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Shareholder Welfare in Minority Freeze-Out Bids: Are Legal Protections Sufficient? Evidence from the U.S. Market

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The presence of a controlling shareholder is a common ownership structure in the United States and United Kingdom, and a predominant organizational form in other world markets as noted in La Porta et al. (1999). The discrepancy between effective control and the fractional cash flow rights of a controlling shareholder give rise to the potential agency conflicts commonly characterized private benefits of control. A controller can obtain private benefits through several channels including self-dealing in the firm's contracting or production relationships or by adopting preferred capital structure or dividend policies. Recent work by Johnson et al. (2000) and Dyck and Zingales (2004) suggest that the private benefits for controllers can be substantial, but vary across legal regimes and with the quality of jurisdictional enforcement of the minority claimants' rights.

In the U.S., a market characterized by relatively strong protections for minority claimants, the specter of self-dealing is particularly pronounced when a corporation's controlling shareholder bids for the remaining minority equity stake in the firm, transactions commonly referred to as minority freeze-outs. Freeze-out bids often garner the attention of the business press and legal community because, unlike a typical change-in-control bid, the pricing of minority shares in freeze-out transactions does not emerge from an arm's-length negotiation between independent parties. Thus, while freeze-out bids are, in many cases, subject to judicial review, transaction structure and the allocation of any transaction surplus are commonly believed to be a byproduct of the conflict inherent in disparate ownership interests.[1]

In Bates, Lemmon and Linck (2006) we addressed concerns regarding bid quality and transactional conflict in freeze-out transactions by analyzing the bid characteristics and deal outcomes for a sample of freeze-out proposals involving U.S. public corporations between 1988 and 2003. To address issues associated with the pricing of minority claims and the distribution of any transaction surplus, our analysis examined the shareholder wealth effects of these transactions for both target (minority) and bidding (controlling) shareholders, thereby providing a perspective on the relative wealth gains to transaction participants and the extent of any disproportionate gains to controllers. We also considered whether controlling shareholders were able to propose transactions that minimized vigorous negotiation and limited price discovery during freeze-out bid negotiation, characteristics that would suggest that minority claimants lack adequate representation by their directors or efficient legal recourse or both. Specifically, the analysis considers the incidence and efficacy of bid hostility, the rate of bid completion, and the likelihood and extent of any revisions to the initial bid premiums proposed by controllers.

The market for freeze-out transactions in the U.S.

The U.S. marketplace provides an interesting setting for an analysis of freeze-out activity generally, and

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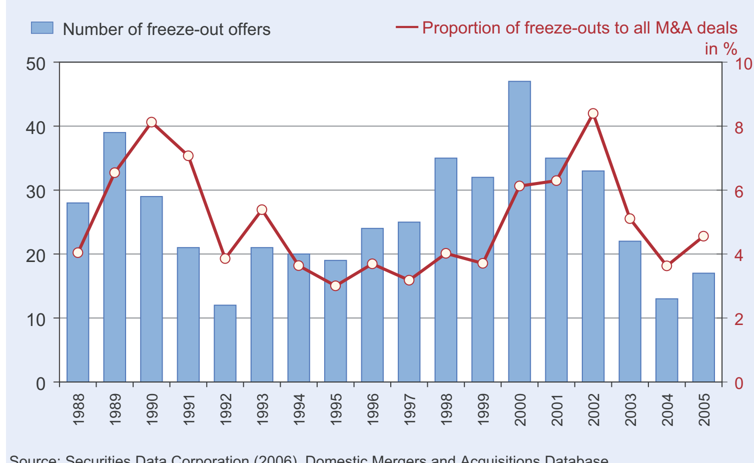
[1] The acquisition of minority shares is not uncommon. These transactions frequently occur as a second-step or clean-up merger following a successful tender offer but are rarely challenged given an established fair price. We exclude clean-up transactions from our analysis and focus instead on bids by majority shareholders that have held their stake for a minimum of six months prior to the freeze-out offer.



Source: Securities Data Corporation (2006), Domestic Mergers and Acquisitions Database.

the potential for controller self-dealing specifically, for several reasons. First, the incidence of freeze-out transactions increased rapidly over the last decade, a period coinciding with the financial collapse of the dot.com industry and an increase in the costs of remaining public mandated by the Sarbanes Oxley Act and contemporaneous rule changes adopted by the NYSE and NASDAQ stock exchanges. As illustrated in the Figure, freeze-out transactions accounted for roughly 5 percent of the overall merger and acquisition activity in U.S. markets between 1988 and 2005. Freeze-out bid activity peaked in 2000 with 47 completed freeze-out transactions, while 2002 saw the highest proportion of freeze-out activity when over 8 percent of the merger and acquisition bids for publicly traded companies involved a controlling shareholder.

A second consideration is that freeze-out transactions likely represent a primary channel through which a controller might realize private benefits of control in the U.S. The degree to which controller self-dealing takes place is a function of the target's statutory environment and the extent to which the relevant legal standards are enforced. Prior studies note a substantial degree of cross-country variation in these characteristics. For example, Dyck and Zingales (2004) suggest that the value of control varies from – 4 percent to + 65 percent of the value of the firm. Notably, they suggest the U.S. has one of the lowest implied values of control in the world. Given relatively high shareholder protections in the U.S., freeze-out transactions presumably present one of the few opportunities for controllers to expropriate value from a minority. Bebchuk and Kahan (2000) argue that freeze-out bids are motivated by a discrepancy between the market price of minority shares and the present value of investment opportunities known exclusively to the controlling shareholder. Information asymmetry, combined with the potentially limited role of target directors as information agents for the minority, suggests that controlling shareholders can capture a portion of deal surplus that would otherwise accrue to the minority shareholders in a comparable full-information negotiation. This effect is exacerbated by the fact that a controlling shareholder's ownership in the target virtually eliminates the potential for third-party bid competition, thereby reducing a controller's own incentive to offer a premium that might otherwise be necessary to deter a competing bidder.

Finally, as we describe in the section that follows, judicial interpretation of freeze-out law in the U.S. developed significantly over the last decade. These changes impart an important source of potential variation in bid outcomes across time and transaction structure.

Legal treatment of freeze-out transactions

Delaware courts have long recognized the potential for self-dealing by controllers and corresponding limitations on the objectivity of a target firm's directors in freeze-out bids.[2] As such, the associated legal doctrine establishes a fiduciary duty of the controller to the minority shareholders and applies a corresponding fairness standard in the judicial review of these transactions. This fairness standard discourages merger bids that are structurally coercive while encouraging full information and arms-length negotiation between a controller and a fully empowered negotiating committee comprised of a target's independent directors.

In contrast to a merger freeze-out bid, the Delaware courts apply a less exacting standard of review to

[2] Although we emphasize Delaware law in this piece, many deal requirements, particularly those associated with disclosure and coercion, have corollary federal legal standards. For example, full disclosure and coercion are addressed in Securities and Exchange Commission rules 10b-5 and 13e-3. While each state jurisdiction has its own laws and courts, many adopt Delaware standards as they pertain to control transactions. Delaware standards might not apply uniformly to freeze-outs, a conjecture we incorporate into our empirical analyses.

freeze-outs structured as tender offers directly to the minority given the voluntary nature of the decision to tender shares. Specifically, provided a tender offer is not structurally coercive, that it includes full disclosure of a bidder's private information as well as a non-waivable majority of the minority tender condition, the transaction is not subject to judicial review under the entire fairness standard. We note, however, that even in the context of a tender offer freeze-out the target board typically appoints a special committee of independent directors to evaluate the transaction and issue a recommendation to minority shareholders. Gilson and Gordon (2003) suggest that by 1995 practitioners generally assumed that freeze-out tender offers would be subject to the alternative standard. This perspective was challenged and substantively upheld in a series of recent Delaware court decisions beginning with the Siliconix case in 2001.[3]

This shift in the doctrinal regime of judicial review has lead many academics and practitioners to decry the current legal standard as doing little to protect minority claimants from controller self-dealing, particularly in the context of freeze-out bids structured as tender offers. Of course, it remains unclear whether or not, even absent the possibility of judicial review, controlling shareholders would be able to convince minority claimants to tender into substandard bids barring a coercive bid structure such as a two-tiered bid. As is the case for tender offers involving a change-in-control bid, a rational atomistic shareholder who does not perceive his/her stake as being pivotal to the offer's success will not tender unless the price offered in the tender offer is as high as the expected price after the tender offer, resulting in bids that distribute a large portion of the surplus to tendering shareholders. Furthermore, the economic and reputational incentives of target directors may be sufficient to motivate them to negotiate vigorously with a controller, despite no direct obligation to do so in a post-Siliconix regime.

Data description

We compiled our sample from the Securities Data Corporation's (SDC) mergers and acquisitions database. Observations include bids defined as either mergers or bids for the remaining interest of publicly traded target firms listed on U.S. financial exchanges. From this sample, we exclude American depository receipts, real estate investment trusts, closed-end funds, and primes and scores. This screening yielded 4,079 acquisition bids between 1988 and 2003. Of these, 148 were freeze-out bids where acquirers held a toehold in the target of between 50 percent and 90 percent. For comparison purposes, we benchmark outcomes in freeze-out transactions to two sets of arms-length transactions: bids proffered by bidders holding non-controlling equity toeholds (< 50 percent) in the target and bids involving no pre-bid equity stake in the target. Of the 4,079 takeover bids described above, we identify 3,732 bids with no bidder toehold and 186 bids involving a bidder with a minority toehold in the target.

[3] See In re Siliconix Incorporated Shareholders Litigation (Del. Ch. 2001) and In re Aquila Inc. Shareholders Litigation, 805 A. 2d 184 (Del Ch. 2002).

Wealth effects of freeze-out transactions

We estimated the wealth effects associated with freeze-out bid announcements using a 3-day cumulative abnormal return (CAR) to target and bidding shareholders. Abnormal returns are computed as a firm's equity return minus the contemporaneous return on the value-weighted market index. Controlling for bid form, completion, and target firm characteristics, the average announcement CAR to target shareholders in freeze-out bids is positive (14.9 percent), but is significantly lower than the average announcement CAR to target shareholders in both minority toehold bids (19.6 percent) and no toehold bids (19.2 percent). While these results are suggestive, transaction and ownership distortions make it difficult to accurately assess bid quality or relative shareholder welfare in freeze-out bids using only bid premiums or target equity returns. First, bidders already exercise operating control over the target prior to the bid thereby lowering the incremental gains, and the corresponding returns, to freeze-out transactions relative to our benchmark change-in-control transactions. Second, given the bidder's toehold, a portion of the observed change in the bidder's market value is attributable to the change in the value of the shares it owns in the target.

To obtain a more complete perspective on shareholder welfare, we estimate the total wealth surplus generated in successful bids and estimate the relative distribution of these gains between bidders and targets. We focus on the distribution of transaction value between deal participants relative to their pro rata share of the target firm's equity held immediately prior to the bid announcement. We benchmark

Table 1

Merger and acquisition wealth distributions across transaction type

Variable	No toehold	Toehold deals: 0.0% <toehold <50%	Freeze-out deals: 50% ≤toehold <90.0%
Number of Observations	2,783	107	120
Mean abnormal market value change	118.9	88.4	55.1
Distribution of gains to targets and bidders			
Percent of gains to targets	84.7%	100.9%	38.2%
Percent of gains to bidders	15.3%	-0.9%	61.8%
Target gains relative to their pro-rata share			
Target's pro-rata share of firm	100.0%	85.4%	23.1%
Target's share of gains minus pro-rata share	–15.3%	15.5%	15.1%
Mean excess gains (losses) to targets ($millions)	–18.2	13.7	8.3
Surplus to targets (aggregate) as a proportion of their pro-rata claim	84.7%	118.2%	165.2%

Source: Authors.

these results to those obtained in transactions where the bidder holds a minority toehold and no toehold in the target prior to the transaction. Table 1 summarizes the results. Of the 148 freeze-out transactions in our sample, 120 involved completed bids with a publicly traded bidder. Consistent with the notion that the value gains to freeze-outs are lower than those in change-in-control transactions, the average total wealth gains (target and bidder) to freeze-out bid announcements is $55.1 million, compared to $88.4 million for minority toehold bids and $118.9 million for no-toehold bids.

The remaining rows of Table 1 summarize how these gains are split between bidders and targets in freeze-outs and our benchmark change-in-control transactions. In freeze-out bids, 38.2 percent of announcement period surplus accrues to minority shareholders while bidding shareholders receive 61.8 percent. Comparable target/bidder splits for no-toehold and minority toehold bids are 84.7 percent/15.3 percent and 100.9 percent/–0.9 percent, respectively. However, in freeze-out bids minority claimants own only 23.1 percent of the target firm's equity; hence, they receive an allocation of bid surplus that exceeds their pro rata share of the firm by 15.1 percent or $8.3 million. This is similar to the 15.5 percent ($13.7 million) excess distribution observed for targets in bids involving minority toeholds, and exceeds the relative distribution to targets in no toehold bids where target shareholders capture 84.7 percent of the total wealth gains while holding 100 percent of the target's equity prior to the bid. Overall, the evidence on wealth effects and the distribution of transaction surplus in freeze-out bids is inconsistent with the notion that these transactions, on average, are a byproduct of controller self-dealing. In fact, observed distributions suggest that a substantial degree of exercised or implied bargaining power is often wielded by minority shareholders and their agents during freeze-out negotiations.

Explicit negotiation during freeze-out bids

We complement our analysis of wealth effects by providing evidence on the prevalence and effectiveness of explicit bid negotiation. Freeze-out negotiations typically occur with a special committee of the target's board of directors. While the dialogue between controllers and special committees is unobservable, agents often issue public statements regarding the deal's status including whether or not a bid was rejected. In the case of a tender offer, recommendations to tender or withhold shares are provided through a 14D-9 filing. If target representatives are unable or unwilling to negotiate with controllers, or if information asymmetry is extreme, we would expect to observe a lower incidence of bid hostility and bid revisions, but a higher incidence of bid completion for freeze-out bids relative to a benchmark sample of arms-length change-in-control transactions. Alternatively, the economic and reputation incentives of independent directors, the prospect of judicial review and legal recourse, and a shareholder's own incentive to holdout in tender offers may be sufficient to generate negotiation that approaches what otherwise would obtain during an arms-length bids.

Table 2 summarizes the results of multivariate logistic regressions modeling the likelihood of bid hostil-

Table 2

Likelihood of bid hostility, bid completion and bid revisions

Dependent variable Sample	Hostility All Bids	Completion All Bids	Bid Revision All Bids
Number of observations	3.750	4.079	3.750
Intercept	–2.525 (<0.001)	1.239 (<0.001)	–3.125 (<0.001)
Minority Toehold Bids: 0% <toehold <50%	0.034 (<0.001)	0.011 (0.652)	0.042 (0.046)
Freeze-out Bids: 50% ≤toehold <90.0%	0.004 (0.554)	0.057 (0.015)	0.145 (<0.001)
Target termination fees	–0.056 (<0.001)	0.146 (<0.001)	0.032 (0.004)
Acquirer Lockup	–0.042 (<0.001)	0.085 (<0.001)	–0.010 (0.412)
Tender offer	0.037 (<0.001)	0.128 (<0.001)	0.051 (0.001)
Offer includes bidder equity	–0.018 (<0.001)	0.071 (<0.001)	0.040 (<0.001)
Prior Bidding Indicator	0.032 (<0.001)	–0.076 (<0.001)	– –
Relative value of target	0.018 (<0.001)	–0.066 (<0.001)	–0.007 (0.147)
Deal Attitude (1=hostile)	– –	–0.551 (<0.001)	0.401 (<0.001)
Litigation Indicator	– –	–0.019 (0.383)	0.068 (<0.001)
Log(Initial Premium)	0.000 (0.906)	– –	–0.025 (0.060)
Model Chi-square (p-value) Pseudo R^2	197.33 (<0.001) 0.146	138.41 (<0.001) 0.242	341.93 (<0.001) 0.089

Source: Authors.

ity, bid completion, and revisions to initial bid premiums. The regressions in Table 2 incorporate toehold category indicator variables equal to one if a bidder's equity stake in the target six months prior to the bid announcement falls within either the minority toehold (0.0 percent < toehold < 50.0 percent) or freeze-out (50.0 percent ≤ toehold < 90.0 percent) category. The regressions also include a variety of deal characteristics as control variables. We report standardized coefficients for each variable that represent the change in the probability of bid hostility, deal completion, or a bid revision for a change in the explanatory variable from zero to one, or a one standard deviation change in a continuous variable, holding all other variables constant at their means. The statistical significance of each effect is summarized by *p*-values reported in parentheses.

The incidence of explicit bid hostility is low (less than 10 percent) for merger and acquisition activity during our sample period. Controlling for bid characteristics, the results suggest relatively small differences in the likelihood of observing a hostile response in freeze-out bids compared to our benchmark minority toehold and no toehold change-in-control transactions. Specifically, the rate of bid hostility in freeze-out transactions is equivalent to the rate in no toehold bids and only 3 percent lower than the hostility rate in minority toehold bids. In unreported results we further document that, for the subsample of freeze-out transactions the incidence of bid hostility is 18.5 percent higher for deals structured as tender offers relative to freeze-outs structured as merger bids. These findings are inconsistent with the premise that representatives of the minority claimants are passive during freeze-out transaction or that controlling shareholders reliably avoid conflict with minority shareholders or their representatives by structuring transactions as freeze-out tender offers.

Of the 4,079 bids in our sample, 3,302 are ultimately completed and 777 are withdrawn. Holding contract, bid, and negotiation characteristics constant, we find that completion rates are approximately 5.7 percent higher in freeze-out bids compared with no-toehold bids and 4.6 percent higher than the rate for minority toehold bids. Deal completion rates are also higher for tender offers and bids including bidder equity, but they are lower for follow-on bids. Notably, bids that receive a hostile reception are 55.1 percent less likely to be completed suggesting that, although completion is more likely in freeze-out transactions, bid resistance, when observed, is highly effective at deterring unwanted bids. Given our results on bid value, we presume that a higher rate of bid completion for freeze-out bids is a function of the favorable distributions offered to minority shareholders, rather than a byproduct of controllers pushing through self-serving bids.

The last column of Table 2 summarizes the determinants of bid revisions for the transactions in our sam-

ple. We observe bid premium revisions for 387 of our 3,750 sample bids with available premium data, 37 of which occur during freeze-out negotiations. Relative to the no toehold bids in our sample, freeze-out bids are 14.5 percent more likely to entail a revision to an initial bid proposed by controllers. These results are consistent with the presence of bid tension in freeze-out offers that exceeds what is observed during an arm's-length negotiation, a finding that again conforms to the notion that minority claimants and their agents vigorously negotiate with controllers and have a fair degree of success in the process of price discovery.

Concluding remarks

The U.S. market witnessed a recent surge in acquisition bids initiated by controlling shareholders seeking to acquire the remaining shares of minority claimants in the firm, transactions commonly referred to as minority freeze-outs. Practitioners and legal scholars have long been engaged in an ongoing debate regarding the inherent conflicts that arise in these transactions and the corresponding bid outcomes that obtain for minority shareholders. Over the last 5 years, this debate has intensified following a reduction in the standard of review over freeze-outs executed in U.S. jurisdictions. Our findings indicate that, on average, economic incentives and legal protections adequately insulate minority shareholders from outright expropriation during freeze-out bidding. In fact, our analysis of the distribution of bid surplus and the evidence for explicit bid negotiation suggests that freeze-out bids are often contested transactions and yield proportional wealth gains in excess of what is observed in otherwise equivalent arms-length change-in-control bids. These results hold even in an era characterized by lower judicial oversight, suggesting the economic incentives of deal participants likely outweigh any legal constraints applied through judicial review of transaction fairness. Overall the methodologies and results summarized here provide a necessary economic foundation from which to assess arguments concerning the welfare of minority shareholders in freeze-out transactions generally.

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