45] *Cf.* Pak Mail Schedule 14A ("The merger structure for the transaction was selected for, among other reasons, its structural simplicity and ease of administrative execution, as opposed to more complex transaction structures.").

5. Implications[46]

The results presented in this paper support arguments for convergence between tender offers and mergers, on both welfare maximization and doctrinal coherence grounds. On social welfare, this paper identifies more precisely the *ex ante* pricing calculation that is required under the current Delaware doctrinal regime. Investors considering taking a minority position in a controlled company must estimate, first, the lower price that they will receive, in expectation, in a tender offer freeze-out under *Siliconix*, and second, the likelihood that the controller will proceed via tender offer rather than merger. Systematic mis-estimation in either of these two steps (possibly due, e.g., to gradual shifts in legal guidance on choice of transactional form) will lead to mis-pricing of a minority position, which in turn will reduce allocational efficiency. Controllers may also be less able to attract investors into a minority position due to the economic uncertainty created by *Siliconix*, which reduces access to public capital. (La Porta, Lopez-DeSilanes, Shleifer & Vishny, 2002) Though controllers could mitigate these efficiency losses by committing *ex ante* to a certain transactional form, to my knowledge no controller since *Siliconix* has done so. Thus the evidence presented in this paper bolsters arguments for doctrinal convergence between tender offers and mergers by identifying an efficiency loss (not just a one-time wealth transfer) that the current regime creates.

On doctrinal coherence, Delaware corporate law generally looks to the appraisal remedy for guidance in determining the fair value of minority shares (Coates 1999), and in appraisal Delaware law articulates a pro rata claim on the going concern value as the natural measure of a minority shareholder's entitlement.[47] In this analysis transactional form cannot play a role. The fact that it does as an empirical matter suggests either that Delaware doctrine must alter its conception of a fair entitlement in response to the transactional form used by the controller, or that the Delaware doctrine of freeze-outs should be made less sensitive to transactional form. Because the former doctrine is well-established while the latter is very much unresolved, it would seem that doctrinal convergence is the more plausible way forward.

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[46] In this Part I benefited greatly from insights developed at a panel discussion on freeze-outs held at the Harvard Law School on April 6, 2004, at which summary data from Part 4 was presented. I am grateful to my fellow-panelists Frank Balotti, Robert Clark, Jim Morphy, Gil Sparks, and Vice Chancellor Leo Strine for their interpretations of this data and more general observations on freeze-outs. Of course, the views expressed here are solely my own and should not be attributed to the other panelists.

[47] *See, e.g.*, Cavalier Oil Corp. v. Harnett, 564 A.2d 1137 (Del. 1989).

The question then becomes how best to achieve such convergence. As a starting point it is important to note that entire fairness review is a judicial (not statutory) construct, and therefore can be shaped with a relatively free hand by the Delaware courts. The Chancery Court in *Siliconix* approached the standard of review question by examining the board's statutory role: because the board is the gatekeeper to the statutory merger process but plays no formal role in tender offers, the court carved out tender offers as an exception to the traditional entire fairness review for self-dealing transactions. However, as several post-*Siliconix* judges and academic commentators have noted (e.g., V.C. Strine in *In re Pure Resources*; Gilson & Gordon 2003), this reasoning runs counter to a long line of Delaware case law that is precisely about the appropriate role for the target board in hostile tender offers. In order to avoid this considerable tension (if not contradiction) between the board's role in third-party tender offers and the board's role in freeze-out tender offers, the better approach would be a return to first principles of Delaware corporate law, under which the objective in a self-interested transaction is to emulate, to the extent possible, the process and outcome of an arms-length negotiation. Applying this general principle to the freeze-out context, courts should assess the extent to which the negotiation process emulates both prongs of the arms-length merger process, namely, disinterested board approval and disinterested shareholder approval. The more the process provides both of these procedural safeguards, the more likely a court should be to apply business judgment review; conversely, the more the process does not include these procedural safeguards, the more likely a court should be to apply entire fairness review.

The evidence presented in this paper suggests that current freeze-out doctrine falls short of this arms-length standard in two important respects. First, because SC's do not have bargaining power in tender offer freeze-outs, SC approval in tender offers does not adequately emulate target board approval in a third-party context, in which both parties have veto power. Second, because current doctrine provides no incentive for the controller to provide a MOM condition in a merger freeze-out after the controller has received SC approval, almost two-thirds of one-step merger freeze-outs do not provide this protection. Putting these points together, the theory and evidence presented in this paper suggest that current doctrine falls short with respect to the first element of the arms-length merger process (i.e., disinterested board approval) with respect to

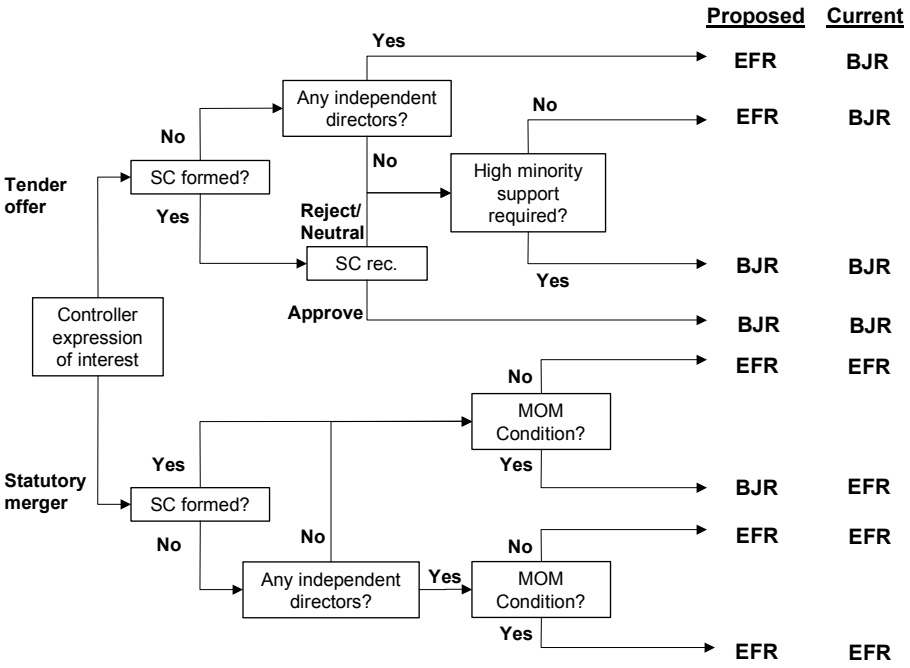
tender offer freeze-outs, and falls short with respect to the second element (disinterested shareholder approval) with respect to the freeze-out mergers.

The objective, then, is to construct a more tailored application of business judgment review (BJR) and entire fairness review (EFR) that is sensitive to specific procedural choices that the controller and the SC make, rather than simply applying BJR for tender offers and EFR for merger freeze-outs. Specifically, when a deal process includes meaningful SC bargaining power against the controller and minority shareholder approval, courts should apply BJR; when either or both of these process prongs are weak or non-existent, courts should apply EFR. If properly constructed, the system of standards of review would create incentives for controllers to provide adequate procedural protections to the minority, regardless of the transactional form used. By extension, a properly constructed system of review would achieve convergence in process and outcomes between freeze-out mergers and freeze-out tender offers.

An additional objective for doctrinal reform, not implied by the results presented here but generally well-accepted among practitioners and academics, is that EFR should be deployed sparingly, given the cost and difficulty of its application. In fact, part of the explanation for the dramatic doctrinal gap between *Kahn v. Lynch* (in which the Delaware Supreme Court maintained EFR for freeze-out mergers) and *Siliconix* (in which the Chancery Court abandoned EFR for freeze-out tender offers) may be the fact that Chancery judges "personally face the daunting task of valuation" and therefore may be "institutionally inclined to avoid it wherever they can do so responsibly" (Allen & Kraakman 2003:312). This aspect of judicial realism suggests that the simple solution of applying EFR to all freeze-out transactions, as proposed by Cannon (2003) and Resnick (2003), may not adequately account for institutional realities and may introduce judicial costs that outweigh the benefits of doctrinal convergence.

Considering these objectives together, and drawing from proposals put forward by Gilson & Gordon (2003), Allen, Jacobs & Strine (2001), and Wolfe (2002), I summarize my proposal for reform in Figure 4.

Figure 4: A Proposal for Reform



Beginning with the upper branch of the tree, the proposed approach, following Gilson & Gordon (2003), applies BJR for freeze-out tender offers in which the controller receives SC approval and sufficient minority approval in the form of tendered shares. This proposal is consistent with Chancery Court's holding in *Siliconix*, but for a different reason: while the Chancery Court applied BJR because of the absence of a statutory role for the board in a tender offer, the proposed approach applies BJR because the transaction received both SC approval and (through shares tendered) minority shareholder approval. This difference in reasoning yields important differences around the edges of the preferred route: if the target has independent directors but does not form an SC, or if an SC is formed and recommends against the deal, the *Siliconix* approach continues to yield BJR in a tender offer freeze-out, while the proposed approach yields EFR because the board approval condition is not satisfied. Note that this difference around the edges of the preferred route creates incentives for the target to establish a SC and for the controller to gain SC approval, which in turn give the SC bargaining power against the controller.

However, the SC's bargaining power against the controller is not unchecked. In a departure from Gilson & Gordon, I propose BJR if the SC recommends against the transaction but the controller nevertheless is able to gain supermajority support among the minority shareholders. This point follows from the theoretical model and empirical evidence presented in this paper suggesting that minority shareholder approval can be an important built-in (structural) constraint against the controller in a tender offer freeze-out. This contour limits the SC's ability to unreasonably withhold approval against a price that appeals to a supermajority of minority shareholders. Indirectly, this contour gives greater bargaining power to the SC against a large controller compared to a smaller controller, precisely where the theory and empirical evidence presented in this paper indicate that bargaining power is needed. The reason is that a large controller does not need supermajority approval from the minority; therefore, under the proposed approach, the only way a large controller can achieve BJR is through SC approval.

Examining the bottom half of the tree, the general principle remains the same: when the controller receives both disinterested board approval (i.e., SC approval) and disinterested shareholder approval (MOM approval), the court should apply BJR; when either or both of these procedural protections are lacking, the court should apply EFR. The proposed approach is consistent with Allen, Jacobs & Strine (2001), which advocates BJR for freeze-outs that include a MOM condition, and with Wolfe (2002), which provides theoretical reasons for valuing a MOM condition in a merger freeze-out but not in a tender offer freeze-out. In the case where there are no independent directors,[48] the proposed approach advocates EFR review even with a MOM condition, on the grounds that majority support from the minority does not substitute for judicial review of the transaction, though in most deals support from a majority of the minority would provide important evidence on the question of entire fairness. Importantly, this proposed approach does not require a reconsideration of the Delaware Supreme Court's decision in *Kahn v. Lynch*. The *Kahn* rule – that SC approval or MOM approval leads to burden shifting on entire fairness – continues to stand; the additional layer provided here is that the combination of SC approval *and* MOM approval leads to BJR.

[48] Because the director independence requirements under the Sarbanes-Oxley Act and the stock exchange listing requirements do not apply to controlled companies, targets boards in freeze-out transactions may have no independent directors.

6. Conclusion

Recent changes in the judicial protection afforded minority shareholders under the Delaware common law have attracted considerable practitioner and academic commentary over the past three years. This paper presents the first systematic empirical evidence on the influence of these doctrinal movements on freeze-out form and outcomes. On outcomes, I find that controlling shareholders are able to pay less in tender offer freeze-outs than in merger freeze-outs. This difference is statistically and economically meaningful, and is consistent with New York City practitioner views that controlling shareholders have more bargaining power against special committees in tender offer freeze-outs than in merger freeze-outs. On transactional form, I present some evidence that larger controllers are more likely to proceed via tender offer when its outside counsel has substantial M&A experience.

These findings provide new insights on transactional practice and on freeze-out policy. On legal practice, the evidence presented here is consistent with the view that new transaction structuring practices disseminate slowly among corporate law firms. In addition, the evidence on deal outcomes suggests that this slow dissemination can sometimes have negative economic consequences for clients, who leave legal issues such as choice of transactional form to their outside counsel. These findings also bolster arguments for convergence in judicial standards of review between tender offer and merger freeze-outs, and provide guidance on how such convergence might best be achieved.

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Table 1: Summary Statistics by Transaction Form

This table reports summary statistics on all freeze-out transactions announced between June 19, 2001, when the Delaware Chancery Court issued its opinion in *Siliconix*, and December 31, 2003 (n=96). Two reverse stock splits are categorized as statutory mergers for reasons described in the text. * = statistically significant difference between means at 90% confidence; ** = statistically significant at 95% confidence; *** = statistically significant at 99% confidence.

Mean (median)	**All Transactions (n=96)**	**Tender Offers (n=27)**	**Statutory Mergers (n=69)**
Target characteristics			
Delaware incorporation	60.4%	74.1%	55.1%
Controlling shareholder			
Controller pre-announcement stake	64.7% (65.4%)	70.8% (73.1%)	62.4% (63.09%)
Founder or family group	45.8%	25.9%**	53.6%**
Private equity firm	6.3%	3.7%	7.2%
Corporate parent	47.9%	70.4%**	39.1%**
Experienced outside counsel	26.7%	50.0%**	16.7%**
Deal characteristics			
Transaction value ($MM)	96.0 (14.5)	194.4 (25.5)**	57.6 (11.5)**
Stock consideration	16.7%	18.5%	15.9%
Offer conditions			
Non-waivable majority-of-the-minority or 90% tender condition	61.8%	88.9%***	45.1%***
Back-end guarantee at same price		96.3%	N/a
Outcomes			
Tendered into front-end tender offer (%)		73.7% (78.0%)	N/a
Success rate	79.2%	92.6%	73.9%
Days between initiation and close	161 (143)	100 (100)***	194 (185)***
Bargaining power (successful deals only)			
Increase over first offer	14.3% (10.4%)	7.2% (4.2%)***	18.1% (11.6%)***
Final premium over pre-announcement trading price:			
1 day prior	45.0% (34.4)	33.8% (26.3%)*	51.0% (35.9%)*
1 week prior	43.8% (32.6)	28.8% (27.5%)**	51.6% (37.9%)**
4 weeks prior	44.4% (39.6)	25.1% (31.1%)***	54.7% (47.8%)***

Table 2A-2D: Negotiated Outcomes by Minority Approval Required, Transactional Form

This table reports the outcomes by the minority approval required and the transactional form used. Tender offer freeze-outs are defined to require "high" approval when the controlling shareholder holds a below-median pre-deal stake in the target. The median pre-deal stake in the sample of successful tender offer freeze-outs (n=25) is 73.0%. Statutory merger freeze-outs are defined to require "high" approval when the deal includes a majority-of-the-minority (MOM) condition or a 90% condition. * = statistically significant difference between means at 90% confidence; ** = statistically significant at 95% confidence; *** = statistically significant at 99% confidence.

Table 2A: Increases Over First Offer

Mean (median)	**Transactional form:**		
Minority approval required:	**Tender Offer**	**Statutory Merger**	**Total**
Low	2.4%*** (0.0%)	20.2%*** (13.9%)	14.1% (8.3%)
High	11.9% (11.9%)	16.0% (10.4%)	14.5% (10.5%)
Total	7.2%*** (4.2%)	18.1%*** (11.6%)	14.3% (10.4%)

Table 2B: Premium Paid Over Market Price 1 Day Prior to Deal Announcement

Mean (median)	**Transactional form:**		
Minority approval required:	**Tender Offer**	**Statutory Merger**	**Total**
Low	26.4% (17.5%)	43.9% (28.6%)	38.1% (23.2%)
High	41.2% (38.8%)	59.2% (62.9%)	52.6% (46.3%)
Total	33.8%* (26.3%)	51.0%* (35.9%)	45.0% (34.4%)

Table 2A-2D: Negotiated Outcomes by Minority Approval Required, Transactional Form (cont)

Table 2C: Premium Paid Over Market Price 1 Week Prior to Deal Announcement

Mean (median)	**Transactional form:**		
Minority approval required:	**Tender Offer**	**Statutory Merger**	**Total**
Low	24.2% (20.8%)	43.9% (28.6%)	37.4% (25.4%)
High	33.8%** (36.0%)	60.8%** (65.1%)	51.2% (40.1%)
Total	28.8%** (27.5%)	51.6%** (37.9%)	43.8% (32.6%)

Table 2D: Premium Paid Over Market Price 4 Weeks Prior to Deal Announcement

Mean (median)	**Transactional form:**		
Minority approval required:	**Tender Offer**	**Statutory Merger**	**Total**
Low	14.5%** (3.8%)	46.9%** (33.3%)	36.1%* (30.5%)
High	35.7%** (36.0%)	63.6%** (60.1%)	53.5%* (46.8%)
Total	25.1%*** (31.1%)	54.7%*** (47.8%)	44.4% (39.6%)

Table 3: Negotiated Outcomes – Multivariate Analysis

This table reports regression estimates on the association between the outcome for minority shareholders and target, controller, and deal characteristics. * = statistically significant at 90% confidence; ** = statistically significant at 95% confidence; *** = statistically significant at 99% confidence. All models are run as ordinary least squares (OLS) regressions and include a constant term (not reported). Standard errors are White (1980) robust.

Table 3A: All successful deals

Dependent variable ➔	**#1: Increase over first offer**	**#2: Premium over market price 1 day prior**	**#3: Premium over market price 1 week prior**	**#4: Premium over market price 4 weeks prior**
Target Characteristics				
Delaware incorporation	5.37 (3.23)	1.68 (9.65)	4.28 (9.54)	-2.25 (9.83)
Controlling Shareholder				
Private equity firm?	-15.40 (3.68)***	66.39 (29.51)**	74.74 (27.45)***	61.95 (28.64)**
Corporate parent?	0.01 (4.31)	9.78 (10.69)	6.05 (10.46)	6.44 (10.90)
Deal Characteristics				
Tender offer	-10.41 (4.52)**	-23.03 (12.07)*	-27.35 (11.93)**	-35.57 (11.99)***
Minority approval required (%)	-0.01 (0.09)	0.26 (0.19)	0.21 (0.19)	0.24 (0.19)
Log(transaction value)	-1.74 (1.39)	-4.26 (3.00)	-2.55 (3.68)	-1.51 (3.98)
Stock consideration?	11.23 (9.70)	-1.96 (16.11)	-3.32 (16.26)	-10.00 (17.40)
Number of observations	69	69	67	69
R-sq	21.5%	22.6%	26.3%	23.7%

Table 3B: Delaware targets only

Dependent variable ➔	**#1: Increase over first offer**	**#2: Premium over market price 1 day prior**	**#3: Premium over market price 1 week prior**	**#4: Premium over market price 4 weeks prior**
Controlling Shareholder				
Private equity firm?	-16.74 (6.40)**	42.07 (31.44)	60.00 (31.76)*	53.18 (30.22)*
Corporate parent?	3.49 (8.82)	18.10 (18.36)	20.41 (18.89)	27.87 (19.63)
Deal Characteristics				
Tender offer	-9.10 (7.51)	-20.39 (15.02)	-33.16 (15.21)**	-50.11 (15.62)***
Minority approval required (%)	-0.05 (0.12)	-0.03 (0.24)	-0.12 (0.25)	-0.12 (0.25)
Log(transaction value)	-2.66 (2.02)	-4.98 (5.18)	-3.78 (4.82)	-0.46 (4.63)
Stock consideration?	11.06 (9.95)	-5.22 (18.43)	-7.71 (16.70)	-21.54 (17.29)
Number of observations	44	42	40	42
R-sq	22.0%	18.5%	33.1%	32.5%

Table 4: Negotiated Outcomes – Tender Offer/Control Interaction

This table reports regression estimates on the association between the outcome for minority shareholders and target, controller, and deal characteristics. * = statistically significant at 90% confidence; ** = statistically significant at 95% confidence; *** = statistically significant at 99% confidence. All models are run as ordinary least squares (OLS) regressions and include a constant term (not reported). Standard errors are White (1980) robust.

Table 4A: All successful deals

Dependent variable ➔	**#1: Increase over first offer**	**#2: Premium over market price 1 day prior**	**#3: Premium over market price 1 week prior**	**#4: Premium over market price 4 weeks prior**
Target Characteristics				
Delaware incorporation	5.69 (3.21)*	2.58 (9.78)	5.33 (9.77)	-1.22 (10.05)
Controlling Shareholder				
Private equity firm?	-14.93 (4.01)***	66.99 (28.82)**	74.67 (27.30)***	62.14 (27.92)**
Corporate parent?	0.13 (4.20)	9.54 (10.69)	5.21 (10.65)	4.83 (10.84)
Deal Characteristics				
Tender offer*Control	-0.29 (0.09)***	-0.58 (0.31)*	-0.58 (0.29)*	-0.79 (0.30)***
Minority approval required (%)	-0.03 (0.08)	0.21 (0.17)	0.13 (0.17)	0.13 (0.17)
Log(transaction value)	-1.68 (1.37)	-4.18 (3.01)	-2.63 (3.70)	-1.40 (3.98)
Stock consideration?	11.32 (9.52)	-1.77 (15.84)	-3.06 (16.05)	-9.29 (17.23)
Number of observations	69	69	67	69
R-sq	23.8%	23.7%	25.5%	23.2%

Table 4B: Delaware targets only

Dependent variable ➔	**#1: Increase over first offer**	**#2: Premium over market price 1 day prior**	**#3: Premium over market price 1 week prior**	**#4: Premium over market price 4 weeks prior**
Controlling Shareholder				
Private equity firm?	-15.69 (6.63)**	45.37 (28.66)	59.12 (30.65)*	52.00 (27.66)*
Corporate parent?	4.47 (8.39)	22.03 (18.34)	21.13 (18.52)	26.57 (18.39)
Deal Characteristics				
Tender offer*Control	-0.29 (0.15)*	-0.69 (0.37)*	-0.75 (0.32)**	-1.15 (0.33)***
Minority approval required (%)	-0.07 (0.12)	-0.07 (0.23)	-0.19 (0.24)	-0.26 (0.25)
Log(transaction value)	-2.44 (2.01)	-4.40 (5.26)	-4.43 (4.76)	-0.69 (4.44)
Stock consideration?	10.39 (9.60)	-7.74 (18.23)	-7.18 (15.82)	-20.11 (16.45)
Number of observations	44	42	40	42
R-sq	24.6%	23.1%	33.6%	34.2%

Table 5: Transactional Form by Controller's Stake, Outside Counsel

This table reports statistics on the percent of freeze-outs executed via tender offer, by the pre-deal controlling stake of the acquirer and the M&A experience of the controller's outside counsel. "Experienced" outside counsel are the fifteen law firms which advised most frequently in M&A transactions, on either the buy-side or the sell-side, during the period 1990-2003. * = statistically significant difference between means at 90% confidence; ** = statistically significant at 95% confidence; *** = statistically significant at 99% confidence. Rows do not sum to total column because the identity of the controller's outside counsel is not publicly reported for unsuccessful statutory merger freeze-outs.

Table 5A: Full sample

% executed via tender offer (number of total deals in category)	**M&A experience of outside counsel:**		
Controller's pre-deal stake:	**Experienced**	**Other**	**Total**
< 70%	27.3% (11)	16.7% (42)	17.2%** (58)
>=70%	83.3%*** (12)	28.6%*** (21)	44.7%** (38)
Total	56.5%*** (23)	20.6%*** (63)	28.1% (96)

Table 5B: Delaware targets only

% executed via tender offer (number of total deals in category)	**M&A experience of outside counsel:**		
Controller's pre-deal stake:	**Experienced**	**Other**	**Total**
<70%	42.9%* (7)	13.0%* (23)	18.8%** (32)
>=70%	90.9%*** (11)	23.1%*** (13)	53.8%** (26)
Total	72.2%*** (36)	16.7%*** (36)	34.5% (58)

Table 6: Transaction Form – Multivariate Analysis

This table reports regression estimates on the association between the controller's choice of transactional form (tender offer or statutory merger) and target, controller, and deal characteristics. The dependent variable in all models is TENDER, set to 1 if the freeze-out is structured as a tender offer and 0 otherwise. * = statistically significant at 90% confidence; ** = statistically significant at 95% confidence; *** = statistically significant at 99% confidence. All models are run as probit regressions and include a constant term (not reported).

Table 6A: Full sample

Model # ➔	**#1**	**#2**	**#3**	**#4**
Target Characteristics				
Delaware incorporation	0.40 (0.33)	0.12 (0.36)	0.08 (0.36)	0.07 (0.36)
Controller Characteristics				
Private equity firm?	-0.07 (0.73)	-0.47 (0.86)	-0.57 (0.88)	-0.51 (0.88)
Corporate parent	0.47 (0.36)	0.29 (0.41)	0.34 (0.39)	0.41 (0.39)
Controller's Outside Counsel:				
Experienced?		0.52 (0.42)		
Experienced? * Control			0.02 (0.01)	
Experienced? * High Control?				1.10 (0.58)*
Deal Characteristics				
Minority approval required in tender offer (%)	-0.03 (0.01)**	-0.03 (0.01)**	-0.02 (0.01)*	-0.02 (0.01)
Log(transaction value)	0.25 (0.10)**	0.17 (0.11)	0.16 (0.11)	0.14 (0.11)
Stock consideration?	-1.12 (0.49)**	-0.60 (0.54)	-0.61 (0.54)	-0.57 (0.54)
Log(days since *Siliconix*)		-0.26 (0.20)	-0.26 (0.20)	-0.23 (0.20)
Number of observations	96	86	86	86
Pseudo R-sq	21.5%	23.7%	24.7%	25.9%

Table 6B: Delaware targets only

Model # ➔	**#1**	**#2**	**#3**	**#4**
Controller Characteristics				
Private equity firm?	0.54 (0.83)	-0.12 (1.05)	-0.14 (1.05)	0.13 (1.04)
Corporate parent	0.92 (0.51)*	0.71 (0.61)	0.89 (0.58)	1.16 (0.60)
Controller Outside Counsel:				
Experienced?		0.93 (0.55)*		
Experienced? * Control			0.03 (0.02)*	
Experienced? * High Control?				1.82 (0.88)**
Deal Characteristics				
Minority approval required in tender offer (%)	-0.02 (0.01)	-0.02 (0.02)	-0.01 (0.02)	0.01 (0.02)
Log(transaction value)	0.44 (0.15)***	0.36 (0.18)**	0.33 (0.18)*	0.32 (0.18)*
Stock consideration?	-1.57 (0.61)**	-1.07 (0.71)	-1.08 (0.70)	-1.10 (0.72)
Log(days since *Siliconix*)		-0.33 (0.27)	-0.30 (0.27)	-0.22 (0.27)
Number of observations	58	54	54	54
Pseudo R-sq	33.6%	42.0%	42.8%	45.5%