

Breaking Up is Hard to Do? An Analysis of Termination Fee Provisions and Merger Outcomes

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Abstract

This paper provides large-sample evidence pertaining to the use of and wealth effects associated with provisions for termination fees in merger agreements between 1989 and 1998. The evidence suggests that target termination fee clauses are an efficient contracting device through which target managers compensate bidders for the costs associated with bid negotiation and the potential for information expropriation by third parties. While target fees truncate a normal bidding process, target shareholders gain from higher completion rates and greater negotiated takeover premiums in deals that include target termination fee clauses. Our findings regarding bidder fee provisions indicate that these clauses are used to lock-in a portion of target wealth gains in deals with higher negotiating costs and greater costs associated with bid failure. Compensation for bidder fee provisions appears to take the form of concomitant target fee provisions, and lower bid premiums.

1. Introduction

Termination fee clauses in merger agreements entail a contingent payment to one party, triggered in the event that management of the counter party dissolves the agreement. Frequently in a competitive bidding process dissolution of a merger agreement can come about if managers of a target solicit, discuss, or accept a proposal from a third party. In one recent and controversial example, American Home Products (AHP) received a termination fee provision from its acquisition target Warner Lambert in a \$75 billion stock deal announced in November of 1999. Under the fee provision Warner Lambert agreed to pay AHP \$1.8 billion in cash if Warner terminated the merger under conditions not associated with a pending regulatory decision.¹ In a motion filed with the Delaware Chancery Court, a competing suitor Pfizer argued that this fee provision constituted a “draconian defense measure” which would disallow the Warner board from even considering Pfizer’s own \$80 billion stock bid. Following a protracted period of legal and financial wrangling (and an approximately 25% drop in the value of AHP shares) Pfizer eventually secured an agreement to acquire Warner Lambert in a \$90 billion stock deal after also agreeing to pay AHP’s \$1.8 billion termination fee.

In recent years, an increasing proportion of merger agreements have included bidder and target provisions for termination fees. In our terminology, the presence of a target termination fee provision indicates that the target has agreed to pay a fee to the bidder in the case that the merger agreement is terminated. Bidder fee provisions are defined analogously. The use of termination fees was a relatively uncommon practice in 1989 with approximately 2% of all deals including target fee provisions, and less than 1% including bidder fees. By 1998, however, termination provisions were

¹ In the proposed deal between Warner Lambert and AHP, termination fees were payable by both parties in roughly symmetric amounts. This \$1.8 billion termination fee was and is the largest such fee that has been negotiated, amounting to nearly as much as American Home earned in 1998 and 1999.

significantly more prevalent with over 60% of all deals including a target fee arrangement and approximately 13% including a bidder fee provision.

Although merger events have been studied in great detail, there is little evidence on the role of termination fee provisions in these transactions. In this paper we examine whether the empirical evidence supports either of two theories to explain the provision of termination fee clauses by merger targets. The first is a theory of managerial discretion, which posits that incumbent managers incorporate fee provisions in order to “lock-in” deals with friendly bidders and curb the bidding activity of hostile, but potentially higher-value, third parties. The second, which we refer to as the efficiency theory, posits that termination fee provisions compensate bidders for negotiation costs and the creation of information externalities, thereby encouraging bidders to reveal their private information and improving the incentives for bidding. To investigate the veracity of either proposition, our analysis broadly considers: i.) whether target fee provisions significantly alter the probability that a deal will be completed, ii.) which firm and deal characteristics are correlated with the use of fee provisions, and iii.) whether target fees in merger agreements limit competitive bidding and truncate the returns realized by target shareholders in acquisition bids.

We find that *bidding* firms also grant termination fee provisions, albeit with significantly less frequency than do targets. As there is little theoretical work pertaining to the determinants of these provisions in mergers our analysis of this activity is exploratory in nature. We do, however, propose an insurance hypothesis that suggests that bidder fee grants are used to guarantee a fraction of a target’s gain in deals where negotiation costs are high and bid failure is particularly costly. As a corollary to the insurance hypothesis we suggest that the cost of this insurance for targets will include reciprocal target fee provisions, and lower total acquisition premiums.

Our results suggest that termination fee grants by merger targets have a substantial and positive effect on the probability of deal completion, suggesting that the use of termination fees may truncate a natural bidding process. Consistent with the efficiency hypothesis, however, we find that

the provision of target fees are positively correlated with proxies for negotiation and bidding costs. Specifically, target fee grants are more prevalent in deals involving assets with significant growth opportunities, in stock deals, and in transactions involving larger targets, but are less likely to be used when a bidder owns a substantial equity toehold in a target firm. To test the managerial discretion hypothesis we consider the relation between the use of target fee grants and various measures of agency conflict in the target firms, including pre-deal market performance, free cash flow, and the stock ownership of insiders. In contrast to the predictions of the managerial discretion hypothesis, the level of free cash flow is found to be uncorrelated with target fee use, while pre-deal stock-price performance is significantly better for targets that offer target fee arrangements. Consistent with the managerial discretion hypothesis, target fees are somewhat less likely to be included in deals when insiders own a significant proportion of the target firm, however, the magnitude of this effect is economically quite small.

This research considers the wealth effects of target fee grants using data on deal premiums offered to target shareholders, announcement returns to target and bidding shareholders, and total target shareholder auction returns. We find no evidence that target shareholders are made systematically worse off by the use of target fee provisions. Deal premiums are somewhat higher in transactions that include target payable fees after controlling for various deal and target characteristics. Further analysis into the endogenous determination of premiums and target fees utilizing simultaneous equations suggest that these terms, like other attributes of the deal, are determined jointly during deal negotiations. Deal announcement abnormal returns to target and bidder shareholders (computed from day -1 to day +1 surrounding a bid announcement) do not vary with the inclusion of a target fee clause. Cumulative auction abnormal returns (computed from day -42 relative to the first bid for the target to the conclusion of a single or series of bids for the target), however, are significantly higher for targets that provide termination fees as compared to those that do not; a result we trace primarily to higher completion rates in deals with termination fees. Overall,

our evidence is consistent with the notion that target granted fee provisions improve the contracting environment and enhance the value of targets in negotiated corporate takeovers.

Bidder termination fee clauses are more likely to be incorporated in transactions where the costs of negotiation, including price discovery, are high. Specifically we find that bidder fees are more prevalent in relatively large deals and for bids financed with stock. Deals involving larger targets are also likely to have higher expected costs associated with bid failure, given that larger targets are generally less likely to be takeover candidates (e.g. Paelpu, 1986; Comment and Schwert, 1995). The results are generally consistent with the insurance hypothesis for the provision of bidder fees, which suggests that in riskier and more costly deals targets may negotiate the use of bidder fees to preemptively capture a portion of the merger gain. Our analysis further suggests that bidder fee clauses are positively correlated with the inclusion of target fee provisions and inversely correlated with deal premiums and wealth gains to target shareholders; features that we conclude represent compensation for a bidder fee concession.

The remainder of this article is structured as follows. In Section 2 we develop our hypotheses, provide a review of recent judicial decisions, and discuss the academic literature pertaining to termination fees. In Section 3 we describe our data selection process and summarize our sample. We present our analysis on the probability of deal completion in Section 4, and on the decision to incorporate target and bidder termination fees in deals in Section 5. In Section 6 we examine the wealth effects associated with termination fees and provide concluding remarks in Section 7.

2. Hypotheses and prior research

2.1. Target termination fee provisions

Termination fee grants by targets have captured the attention of academics and jurists alike because of their potential to significantly decrease the value of a target to third-party bidders.

Figures 1 and 2 summarize the frequency and magnitude of target and bidder termination fee grants for our sample. We note that the use of termination fees in our sample increased substantially over the sample period. While only about 2% of transactions included a target termination fee provision in 1989, this proportion increased to over 60% by 1998. Despite the increased usage of fees, the magnitude of target fee provisions relative to deal value has changed little over time. In our first sample year the average fee provision entailed a cash payment of \$16.57 million, and accounted for 2.7% of the total value of the proposed deal. Over the intervening years, while the average fee provision increased to \$41.15 million, much of this increase was matched by contemporaneous increase in deal values such that the average termination fee still only accounted for 3.2% of bid value in the last sample year. Thus, while individual grants can be quite large in an absolute sense, the size of target fee provisions relative to total deal value has remained relatively small.

Recent judicial (see Delaware Supreme Court, *Brazen v. Bell Atlantic*, 695 A.2d 43 (Del. 1997)) and academic (see Pilbosian, 1998) opinions have questioned the consequence of such fees and suggest that they represent an appropriate level of compensation for jilted suitors given the opportunity cost of the assets involved, and the transaction fees incurred in negotiating the deal. While it is not possible to directly observe the opportunity cost of the assets involved in a merger McLaughlin (1990) finds that investment banking fees averaged 1.29% of the transaction value for tender offers between 1978 and 1985, while Servaes and Zenner (1996) find that relative fees were on average 0.85% between 1985 and 1993. These results bring into question whether opportunity costs alone can explain the disparity between observed fees and the direct costs borne by targets and acquirers. This paper provides evidence on the determinants of the use of target termination fee clauses and considers whether such fees alter the nature and competitiveness of auctions for targets, as might be the case if their use inadvertently or intentionally prevents third parties from bidding.

2.1.1. The managerial discretion hypothesis

Target termination fee provisions, if set high enough, can be a device by which target managers inhibit competitive bidding for the firm albeit at the expense of their shareholders. On average, target fee grants are a small fraction of deal value, however, on a percentage basis they can account for a substantial proportion of the total wealth gains to mergers. For example Jensen and Ruback (1983); Jarrell, Brickley, and Netter (1988); and more recently Andrade, Mitchell, and Stafford (2000) show that the announcement period abnormal returns to target shareholders range between 16.0% and 34.1%, while the returns to the combined target and bidder shareholders suggest a net wealth gain of only 1.0% to 3.0%. The total costs of target fees may be even more substantial as it is reasonable to assume that these contract provisions also impose significant indirect costs to third party bidders including restricted access to a target's data room, operating facilities, or managers; access which might otherwise aid in the valuation of a target but often invalidate an existing merger agreement.

If a target termination fee provision exceeds the difference between the reservation price of a higher-value bidder and the bid that received the termination fee, the higher-value bidder will not tender an offer as any of that firm's gain is subsumed by the termination fee incurred.² Self-interested target managers may elect to curtail a natural bidding process if it provides the opportunity to hand select a "friendly" bidder in exchange for a side payment. As discussed in Hartzell, Ofek, and Yermack (2000) side payments to target management in acquisitions can include an employment contract with the new organization, or a negotiated severance arrangement that enhances existing provisions. We therefore expect that under the managerial discretion hypothesis the use of target fee provisions will be positively correlated with the degree of any agency conflict between target managers and shareholders.

The use of termination fees by target managers to discriminate against third party bidders will have a negative impact on target shareholder wealth for a number of reasons. First, it reduces the probability that competing bids will be forthcoming and Jennings and Mazzeo (1993) and Banerjee and Owers (1996) show that target returns to corporate control contests involving multiple bids and bidders are consistently higher than deals featuring non-competitive bidding. Second, termination fees can be used to lock-in “friendly” bidders while Schwert (2000) shows that deal hostility is positively correlated with deal premiums. Finally, if incumbent managers utilize termination fees as a means of hand-selecting friendly bidders in exchange for their jobs, target shareholders can not gain from a disciplinary takeover that might otherwise remove poorly performing managers.³

2.1.2. The efficiency hypothesis

From an efficiency standpoint, termination fees can play an important role in facilitating bids and maximizing bid premiums. The public announcement of a bid for a target creates a positive externality by providing third parties with information about the potential synergy gains associated with acquisition. Until a merger is definitive, early bidders are exposed to the risk that a higher value bidder, free riding on this information, will submit a competing bid and ultimately win the auction; the expected cost of which is higher for initial bidders and increasing in the value of private information revealed in the bid.⁴ Berkovitch, Bradley, and Khanna (1989) suggest that target payable termination fee clauses help to offset the expected cost of such free riding by providing initial bidders

² If bidding costs are non-zero, higher-value bidders will only tender an offer for the target when the termination fee is less than the difference between the firm’s reservation price and sum of the reservation price of the lower value bidder plus any bidding costs.

³ It should be noted that neither Martin and McConnell (1991) nor Hartzell, Ofek, and Yermack (2000) find that the gains to target shareholders are correlated with whether or not the incumbent managers remain with the firm following a merger.

⁴ Acquisition attempts for public targets inevitably expose a bidder to a non-trivial waiting period before final shareholder approval. The source of such intervals are varied and include a minimum 20 business day tender offer period under the Williams Act, required SEC registration of issued stock under rule 145, proxy solicitation for target shareholder approval of mergers, and review and clearance by various regulatory agencies.

with a minimum return that is invariant to the deal outcome, thereby encouraging the revelation of private information.

In addition to the risk of information expropriation, bidders bear the direct costs associated with valuation and negotiating with the target. Fishman (1989) and Jennings and Mazzeo (1993) suggest that bidding costs are a positive function of information acquisition, and can temper a firm's incentive to enter an initial or competing bid for a target. Similarly, Servaes and Zenner (1996) argue that information asymmetry between the bidder and target and deal complexity positively influence the use of costly investment banking services in acquisitions. Thus, we expect under the efficiency hypothesis that a target's incentive to offer a termination fee will be increasing in the costs associated with bidding and with the value of private information that is potentially revealed during the bidding process.⁵

Target fee provisions clearly impose a cost on third party bidders suggesting that the use of termination fees may discourage competing bids for the target. To the extent that termination fee clauses reduce the competitiveness of the ensuing auction, the conventional wisdom suggests that their presence will be negatively correlated with target shareholder welfare. From an efficiency standpoint, however, target managers will incorporate fee provisions only in those cases where they are expected to benefit target shareholders. In this case we expect termination fee provisions to be used in deals where the benefits associated with improved incentives for information revelation during the bid process outweigh the costs associated with a lower likelihood of receiving a competing bid. Thus, under the efficiency hypothesis we expect that, all else equal, bid premiums and target

⁵ In a related argument Berkovitch and Khanna (1990) and Roosevelt (2000) show that in a multi-bidder setting target fee grants to second best value bidders can improve the distribution of gains to target shareholders in perfect information auctions with costly bidding. In this case target managers can strategically employ termination fees to incent bidding by lower-value acquirers thereby insuring that a winning bid be in excess of the marginal reservation price of target shareholders. The true sequence of bidding activity (including non-public negotiation) and the marginal reservation prices of bidders are not readily observable, therefore, we are unable to test this hypothesis directly.

shareholder welfare in deals with target termination fees will be no lower than those in deals without fees.

2.2. *Bidder termination fee provisions*

Similar to target granted fees, the incidence of termination fee grants by bidders increased significantly between 1989 and 1998. As can be seen in Figure 1, the proportion of announced deals including bidder fees increased from approximately 0.1% in 1989 to 12.8% in 1998. While this fraction is significant, it has remained substantially lower than the proportion of deals including target fee grants. The results in Figure 2 also suggest that the relative value of bidder termination fees has remained constant and markedly similar to the fee grants of targets over the last decade.

To date, no theoretical or empirical research has addressed the possible motives behind the provision of bidder termination fee clauses in merger agreements, nor have these provisions been independently adjudicated in the courts. As an insurance hypothesis, we propose that bidder fee commitments are valuable to target shareholders because they lock-in a portion of the expected gain to a still uncertain deal. As such, the value of fee insurance for targets (like bidders) will be increasing in the transactions costs associated with negotiation. Furthermore, we also expect targets to negotiate bidder fee provisions in transactions where the expected costs to the target of bid failure are large. Because deal insurance is unlikely to be costless for targets, we look for additional indirect evidence for the insurance hypothesis by examining whether compensation for such terms takes either of two forms including reciprocal target fee commitments and/or lower bid premiums to targets.

2.3. *The evolution of the legal treatment of termination fees*

Legal challenges to termination fee provisions granted by targets have rested upon the contention that such fees reduce or subsume the expected gains to alternative bidders, thus deterring a competitive auction for the target. To date such legal challenges have not found support in the courts. In *Paramount v. QVC Networks* in 1994, the Delaware Chancery Court ruled against an

equity lockup option granted in a merger agreement between Paramount and a prospective bidder Viacom, but let stand Paramount's grant of a \$100 million termination fee to Viacom by deferring a ruling on whether the termination fee was "unreasonable by itself".⁶ More recently in *Brazen v. Bell Atlantic* 1997, a Bell Atlantic shareholder challenged a \$550 million termination fee granted by that firm in its merger proposal with NYNEX on the grounds that the magnitude of the fee coerced target shareholders to vote to approve the deal. In this case the Delaware Supreme Court ruled directly on the termination fee provision, allowing it to stand by suggesting that the fee was not "egregiously large" given the opportunity cost of the assets locked up in the merger negotiation.⁷

The Paramount and Brazen cases had an obvious and positive effect on the use of target termination fees in merger agreements. As can be seen in Figure 1, the proportion of deals that included fee grants by the target firm increased by nearly one quarter from 27% of deals in 1993 to 34% in 1994; and roughly doubled again between 1996 to 1997. Coates and Subramaniam (2000) infer that the successful legal challenge to lockup options in the *Paramount* case also resulted in a contemporaneous decrease in the number of deals with lockup provisions through the second half of the 1990s.

2.4. Related Literature

Our research can be viewed as complementary to the well-established line of theoretical work concerning the role of incumbent managers in facilitating target auctions. For example Bebchuk

⁶See *Paramount Communications Inc. v. QVC Network, Inc.* 637 A.2d (Del. 1994). QVC challenged the decision by Paramount management to grant Viacom a lock up option that entailed the right to purchase treasury shares equivalent to approximately 20% of the outstanding shares in Paramount. In its ruling the Delaware court upheld a previous decision invalidating the lockup option asserting that the imposed condition made Paramount less attractive to other bidders and thus was at odds with management's duty to auction the target to the highest bidder under as under the Revlon standard. For a summary of the legal challenges and arguments pertaining to lockup options as well as termination fees we refer the reader to Roosevelt (2000), and Coates and Subramanian (2000). Burch (2001) provides an excellent summary of the existing theory and provides some empirical evidence regarding the effects of lockup options on merger outcomes.

⁷ See *Brazen v. Bell Atlantic*, 695 A.2d 43 (1997). In fact the \$550 million termination fee provision was granted by both parties in the Bell Atlantic-NYNEX merger agreement and amounted to only 2.5% of the \$21 billion deal value at the merger announcement.

(1982a, 1982b) and Hirshleifer and Png (1989) consider the equilibrium between target management's incentive to facilitate competitive bidding and the diminished ex ante motivation of bidders to search for targets and make initial bids. Their research suggests that incumbent managers have an incentive to credibly commit to limiting their assistance to competing bidders in order to facilitate the receipt of an initial bid. Giammarino and Heinkel (1986) model target management's inclination to accept a first bid, when rejection would allow a second bidder to enter, and Shleifer and Vishny (1986) show that incumbent managers may pay greenmail to a low value bidder in an effort to persuade a higher-value bidder to enter an offer. Finally, in works most closely related to our own, Berkovitch, Bradley, and Khanna (1989); and Berkovitch and Khanna (1990) examine how target management's strategic use of discriminatory value-reducing defensive strategies (such as target termination fees, or lock ups of target assets or equity) can incent search activity, improve the degree of competitive bidding, and increase the merger premiums received by target shareholders.

This research also parallels empirical work examining the effects of antitakeover charter amendment adoption on the market for corporate control over targets. These studies include Pound's (1987) examination of provisions including supermajority and classified board amendments, Bhagat and Jefferis' (1993) study of the deterrent effect of classified board charter provisions, poison pills, and "fair price" amendments, and Comment and Schwert's (1995) analysis modeling the adoption of poison pill rights plans.

Ours is not the first paper to empirically examine the impact of merger agreement provisions on transaction outcomes. In a contemporaneous paper similar to our own, Officer (2002) finds that termination fee provisions, while inversely correlated with deal competition, do not significantly reduce the premiums received by target shareholders. Officer concludes, as do we, that termination fee grants are negotiated optimally as an incentive to encourage bidding and the revelation of private information. Burch (2001) examines the impact of lockup options granted to bidders in mergers between 1988 and 1995 and finds that while lockups deter competition for a target, the returns to

target shareholders are significantly higher for deals that include lockup provisions. Lockup provisions, although used with significantly less frequency, can be viewed as substitutes for the provision of target termination fees, and we control for their incidence in the analyses that follow.

3. Data collection and summary statistics

3.1. Sampling

Sample transactions are drawn from a pool of 3533 merger announcements between 1989 and 1998 obtained from the Securities Data Corporation (SDC) domestic mergers and acquisitions database. These observations include only transactions where deal value was made public, the form of the deal was defined as a “merger” or “acquisition” by SDC, and where the status of the deal is either “completed” or “withdrawn”. Target firms are required to have non-missing returns data from CRSP during the three days surrounding the announcement date of the deal, and book value of assets reported on Compustat for the fiscal year preceding the year of the merger announcement. These data restrictions constrain our sample to 3037 observations.

3.2. Termination fees

Detail about the sample distribution of the termination fee provisions granted by targets is provided in Panel A of Table 1. Fully three quarters of the fees payable (1123 total observations) are less than \$18 million, or about 3.8% of average transaction value. Several large fees remain in the highest quartile with 131 above 5% of transaction value, but only 25 observations involve fees in excess of 10% of the value of the proposed transaction. Panel B of Table 1 summarizes the sample distribution of bidder fee provisions. In all, 319 of the transactions included bidder fee provisions. Mean (median) bidder fee provisions were \$51.14 million (\$10.00 million) accounting for 2.8% (2.6%) of the total value of the proposed deal. The maximum termination fee grant by both bidders and targets in our sample was \$1.8 billion payable by the Bell Atlantic and GTE corporations in a \$53 billion merger announced in July of 1998.

3.3. *Deal characteristics*

In Table 2 we describe the transaction data in our sample including a number of control variables found to affect acquisition announcement returns and deal premiums in previous studies. All transaction data is obtained from SDC.

The distribution of bidder termination fee clauses appears to complement target fee grants where approximately 25% (284) of deals with target fee grants also include a bidder grant compared to only 1.8% (35) in deals that do not include target payable fees. For the full sample, 515 transactions or 16.96% of the observations included lockup options granted by the target to the bidding firm. The distribution of lockups between transactions that do and do not include termination fees is similar.

Consistent with the hypothesis that deals with fees are somewhat more complex transactions we find that the mean (median) market value of bids with target fee provisions are \$1164.89 million (\$230.30 million), almost twice the average transaction value of \$702.34 million (\$100.50 million) for transactions without. In addition, 60.20% of deals with target fees included some equity compensation for targets while only 48.64% of bids without fee grants were equity based. We note that in addition to increasing deal complexity, equity based offers potentially expose bidders to greater risks of information expropriation. For stock deals the value of securities offered to target shareholders depends on the value of the combined firm following the merger, which may in turn require that bidders divulge more of their information about the synergies associated with the acquisition.

Consistent with Coates and Subramaniam (2000) and Officer (2002) we find that 24.75% of deals with termination fees were structured as tender offers, significantly more than the 18% of

tender offers observed for deals without target fee grants.⁸ Toehold positions held by the bidding firm vary inversely with the provision of termination fee obligations. In bids involving termination fee provisions, the average toehold position is only 0.59%, significantly less than the average 6.42% stake held by bidders in deals that do not have payable target fees. Similarly, bidders hold more than 5% of the target shares in only 2.22% of deals including termination fees compared to 11.44% of deals without fees. Deals with target fees are significantly less likely to be hostile or litigious as defined by SDC. Target resistance and deal litigation are identified in 8.15% and 11.02% of deals without termination fees respectively, whereas only 1.07% and 7.39% of deals with target fees result in a hostile response from target managers or involve deal litigation.

Target fees are also less likely to be provided in follow-on offers.⁹ Of the 294 deals that were preceded by earlier bidding, only 80 transactions or 27.27% of follow-on bids included target termination fees while 214 or 72.73% did not. This result is consistent with the efficiency hypothesis as the costs associated with information acquisition and leakage for follow-on offers will be relatively low as compared to initial offers. Finally, target fee grants appear to have a significant positive impact on the probability of deal completion. Only 6.15% of transactions involving target granted fee provisions are withdrawn, roughly one fifth the withdrawal rate (29.73%) for the subsample of merger agreements not including fee provisions.

3.4. *Target characteristics*

Table 3 provides descriptive data about the target firms in our sample delineated by whether or not a target termination fee provision was included in the transaction. Accounting data is obtained

⁸ Schwert (2000) finds that tender offers are more likely to occur in hostile acquisition attempts, reducing the likelihood that such deal types will include a negotiated target payable fee. Very few of the transactions in our sample are identified as hostile by SDC suggesting that many of the tender offers recorded here result in a negotiated deal between management and acquirer; a finding consistent with Comment and Jarrell (1987).

⁹ A bid is considered to be an initial bid for a target if no prior bid is identified on SDC within the last 365 calendar days of the bid. A bid is considered a subsequent bid if it is announced within 365 calendar days from the last bid (but not necessarily the first bid) for the target.

from Compustat; returns data from the University of Chicago's CRSP tapes; and ownership data is from Compact Disclosure.

The average (median) book value of target assets for the full sample is \$1675.009 million (\$156.468 million), and leverage accounts for 23.3% (18.5%) of the total assets of the firm. Book size and capital structure for the two subsamples of targets, delineated by the use of target fee provisions, are not significantly different with the exception of median total assets which is marginally larger in deals with target fees. Based on the market value of the target's equity measured 42 trading days prior to the bid, targets in deals including termination fee provisions are significantly larger on average (\$768.420 million) compared to those in deals without fees (\$495.227 million). This result is consistent with the finding for deal values reported in Table 2.

As proxies for agency conflict between target managers and shareholders we include measures of pre-bid market performance and free cash flow for sample target firms. If, as proposed by the managerial discretion hypothesis, target fee clauses are a device used by incumbent managers to negotiate for private concessions from bidders we expect the incidence of target fee provisions will be positively correlated with pre-existing evidence of agency conflicts in the target including higher free cash flow to total assets and relatively poor net of market equity performance. Consistent with a disciplinary motive for acquisitions generally our evidence suggests that our transactions are often preceded by relatively poor performance for the target where the average (median) net-of-market buy-and-hold return for targets over the 12 months prior to the announcement is -2.2% (-8.6%). Pre-bid performance of targets, however, is not significantly different in deals that incorporate target fee provisions compared to those that do not. Targets offering termination fees do have somewhat higher levels of free cash flow to total assets, although neither the mean nor the median differences between the two subsamples are significantly different from zero.

To the extent that equity ownership aligns the interests of managers and shareholders, inside ownership should be inversely correlated with the extent of any agency conflict in the target.

Alternatively, we note that Cotter and Zenner (1994) and Walkling and Long (1984) find that conditioned upon receiving an offer, managers with higher levels of shareholdings are more likely to accept bids. Conceptually this finding may obtain because these bids are more likely to include substantial premiums to avoid being rebuffed by controlling managers. In this sense inside ownership might be positively correlated with deal certainty in observed deals, thus decreasing the probability that a target fee provision is also granted. Given the plausibility of either interpretation, the predicted effect of inside ownership on the use of target fee provisions is ambiguous. Equity ownership by target insiders (officers and directors) is 17.5% (9.4%) for the average (median) transaction in our sample. Our univariate evidence does suggest that inside ownership is significantly lower on average for deals that includes target termination fees (16.3%) compared to deals that do not (18.2%), providing some evidence consistent with managerial discretion driving the provision of termination fees. A higher incidence of family control is found in deals that do not involve target fees.

Table 3 also includes proxies for information asymmetry between bidders and targets. If information asymmetry increases the cost of information acquisition and therefore the value of private information revealed during the bidding process, target fee grants allocated in deals with relatively higher information asymmetry may represent an efficient negotiating tool for target managers seeking to incent bidding. To gauge the degree of information asymmetry we follow Servaes and Zenner (1996) in estimating the relatedness of target and bidder lines of business by identifying cases where the target and bidder share the first two digits of their primary SIC code (SIC match). Following Smith and Watts (1992), we also include the target's ratio of market-to-book assets in the fiscal year prior to the announcement year as a proxy for the extent of the firm's growth opportunities.

Approximately 56.7% of the sample transactions involve targets and bidders that share the same primary SIC code. Of the deals including target termination fees 60.2% have an SIC match

between target and bidder, while 54.6% of deals without target fees have an SIC match. To the extent that information asymmetry in same industry deals is low this finding is not consistent with the efficiency hypothesis. The mean (median) market-to-book ratio of target's that grant fee clauses is 1.914 (1.349), significantly higher than the mean (median) ratio of 1.464 (1.113) reported by targets that do not offer fees. The result for growth opportunities, which are potentially more opaque from the standpoint of a third party valuation, is consistent with the notion that termination fees are granted in deals where the costs of information acquisition and the value of the bidder's private information are likely to be high.

4. Termination fees and deal completion

In this section we examine whether the presence of target or bidder termination fee obligations significantly affects the likelihood of deal completion in a multivariate framework. The results of logistic regressions modeling the probability of deal completion are summarized in Table 4. The standardized coefficients reported for each independent variable indicate the change in the probability that the dependent variable equals one (a deal will be completed) given a change from zero to one for an indicator variable or a one standard deviation change in a continuous variable, holding all other independent variables constant at their sample means. Of the 3037 bids in our sample, 2399 transactions were completed while 638 were withdrawn.¹⁰

The results in Table 4 indicate that contract characteristics play an important role in the likelihood of completing a transaction. Based on the coefficient estimates of Model (2) the presence of target termination fee provisions increases the probability of deal completion by approximately 15.5%. Given this finding we cannot reject the hypothesis that target fees truncate a natural bidding

¹⁰ We note that the withdrawal rate is not affected by our data restrictions. Over the same interval SDC reports a deal failure rate of 21.06% for the 3533 merger announcements in the prescreened sample, nearly identical to the 21.01% rate in our restricted sample of 3037 transactions.

process.¹¹ The magnitude of this effect further highlights the extent to which target fee provisions can influence deal outcomes. We do not however, dismiss the possibility that the incorporation of target termination fee provisions are jointly determined with alternative deal characteristics, such as deal premiums, which may also play a role in the probability of deal completion. We provide further discussion and a direct test for such an endogenous relation in Section 6.1 and Table 7 of this paper. Bidder termination fee grants are not significantly correlated with deal completion. As in Burch (2001) we find that lockup options on target shares are positively correlated with the probability of deal completion, where the inclusion of a lockup option increases the probability of a successful transaction by 12.4%.

With respect to other transaction characteristics, the results in Model (2) of Table 4 suggest that stock offers and tender offers increase the probability of deal completion by approximately 7.9% and 18.1% respectively. As might be expected, deal hostility and litigation have an adverse effect on the probability of deal completion. Morck, Shleifer, and Vishny (1988) find that a founding family presence on the target's top management team increases the likelihood of a friendly transaction, thus we incorporate a family firm indicator variable that is equal to one if a family, group of families, founder of the firm, or a non-founding chairman control more than 20% of the outstanding equity of the target. The negative and significant family firm coefficient in Model (2) is interesting as it suggests that after controlling for deal attitude, bids made for family or insider-owned targets are less likely to ultimately be consummated, and contrasts with Morck et al. Coefficients on inside ownership (unreported) are positive but insignificantly different from zero across similar specifications. In our sample, the presence of a bidder toehold of 5% or larger is perfectly correlated with deal completion, thus we do not include bidder toeholds in our logistic regression. The positive

¹¹ Consistent with this view we find that only 4.4% of deals involving target termination fees receive follow on bids, compared to 11.5% of deals without fees.

relation between bidder toeholds and deal completion is consistent with the findings of Walkling (1985), and Betton and Eckbo (2000), as well as the theoretical work in Singh (1998).

Overall, our results indicate that the presence of target termination fees is positively associated with deal completion, a result that is consistent with the hypothesis that target firm management may utilize such provisions to lock-in deals with friendly bidders. Alternatively, deal completion could also be positively associated with the presence of termination fee provisions if such fees are used to solve contracting problems between bidders and targets as posited by the efficiency hypothesis. In the next section we begin to discriminate between these two hypotheses by examining the firm and deal characteristics underlying the use of target and bidder fee provisions.

5. The determinants of fee provisions

5.1. Target fee provisions

In Table 5 we present logistic regressions for the inclusion of target termination fee provisions in merger agreements as a function of deal and target firm characteristics. Each specification also includes time period dummy variables to control for the effects of the Paramount and Brazen court decisions.

The results in Table 5 indicate that target fee provisions are positively correlated with the presence of bidder fee grants suggesting that target fees may in some cases be part of a reciprocal arrangement between target and bidder.¹² There is some evidence that target fee grants are inversely correlated with the provision of target share lockups, but in Model (3) the coefficient on the lockup indicator becomes statistically insignificant after controlling for other target firm characteristics. Based on coefficients in Model (3) hostile bidders are approximately 37% less likely to receive a

target termination fee provision, a finding that is consistent with the notion that target fee provisions are used to lock-in friendly bidders, but is more likely explained by the fact that bids resisted by target management are unlikely to result in a negotiated merger agreement. Fee grants by targets are inversely correlated with bidder toeholds, where the presence of a bidder toehold greater than 5% of the target's shares decreases the probability of observing a target fee clause by approximately 34%. This is consistent with the efficiency hypothesis where toeholds reduce the likelihood of competitive bidding. Finally, target fee provisions are almost 30% more likely to appear in tender offers.

Consistent with the predictions of the efficiency hypothesis, the use of target fees is positively correlated with deal complexity as proxied by the market value of the target firm. Based on the coefficients in Model (3), a one standard deviation increase in the size of the target firm (\$5.81 million) increases the probability of observing a target fee clause by 3.3%. The use of target fees is 12% more likely in stock-based offers. While stock offers increase deal complexity, they may also proxy for situations where information externalities are more problematic for bidders. Target fee provisions are also positively related to the target's growth opportunities as proxied by market-to-book assets where, based on the coefficient in Model (3), a one standard deviation in a target's market to book (1.78) increases the likelihood of a target fee clause by 3.4%. The indicator variable for a line of business match between bidder and target (SIC match) is insignificant in the regressions.¹³

In Model (3) of Table 5 we find that target termination fee provisions are positively related to

¹² Bidder fees, when provided, are often matched to fees provided by the target both in frequency and size. Of the 319 transactions that include termination fees payable by bidders 89% of these transactions (284 observations) also included matching fees payable by the target. The distribution of these overlapping fees provisions is also almost identical with a spearman correlation of 0.966 and average (median) termination fee provisions of \$54.210 million (\$10.0 million) and \$54.435 (\$10.0 million) within the target and bidder subsamples respectively.

¹³ To examine whether these results are robust to alternative measures of information asymmetry facing bidders we estimate models similar to Model (2) in Table 5 utilizing independently (i) the standard deviation of market model residuals estimated over days -250 to -50 relative to the announcement date, (ii) the ratio of intangible to total assets. Coefficients on the standard deviation of market model residuals and intangible assets are consistently positive and significantly different from zero.

the target's pre-bid net of market performance and are uncorrelated with target free cash flow. These results are inconsistent with the notion that rent-seeking incumbent managers negotiate termination fee clauses at shareholder expense. One exception to this conclusion is our measure of inside ownership, which has a negative and marginally significant impact on the use of target fee provisions. The economic significance of managerial ownership is actually quite small, however, where a one standard deviation increase (0.21) decreases the probability of a target termination fee clause by only 2.7%. While this finding is consistent with agency problems in the target, it is also potentially consistent with the efficiency hypothesis, where managerial ownership has in prior research been shown to increase the probability of deal completion. Subsequent analyses (unreported) do not indicate that the relation between target fees and inside ownership is nonlinear.

5.2. *Bidder fee provisions*

In Table 6 we model the provision of bidder termination fee clauses as a function of deal characteristics and target firm attributes. Each specification also includes time period dummy variables to control for the effects of the Paramount and Brazen court decisions.

As in Table 5, the results in Table 6 suggest that target fees provisions often complement bidder fee arrangements; in fact this is far and away the strongest predictor of bidder fees. Bidder toeholds and tender offers, which increase the probability of successful deal completion, are negatively correlated with the presence of bidder termination fees, although only the coefficient on tender offers is statistically significant. Consistent with the insurance hypothesis, we find that deals for larger targets and deals involving bidder equity (where negotiating costs are likely to be high) are more likely to include bidder fee provisions. Moreover, deals involving larger targets are also likely to have higher expected costs of bid failure, given that larger targets are generally less likely to be takeover candidates (e.g. Paelpu (1986) and Comment and Schwert (1995)). The standardized coefficients in Model (2) indicate that deals that include bidder equity (stock offers) are 2.6% more

likely to include a bidder termination fee, while a one standard deviation increase in the size of the target (\$5.70 million) raises the likelihood of a bidder granted termination fee by 1.3%. Our proxies for information asymmetry between bidder and target included in Model (2) yield coefficients that are not statistically different from zero.

5.3. *Industry effects*

Figure 3 summarizes the distribution of termination fee and lockup provisions by the target firm's industry for our sample of transactions. Industry clusters are derived using the 4-digit SIC definitions in Fama and French (1997). Consistent with the findings in Section 5, target fee grants are most prevalent in the technology and pharmaceutical industries where growth opportunities make up a greater proportion of total firm value. Utilities incorporate the highest per-deal proportion of target and bidder termination fees (53% and 30% respectively) for the 76 sample transactions that occur in this industry. While transactions in this segment involve fixed assets with a high degree of transparency, Coates and Subramaniam (2000) note that regulatory approval extends the time to completion thus exposing deal participants to greater transaction risk. The figure also indicates that stock lockup options are clustered in deals involving financial targets, where regulatory constraints restrict the use of target fee grants.¹⁴

6. **The shareholder wealth effects associated with termination fee provisions**

In this section we examine the shareholder welfare consequences associated with the provision of target and bidder termination fee clauses in merger agreements. The efficiency and managerial discretion hypotheses provide disparate conclusions about the welfare of target shareholders in deals involving target termination fee clauses. If target fees are used by self-serving management to deter competitive bidding, the use of these provisions will lead to lower target

¹⁴ As noted by Coates and Subramaniam (2000) Federal Reserve Board rules restrict cash commitments by financials to no more than 10% of the target's consolidated net worth.

shareholder welfare. Alternatively, if incumbent managers use target fee provisions to improve bidding incentives, we expect that target shareholders will not suffer from their inclusion, and may potentially be made better off if fee provisions allow target managers to capture a larger portion of the rents associated with acquisition. Under the insurance hypothesis, bidder fee provisions lock-in a portion of any merger gains to targets but will be associated with lower bid premiums as compensation for fee concessions. To provide evidence on the wealth effects associated with termination fee provisions we examine i.) bid premiums, ii) announcement period cumulative abnormal returns to targets and bidder shareholders and, iii.) target auction returns defined as the cumulative abnormal returns to targets shareholders over an entire bidding sequence.

6.1. Bid premiums and termination fee provisions

Our primary measure of the bid premium is the total value of compensation paid to target shareholders as reported by SDC, deflated by the market value of the target's equity 42 trading days prior to the bid announcement less one. As a second measure of the bid premium we use the share price paid to target shareholders as reported by SDC deflated by the target's share price 42 trading days prior to the bid announcement less one. As noted by Officer (2002), the premiums computed using SDC data are very noisy and include many large outliers. Following Officer, the premium measure used in our regressions is equal to our primary measure when this value is greater than zero and less than two, and is equal to our secondary measure when the primary value is missing and the value of the secondary measure is greater than zero and less than two. Otherwise the premium is regarded as missing. Using this procedure we obtain bid premiums for 2735 of the bids in our sample. The average premium is 56.7% for deals including target termination fees compared to 53.6% for deals without target fees with the difference significant at the 5% level.

Table 7 Models (1-3) present results from regressions of bid premiums on target (bidder) fee provisions using an indicator variable equal to one if a target (bidder) fee provision is incorporated into the merger agreement. Various control variables shown in other studies to affect deal premiums

are included. The regressions also include indicator variables for each sample year 1990 to 1998 to capture any macroeconomic effects. Across all of the three models, bid premiums are between 3.7% and 6.3% higher in deals that include target termination fees compared to deals that do not. These results are consistent with the efficiency hypothesis, and do not support the view that self-serving managers use termination fees to lock in “friendly” deals. Bid premiums are between 3.6% and 6.9% lower in deals with bidder termination fees suggesting that, consistent with the insurance hypothesis, targets receiving bidder payable fees negotiate lower premiums. Deal premiums do not vary systematically with the existence of lockup agreements.

It is possible that only relatively large target fee provisions could be used in ways that interrupt a normal bidding process. To examine this possibility we incorporate in an unreported specification an indicator variable equal to one if the value of the target termination fee exceeds 10% of the total value of the proposed deal in a model otherwise identical to Model (2) of Table 7. The coefficient associated with this variable (-0.163) is negative and significant at the 10% level providing some evidence that the very largest fees do garner lower premia. A similar specification for bidder fees exceeding 10% of deal value yields coefficients that are insignificantly different from zero. Thus, while on average target fee grants do not appear to harm target shareholders, this evidence suggests that cause for concern may exist around the grants of seeming “jumbo” fees which make up only 1% of the total sample.

With respect to the control variables, deal premiums are reliably higher for stock and tender offers and lower for deals involving larger targets and when the bidder has a toehold. Deal premiums are also negatively correlated with the prior bidding indicator and with deal hostility, although neither effect is statistically significant. There is weak evidence that deal premiums are positively correlated with target firm leverage, but no evidence that they vary systematically with other characteristics of the target.

Despite our extensive use of control variables, it is not clear that we have fully accounted for all of the factors that affect both bid premiums and the decision to incorporate bidder and target fee provisions in certain deals. Deal provisions such as the level and form of target compensation, and various contract provisions including lockups and termination fees, are almost surely negotiated simultaneously. In such a setting it is possible that deals with higher bid premiums are more likely to involve target fee provisions as such deals may also be more likely to be completed, thus reducing the probability that a fee will actually have to be paid. In this sense inferring causation between the observed bid premiums and target fee grants will at best be spurious, and coefficients from an OLS regression of premiums on target fees will be biased and inconsistent.

To provide some evidence on whether the endogenous choice between the provision of target fees and deal premiums affect our earlier results, we estimate a system of simultaneous equations following the methodology outlined in Maddala (1983) with bid premium and target termination fee clauses provided as the two endogenous variables. The results of this regression are reported in Model (4) of Table 8. The first equation in Model (4) is an OLS regression of bid premiums on a target fee instrument and various control variables. The second equation is a probit regression where the dependent variable is equal to one if the deal includes a target termination fee, and the independent variables include an instrument for the bid premium and various control variables. The termination fee and bid premium instruments are computed from first stage regressions using all of the control variables in the two equations. The standard errors in the regressions are adjusted for the fact that the instrumental variables for termination fees and bid premiums are estimated. Some control variables are omitted from the two models in order to identify the system.

After accounting for endogeneity, the coefficient on the target fee instrument becomes insignificant, indicating that bid premiums are unrelated to the presence of target termination fees. There is also no evidence of causation running in the reverse direction. The coefficient on the premium instrument in the probit model of fee provisions is not significantly different from zero. We

interpret this result as being consistent with the notion that deal premiums are determined jointly with other deal features including clauses pertaining to target payable termination fees. Overall, the evidence provides further support for the contention that incumbent managers do not use target fees opportunistically, but rather utilize fees as a means by which to improve bidding incentives.

6.2. Announcement period returns and termination fee provisions

To provide additional evidence regarding the effects of termination fees on target shareholder welfare we examine target announcement cumulative abnormal returns (CARs). Announcement CARs are computed as the sample firm's return minus the return on the CRSP value-weighted NYSE/AMEX/Nasdaq index summed over the three-day period $\{-1, +1\}$ surrounding the bid announcement.

In Table 8 we present regressions of target announcement cumulative abnormal returns (CARs) (Models 1-4) and bidder CARs (Models 5-6) on indicator variables for the presence of target and bidder termination fee clauses, and various control variables. In addition to the control variables incorporated in Table 7, we include an indicator variable equal to one if the deal is ultimately completed as a proxy for investors' ex ante expectation regarding deal success. All of the regressions also include indicator variables for each sample year 1990 to 1998 to capture any macroeconomic effects.

The results in Model (1) of Table 8 indicate that, controlling only for fee provisions and lockups, target announcement CARs are on average 3.0% higher in deals that include target fee grants compared to deals that do not. This result is statistically significant at the 1% level. In more fully specified regressions (Models 2 and 3) the coefficient on the target termination fee indicator remains positive, but is insignificantly different from zero. Similar to the premium regressions reported previously, announcement period CARs provide no evidence that target managers use termination fee clauses as a device to limit competitive bidding at the expense of target shareholders in exchange for private benefits negotiated with a friendly bidder.

Announcement period returns to targets are approximately 3.0% to 5.9% lower in deals that include bidder fee provisions. Consistent with the insurance hypothesis, these results can be interpreted in two ways. First, transactions with a lower expected return may be more likely to include bidder fees as a deal “sweetener” for targets. Alternatively, bidder fee provisions could serve as a hedge for a target’s transaction risk, but cost some fraction of the bid premium that might otherwise be captured by target shareholders.

In Model (4) of Table 8 we follow the methodology of Comment and Schwert (1995) and construct a variable “termination fee surprise” computed as the target termination fee indicator minus the estimated probability that a given deal will include a target fee (derived from Model (1) of Table 5). Because many deals contain termination fee provisions it is possible that their use is anticipated, and that the expected effects of a fee are already impounded in target market prices. If this is the case, the managerial discretion hypothesis predicts that the unanticipated use of target fee provisions should convey negative information about the deal. In contrast to this prediction, the coefficient on the target fee surprise variable is positive, but not significant, indicating that the use of an unanticipated target fee grant is not evaluated negatively by the market at deal announcement.

The signs of the control variables in Models (1-4) of Table 8 are similar to those found in many previous studies of merger announcement returns, although some are insignificantly different from zero. Deals that are eventually completed have higher announcement period returns, and follow on bids exhibit lower announcement period returns. Announcement CARs are lower in stock offers, for deals with toeholds, and in bids for larger targets, and are higher for tender offers and hostile deals.

Models (5) and (6) of Table 8 summarize regressions of bidder announcement CARs on indicator variables associated with the provision of target and bidder termination fees, as well as the control variables found in the previous target announcement CARs regressions. Sample transactions include bids undertaken by non-public firms and bidders with missing announcement returns,

resulting in a sample of 1791 bidder announcement returns. Notably, in neither specification do we find that the inclusion of either bidder or target termination fee clauses is significantly correlated with bidder announcement returns. The result that target fee grants do not materially benefit bidders in a negotiated merger provides further evidence against the managerial discretion hypothesis.

6.3. Auction returns and termination fee provisions

In general, the evidence presented so far is consistent with an efficiency motive behind the incorporation of target fee clauses in merger agreements. Under this hypothesis, target managers negotiate termination fee provisions when the benefits from improved bidding incentives outweigh the discouraging effect that fees have on competing bidders. To provide some evidence for this tradeoff, models in Table 9 summarize the results of OLS regressions using target auction CARs as the dependent variable.

Auction CARs are measured as a target's cumulative abnormal return relative to the CRSP value-weighted NYSE/AMEX/Nasdaq index over days -42 relative to the announcement of a first bid up to the end of the auction marked as the close of a completed bid or the withdrawal of a last bid. Following Schwert (2000), bids are considered to be part of a target auction if they occur within 365 calendar days of a previous bid. In total there are 2743 unique target auctions in our sample of which 2521 contain only a single bid for the target, indicating that auctions with multiple bids occur about 8% of the time. Our incidence of multiple auction bids is lower than the 19% rate reported by Schwert (2000) and reflects the consideration of only initial bids (those not preceded by bidding activity within the past 365 days) in our sample to define unique auctions. Excluding this condition we obtain a comparable multiple bid incidence of just over 17% for the sample transactions in this

study.¹⁵ Consistent with our prior finding that the presence of target termination fees is positively correlated with deal success, multiple bid auctions are more likely for targets when the first bid does not contain a fee provision (11.5%) than when it does (4.4%). To capture the effects of the auction process we include an indicator variable equal to one if the auction includes multiple bids. In Models (1-3) auction status (whether the target is ultimately acquired) is not included because auction returns are computed up to the resolution of the final bid, but is included in Models (4) and (5) to parse out the effects of successful versus unsuccessful acquisitions. Other firm and deal characteristics included in the models are those associated with the first bid in the auction.

The results of Models (1-3) indicate that target shareholders appear to benefit from the use of target termination fees. Auction CARs are between 6.8% and 10.0% higher when a target elects to incorporate a target fee clause. Deals receiving multiple bids, however, exhibit auction returns that are 6.0% to 7.0% higher than deals receiving a single bid. Given that deals with termination fee clauses seldom receive follow on bids, these results are consistent with a tradeoff between the higher negotiated premiums in deals with target fees, and the returns to multi-bidder auctions. Unconditionally, however, the potential benefits of an auction appear to be small. As noted previously, only about 11.5% of auctions in deals without termination fee provisions receive multiple bids. Based on the coefficient estimates in Model (2) this implies that the ex ante expected effect of receiving multiple bids on the returns to target shareholders is only about 0.69% ($= 0.115 \times 0.06$), which is much smaller than the additional 7.4% return associated with target fee provisions.

¹⁵ Betton and Eckbo (2000) find that second bids are observed for 37.5% of tender offers made between 1971 and 1990. We examine the data further and obtain two primary reasons for the difference in multiple bid rates between their study and our own. First, tender offers are more likely to be part of a multiple bid auction. For example, approximately 24% of the tender offer bids in our sample ($n=624$) received follow up bids, compared to 15.5% for bids that are not tender offers ($n=2413$). Second, in general, bids in the 1980s were more likely to receive follow up bidding. For example, sampling the SDC universe of bids between 1979 and 1988, approximately 50% of all tender offers were part of multiple bid auctions while 37.7% of non tender offer bids were also part of multiple bid auctions.

In Models (4) and (5) of Table 9 we include an indicator for whether the auction was ultimately completed, resulting in a change in control of the target. After controlling for the positive effect that termination fees have on deal completion, the coefficient on the target fee indicator becomes insignificantly different from zero. This finding suggests that the benefits of target fee provisions accrue to target shareholders in large part through a higher probability of deal completion.

7. Summary and Conclusions

Recent years have seen a remarkable increase in the proportion of mergers and acquisitions involving provisions for target and bidder payable termination fees. In this paper we examine the use of both types of fee provisions for a sample of 3037 merger attempts over the period 1989 to 1998.

We consider whether efficiency motives or managerial discretion better explain the use of target fee provisions. Despite the fact that target fee provisions substantially increase the probability of deal completion, our results do not suggest that, on average, these fee clauses are a byproduct of agency conflict between the management and shareholders of the target. Our results indicate that, consistent with the efficiency hypothesis, target fee clauses are provided more often in deals involving a significant degree of information asymmetry between bidder and target, and in more complex deals. Support for the efficiency hypothesis is further bolstered by our finding that target fee provisions generally yield positive wealth effects for target shareholders. Overall our analyses indicate that provisions for target fee grants entail an optimal trade off between the cost of foregoing a potential target auction and higher negotiated deal premiums.

Our analysis also considers the less prevalent provisions for bidder payable termination fees. We find that bidder termination fee clauses are more likely to be included in deals involving a significant degree of information asymmetry between targets and bidders and in more complex offers. These results are consistent with the insurance hypothesis for the provision of bidder fees, which suggests that targets may find bidder fee provisions more valuable in deals where the costs of

negotiation and bid failure are relatively higher. Corollary evidence indicates that targets compensate bidders for fee provisions through concomitant target fee provisions and/or the receipt of lower bid premiums.

Several important conclusions can be gleaned from our results regarding provisions for target payable termination fees in merger agreements. First, our data suggests that deals including target fees have significantly higher completion rates and larger deal premiums. While target fees do empirically make “breaking up hard to do”, our evidence is largely inconsistent with the notion that, on average, such fees reduce target shareholder welfare or are the byproduct of agency problems between target shareholders and incumbent management. Second, our results provide indirect empirical support for the hypothesis that target fees improve the bargaining position of target managers, and that such fees are more likely to be used in environments where contracting costs are high. Finally, the evidence pertaining to the average firm in our sample reinforces recent judicial opinions that target fee provisions provide reasonable compensation for bidders, while not perceptively harming target shareholders.

Despite these results, however, we advise the consideration of some important caveats in the adjudication of future cases. Specifically, our evidence suggests that the allocation of extraordinarily large fee grants (greater than 10% of deal value) is associated with lower deal premia. In addition, we note that direct acquisition costs in the form of investment banking fees, typically explain less than one half of the value of observed target termination fee grants, suggesting that additional unexplained opportunity, transaction, and bidding costs must be quite large. Obtaining a better understanding of the costs incurred in consummating a merger agreement, and how such costs affect the incentives of third party bidders, remains an interesting topic for further research

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Table 1
Frequency distribution of termination fee provisions granted by targets and bidders merger bids between 1989-1998

Frequency and distribution statistics for the total and relative termination fee data for the 1123 (319) transactions in which target (bidding) firms granted a termination fee provision in the merger contract. The full sample is collected using merger and acquisition attempts announced between 1989 and 1998 provided by SDC. The full sample consists of 3037 observations and includes only transactions classified as “completed” or “withdrawn”, and excludes cases where transaction values (SDC), target total assets (Compustat), or returns data (CRSP) are not available. Relative value is defined as the ratio of the value of the termination fee provision divided by the market value of the bid.

Panel A: Target granted termination fee provisions

	Mean	Median	Std. dev.	Percentiles			
				Min.	25th	75th	Max.
Total Value (\$ millions)	26.25	6.50	102.17	0.1	2.5	18.0	1800.0
Relative Value	0.033	0.029	0.022	0.001	0.021	0.038	0.254

Panel B: Bidder granted termination fee provisions

	Mean	Median	Std. dev.	Percentiles			
				Min.	25th	75th	Max.
Total Value (\$ millions)	51.14	10.00	181.31	0.075	2.0	30.0	1800.0
Relative Value	0.028	0.026	0.018	0.001	0.017	0.035	0.127

Table 2
Summary of transaction data for merger bids 1989-1998

All data is drawn from SDC. The full sample consists of 3037 merger attempts announced between 1989 and 1998 and includes only “completed” or “withdrawn” transactions as defined by SDC, and excludes those transactions for which transaction values (SDC), target total assets (Compustat), or returns data (CRSP) are not available. Target lockup is an indicator variable equal to one if the bidder is granted an option to purchase shares in the target. Equity deals include bids where any component of the compensation offered consists of bidder equity. Toehold represents the fraction of target shares held by the bidder prior to the bid. Bids receive a hostile classification from SDC if target managers rebuff the bidder’s offer. The offer litigation indicator is provided by SDC in deals where associated litigation is launched. Deals are considered to have prior bidding if they follow a previous offer for the target within 365 calendar days. *, **, *** indicates that the mean and median data are significantly different between deals with and without target termination fees at the 10%, 5%, and 1% levels respectively.

	Full Sample (N=3037)	Deals with target termination fees (N=1123)	Deals without target termination fees (N=1914)
Number of deals with bidder termination fees (% of sample)	319 (10.50%)	284 (25.29%)	35 (1.83%)*
Number of deals with lockup of target shares (% of sample)	515 (16.96%)	196 (17.45%)	319 (16.67%)
Mean deal value: \$ millions (median)	873.38 (136.10)	1164.89 (230.30)	702.34*** (100.50)***
Number of equity deals (% of sample)	1607 (52.91%)	676 (60.20%)	931 (48.64%)*
Number of deals structured as a tender offer (% of sample)	624 (20.55%)	278 (24.75%)	346 (18.08%)*
Number of deals with bidder toeholds > 5% (% of sample)	244 (8.03%)	25 (2.22%)	219 (11.44%)*
Bidder toehold: % of target shares (median)	4.27 (0.00)	0.59 (0.00)	6.42*** (0.00)***
Number of deals classified as “Hostile” (% of sample)	168 (5.53%)	12 (1.07%)	156 (8.15%)*
Number of deals with associated litigation (% of sample)	294 (9.68%)	83 (7.39%)	211 (11.02%)*
Number of deals with prior bidding (% of sample)	294 (9.68%)	80 (7.12%)	214 (11.18%)*
Number of completed transactions (% of sample)	2399 (78.99%)	1054 (93.85%)	1345 (70.27%)*

Table 3
Summary of target characteristics in merger bids 1989-1998

All non-return data is from Compustat and is estimated for the target in the fiscal year prior to the announcement date of the acquisition and all returns data is obtained from CRSP. Market value of equity is computed 42 trading days prior to the announcement date of the acquisition attempt. Net-of-market return is defined as the difference between the buy-and-hold return of the target and that of the value weighted NYSE/AMEX/NASDAQ CRSP index over the months -12 to -1 relative to the announcement month of the acquisition. Following Lehn and Poulsen (1989) free cash flow is computed as operating income before depreciation minus total taxes minus change in deferred taxes minus gross interest expense minus any preferred and common dividends paid. Inside ownership data is obtained from Compact Disclosure and measures the fractional ownership of the target firm's officers and directors in the fiscal year prior to the acquisition bid. Family control is an indicator variable equal to one if a family, group of families, founder of the firm, or a non-founding chairman controls more than 20% of the outstanding equity of the target as defined by SDC. The market-to-book assets ratio is defined as total assets minus book equity plus market equity divided by total assets. SIC match is an indicator variable equal to one if the target and bidder share the same first two digits of their primary SIC codes and zero otherwise. Numbers outside parentheses are sample means while the data within parentheses are sample medians. *, **, *** indicates that the mean and median data are significantly different between deals with and without target termination fees at the 10%, 5%, and 1% levels respectively. There are 3037 total observations, with the number of non-missing observations reported by variable in the left hand column.

	Full sample (n=3037)	Deals with target termination fees (n=1123)	Deals without target termination fees (n=1914)
Total assets: \$ millions N=3037	1675.009 (156.468)	1428.256 (167.202)	1819.786 (150.452)**
Market value of equity: \$ millions N=3037	596.246 (90.617)	768.420 (133.009)	495.227*** (70.138)***
Total debt / Total assets N=3005	0.233 (0.185)	0.235 (0.189)	0.231 (0.182)
Net of market return (-12,-1) N=3037	-0.022 (-0.086)	-0.029 (-0.080)	-0.018 (-0.087)
Free cash flow / total assets N=2358	0.063 (0.039)	0.070 (0.041)	0.058 (0.039)
Inside ownership N=2659	0.175 (0.094)	0.163 (0.094)	0.182** (0.096)
Family control indicator N=3037	0.014 (0.000)	0.003 (0.000)	0.020*** (0.000)
Market-to-book assets N=2917	1.634 (1.185)	1.914 (1.349)	1.464*** (1.113)***
SIC match N=3034	0.567 (1.000)	0.602 (1.000)	0.546*** (1.000)

Table 4
Logistic regressions modeling the probability of completing a proposed merger transaction

Models 1 through 3 estimate the probability that a proposed deal in the sample will be completed. In each model the dependent variable is an indicator equal to one if the proposed merger is ultimately consummated (n=2399) and zero if it is not (n=638). Model (1) incorporates contract characteristics as independent variables including an indicator variable equal to one if the deal includes a target fee provision and zero if it does not; an indicator variable equal one if the deal includes a bidder fee provision and zero if it does not; and an indicator variable equal to one if the deal includes a lockup agreement involving target equity, zero if it does not. Model (2) integrates information on the form of the deal including indicator variables equal to one if the deal includes equity-based compensation; if the form of the bid is a tender offer; and if the deal follows a prior bid within the last 365 calendar days. Model (2) also provides measures of target resistance as indicator variables equal to one if the deal is defined as “hostile” or if the deal has associated litigation as defined by SDC. The family firm indicator is equal to one if a family, group of families, founder of the firm, or non-founding chairman controls more than 20% of the outstanding equity of the target. *P*-values are in parentheses and standardized coefficients are provided in brackets. Standardized coefficients relate the change in the probability of including a target fee provision for a one standard deviation increase in a continuous variable, or a shift from zero to one for an indicator variable.

	Model (1) N=3037	Model (2) N=3037	Standardized Coefficient
Intercept	0.654 (<0.001)	0.470 (<0.001)	NA
Deal includes a target termination fee provision	1.859 (<0.001)	1.485 (<0.001)	0.155
Deal includes a bidder termination fee provision	0.203 (0.410)	0.279 (0.307)	0.030
Deal includes a lockup of target shares	1.823 (<0.001)	1.479 (<0.001)	0.124
Deal is a tender offer		2.389 (<0.001)	0.181
Stock offer		0.660 (<0.001)	0.079
Deal has prior bidding		-0.841 (<0.001)	-0.125
Deal attitude is hostile		-2.695 (<0.001)	-0.547
Litigation indicator		-0.420 (0.018)	-0.056
Family firm indicator		-1.031 (0.010)	-0.168
Pseudo R ²	0.127	0.240	

Table 5

Logistic regressions modeling termination fee provisions by target firms

Models 1 through 3 estimate the decision to include target termination fee provisions in a merger agreement. In each model the dependent variable is an indicator equal to one if a target provides a termination fee clause (n=1123) and zero if it does not (n=1914). Model (1) incorporates deal characteristics as independent variables including an indicator variable equal to one if the deal also includes a bidder fee provision and zero if it does not; an indicator equal to one if the deal includes a lockup agreement involving target equity and zero if it does not; an indicator variable equal to one if the deal follows a prior bid within 365 calendar days and zero if it is an initial bid; an indicator variable equal to one if the deal is defined as “hostile” by SDC and zero otherwise; a continuous measure of the fraction of target shares held by the bidder prior to announcement (toehold shares); an indicator variable equal to one if the bid is structured as a tender offer; and an indicator variable (stock offer) equal to one if the bid includes equity. Market value of equity is computed for the target 42 trading days prior to the bid. Model (2) incorporates two proxies for information asymmetry between targets and bidders including the target’s market-to-book ratio in the fiscal year prior to the bid and an indicator variable equal to one if the target and bidder share the same first two digits of their primary SIC code. Model (3) incorporates agency proxies including the target’s free cash flow to assets in the fiscal year prior to the bid; the target’s cumulative net-of-market return over a –12 to –1 month interval prior to the bid announcement date and the fractional ownership of target managers and directors in the fiscal year prior to the bid. Free cash flow is measured as operating income before depreciation minus taxes minus the change in deferred taxes minus gross interest expense minus any preferred and common dividends. *P*-values are in parentheses. Standardized coefficients are obtained from Model (3) and relate the change in the probability of including a target fee provision for a one standard deviation increase in a continuous variable, or a shift from zero to one for an indicator variable.

Table 5 (continued)

	Model (1) N=3037	Model (2) N=2914	Model (3) N=2010	Standardized Coefficient
Intercept	-2.918 (<0.001)	-3.041 (<0.001)	-2.654 (<0.001)	NA
Deal includes a bidder termination fee provision	2.709 (<0.001)	2.709 (<0.001)	2.413 (<0.001)	0.522
Deal includes a lockup of target shares	-0.634 (<0.001)	-0.656 (<0.001)	0.175 (0.382)	0.042
Deal has prior bidding	-0.214 (0.220)	-0.152 (0.390)	-0.319 (0.119)	-0.073
Deal attitude is hostile	-2.504 (<0.001)	-2.451 (<0.001)	-2.574 (<0.001)	-0.368
Bidder toehold	-1.937 (<0.001)	-1.925 (<0.001)	-2.128 (<0.001)	-0.343
Tender offer	1.324 (<0.001)	1.270 (<0.001)	1.235 (<0.001)	0.297
Stock offer	0.474 (<0.001)	0.411 (<0.001)	0.521 (<0.001)	0.122
Log market value of equity	0.133 (<0.001)	0.115 (<0.001)	0.081 (0.031)	0.033
Market-to-book assets		0.128 (0.001)	0.082 (0.063)	0.034
SIC match		0.077 (0.438)	0.157 (0.172)	0.037
Target's net of market return (-12,-1)			0.195 (0.054)	0.027
Free cash flow			-0.154 (0.632)	-0.007
Inside ownership			-0.538 (0.042)	-0.027
Post Paramount indicator (equal to 1 for 1994 onward)	1.023 (<0.001)	1.032 (<0.001)	1.024 (<0.001)	0.222
Post Brazen indicator (equal to 1 for 1997 onward)	1.178 (<0.001)	1.133 (<0.001)	1.171 (<0.001)	0.277
Pseudo R ²	0.277	0.276	0.292	

Table 6
Logistic regressions modeling termination fee provisions by bidding firms

Models 1 and 2 summarize the decision to include bidder termination fee provisions in merger agreements. In each model the dependent variable is an indicator equal to one if a bidder provides a termination fee clause (n=319) and zero if it does not (n=2718). Model (1) incorporates deal characteristics as independent variables including an indicator variable equal to one if the deal also includes a target fee provision and zero if it does not; an indicator equal to one if the deal includes a lockup agreement involving target equity and zero if it does not; an indicator variable equal to one if the deal follows a prior bid within 365 calendar days and zero if it is an initial bid; an indicator variable equal to one if the deal is defined as “hostile” by SDC and zero otherwise; a continuous measure of the fraction of target shares held by the bidder prior to announcement (toehold shares); an indicator variable equal to one if the bid is structured as a tender offer; and an indicator variable (stock offer) equal to one if the bid includes equity. Market value of equity is computed for the target 42 trading days prior to the bid. Model (2) incorporates two proxies for information asymmetry between targets and bidders including the target’s market-to-book ratio in the fiscal year prior to the bid and an indicator variable equal to one if the target and bidder share the same first two digits of their primary SIC code. *P*-values are in parentheses. Standardized coefficients are obtained from Model (2) and relate the change in the probability of including a target fee provision for a one standard deviation increase in a continuous variable, or a shift from zero to one for an indicator variable.

	Model (1) N=3037	Model (2) N=2914	Standardized Coefficient
Intercept	-6.003 (<0.001)	-6.091 (<0.001)	NA
Deal includes a target termination fee provision	2.698 (<0.001)	2.707 (<0.001)	0.166
Deal includes a lockup of target shares	0.060 (0.718)	0.109 (0.644)	0.004
Deal has prior bidding	-0.068 (0.807)	-0.014 (0.960)	-0.001
Deal attitude is hostile	0.293 (0.547)	0.324 (0.507)	0.014
Bidder toehold	-0.853 (0.155)	-0.798 (0.189)	-0.022
Tender offer	-0.893 (<0.001)	-0.819 (0.002)	-0.025
Stock offer	0.695 (<0.001)	0.713 (<0.001)	0.026
Log market value of equity	0.207 (<0.001)	0.204 (<0.001)	0.013
Market-to-book assets		-0.017 (0.576)	-0.001
SIC match		0.237 (0.107)	0.009
Post Paramount indicator (equal to 1 for 1994 onward)	1.037 (<0.001)	0.948 (0.001)	0.029
Post Brazen indicator (equal to 1 for 1997 onward)	-0.208 (0.144)	-0.169 (0.225)	-0.006
Pseudo R ²	0.275	0.276	

Table 7

The effects of termination fee grants on merger bid premiums

Models (1-3) present OLS regressions of the total premium paid to target stockholders on the incidence of target and bidder fee provisions as well as other characteristics of the deal and target. Model 4 summarizes the results of simultaneous regressions of bid premiums and the determinants of target fee provisions following Maddalla (1983) where the termination fee instrument is the fitted value from a first-stage probit regression, and the premium instrument is the fitted value from a first stage OLS regression on the entire set of explanatory variables in Model 4. Bid premiums are defined using a two-step procedure. Our primary measure of the bid premium is the total value of compensation paid to target shareholders as reported by SDC deflated by the market value of the target's equity 42 trading days prior to the bid announcement less one. As a secondary measure of the bid premium we use the share price paid to target shareholders as reported by SDC deflated by the target's share price 42 trading days prior to the bid announcement less one. Following Officer (2002), the premium measure used in our regressions is equal to our primary measure when this value is greater than zero and less than two, and is equal to our secondary measure when the primary value is missing, and the value of the secondary measure is greater than zero and less than two. Otherwise the bid premium is set to missing. Bid premiums are available for 2735 of the bids in our sample. Target termination fee and bidder termination fee are indicator variables equal to one if the merger agreement includes a termination fee granted by a target or bidder respectively and zero otherwise. Target lockups, prior bidding, stock offers, tender offers, toeholds, and the market value of equity are defined in Table 4. Market to book, debt to assets, free cash flow, and inside ownership are defined in Table 2. In models 1-3 the year dummies are indicator variables equal to one for each announcement year 1990-1998 (1989 is the excluded year). In model 4 the year dummies are indicator variables equal to one for announcement years 1994 and later and 1997 and later. The top number provided for each explanatory variable is the parameter estimate with White's heteroscedasticity-consistent *t*-statistics provided in parentheses. *, **, *** indicates that the coefficient is statistically significant at the 10%, 5%, and 1% levels respectively.

Table 7 (continued)

Model	Model 1	Model 2	Model 3	Model 4	
	Bid Premium	Bid Premium	Bid Premium	Bid Premium	Termination Fee
Number of observations	2735	2735	1808	2735	2735
Intercept	0.533*** (48.96)	0.695*** (28.23)	0.739*** (20.43)	0.713*** (15.38)	-5.18 (1.41)
Target termination fee indicator	0.063*** (3.61)	0.041** (2.29)	0.037* (1.67)		
Termination fee instrument				-0.004 (-0.17)	
Premium Instrument					4.805 (0.93)
Bidder termination fee indicator	-0.069*** (-2.69)	-0.041* (-1.62)	-0.036 (-1.20)	-0.016 (-0.37)	1.656*** (8.52)
Deal target share lockup indicator	-0.011 (-0.61)	-0.010 (-0.53)	0.039 (1.26)	-0.017 (-0.83)	-0.317** (-2.21)
Prior bidding indicator		-0.023 (-1.01)	-0.026 (-0.94)	-0.003 (-1.22)	
Stock offer		0.070*** (3.99)	0.067*** (3.05)	0.077*** (4.05)	-0.079 (-0.19)
Tender offer		0.122*** (6.20)	0.104*** (4.67)	0.129*** (5.23)	0.128 (0.20)
Bidder Toehold		-0.203*** (-9.09)	-0.187*** (-7.12)	-0.214*** (-5.88)	-0.067 (-0.07)
Deal Attitude (1=hostile, 0 = friendly or unsolicited)		-0.022 (0.73)	-0.002 (-0.08)		-1.413*** (-6.18)
Log market value of equity		-0.043*** (-9.38)	-0.052*** (-8.79)	-0.043*** (-9.07)	0.289 (1.29)
Target market-to-book assets			-0.007 (-0.11)		
Target debt to total assets			0.095* (1.98)		
Target free cash flow/total assets			-0.009 (-0.22)		
Inside ownership			-0.058 (-1.28)		
Year dummies	Yes	Yes	Yes	Yes	Yes
F-/Chi-squared-statistic (<i>p</i> -value)	5.43 (<0.001)	26.32 (<0.001)	13.63 (<0.001)	22.54 (<0.001)	639.22 (<0.001)
Adjusted/Pseudo R ²	0.010	0.068	0.068	0.065	0.274

Table 8
OLS regressions on target and bidder announcement period abnormal returns

Table presents OLS regressions of target and bidder abnormal returns on the incidence of target and bidder fee provisions as well as other characteristics of the deal and target. Announcement returns are measured as cumulative abnormal returns (CARs) over the daily interval -1 to $+1$ relative to the announcement date. CARs are measured as cumulative net-of-market return where the market return is the CRSP value-weighted NYSE/AMEX/Nasdaq index. Target termination fee and bidder termination fee are indicator variables equal to one if the merger agreement includes a termination fee granted by a target or bidder respectively and zero otherwise. The termination fee surprise variable is the difference between the target termination fee indicator variable and the predicted probability of a target termination fee being observed computed from Model (2) in Table 5. Target lockups, prior bidding, stock offers, tender offers, toeholds, and the market value of equity are defined in Table 4. Market to book, debt to assets, free cash flow, and inside ownership are defined in Table 2. The year dummies are indicator variables equal to one for each announcement year 1990-1998 (1989 is the excluded year). The top number provided for each explanatory variable is the parameter estimate with White's heteroscedasticity-consistent t -statistics provided in parentheses. *, **, *** indicates that the coefficient is statistically significant at the 10%, 5%, and 1% levels respectively.

Table 8 (continued)

Model	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Return sample Daily CAR interval	Target CAR (-1,+1)	Target CAR (-1,+1)	Target CAR (-1,+1)	Target CAR (-1,+1)	Bidder CAR (-1,+1)	Bidder CAR (-1,+1)
Number of observations	3037	3037	2002	3037	1791	1147
Intercept	0.177*** (29.84)	0.208*** (13.51)	0.244*** (10.97)	0.211*** (13.74)	-0.004 (-1.61)	0.020* (1.90)
Target termination fee indicator	0.030*** (3.18)	0.010 (0.96)	0.010 (0.73)		-0.002 (-0.50)	-0.002 (-0.45)
Termination fee “surprise”				0.013 (1.23)		
Bidder termination fee indicator	-0.059*** (-4.55)	-0.030** (-2.34)	-0.033** (-2.29)	-0.025** (-2.12)	0.000 (0.03)	0.010 (1.50)
Deal includes a lockup of target shares	-0.008 (-0.79)	0.002 (0.82)	0.025 (1.50)	0.001 (0.13)	-0.017*** (-4.44)	-0.010 (-1.50)
Deal Status (1=Completed, 0= Withdrawn)		0.039*** (3.44)	0.052*** (3.68)	0.039*** (3.41)		0.003 (0.40)
Prior bidding indicator		-0.063*** (-6.12)	-0.072*** (-5.95)	-0.063*** (-6.16)		-0.001 (-0.13)
Stock offer		-0.025*** (-2.54)	-0.032** (-2.52)	-0.024** (-2.44)		-0.017*** (-3.47)
Tender offer		0.091*** (7.53)	0.076*** (5.37)	0.093*** (7.74)		0.010* (1.82)
Bidder Toehold		-0.063*** (-4.32)	-0.050*** (-2.60)	-0.066*** (-4.66)		0.014** (2.02)
Deal Attitude (1=hostile, 0 = friendly or unsolicited)		0.040** (2.26)	0.045** (2.08)	0.037** (2.09)		-0.009 (-1.07)
Log market value of equity		-0.012*** (-4.60)	-0.016*** (-4.31)			-0.004** (-2.54)
Target market-to-book assets			-0.004 (-1.27)			-0.001 (-0.94)
Target debt to total assets			-0.025 (-0.81)			-0.007 (-0.62)
Target free cash flow/total assets			0.010 (0.36)			0.002 (0.18)
Inside ownership			-0.005 (-0.18)			0.016 (1.50)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
F-statistic (<i>p</i> -value)	8.41 (<0.001)	19.48 (<0.001)	11.73 (<0.001)	19.54 (<0.001)	6.72 (<0.001)	4.61 (<0.001)
Adjusted R ²	0.011	0.067	0.072	0.067	0.020	0.055

Table 9 OLS regressions on target auction returns

Table presents OLS regressions where the dependent variable is the return over the auction period for merger targets in deals announced between 1989 and 1998. Auction returns are measured as cumulative abnormal returns (CARs) over a daily interval beginning -42 days prior to the first bid and ending on the date that the target is either successfully acquired or the final bid in an auction is withdrawn. CARs are measured as cumulative net-of-market return where the market return is the CRSP value-weighted NYSE/AMEX/Nasdaq index. An auction is comprised of all bids for a target including first bids and successive bids made within 365 calendar days of a prior bid announcement. Target termination fee and bidder termination fee are indicator variables equal to one if the merger agreement includes a termination fee clause granted by a target or bidder respectively and zero otherwise. Target lockups, prior bidding, stock offers, tender offers, toeholds, and the market value of equity are defined in Table 4. Market to book, debt to assets, free cash flow, and inside ownership are defined in Table 2. The year dummies are indicator variables equal to one for each announcement year 1990-1998 (1989 is the excluded year). The top number provided for each explanatory variable is the parameter estimate with White's heteroscedasticity-consistent *t*-statistics provided in parentheses. *, **, *** indicates that the coefficient is statistically significant at the 10%, 5%, and 1% levels respectively.

Table 9 (continued)

Model	Model 1	Model 2	Model 3	Model 4	Model 5
Return sample	Auction CAR	Auction CAR	Auction CAR	Auction CAR	Auction CAR
Daily CAR interval	(-42, End)	(-42, End)	(-42, End)	(-42, End)	(-42, End)
Number of observations	2743	2743	1804	2743	1804
Intercept	0.268*** (21.16)	0.459*** (14.24)	0.534*** (12.10)	0.2224*** (6.48)	0.300*** (6.59)
Target termination fee indicator	0.068*** (4.07)	0.074*** (4.37)	0.100*** (4.47)	0.026 (1.57)	0.032 (1.46)
Bidder termination fee indicator	-0.102*** (-4.42)	-0.049** (-2.12)	-0.045* (-1.66)	-0.049** (-2.182)	-0.053** (-2.06)
Deal includes a lockup of target shares	0.008 (0.47)	0.055*** (3.11)	0.075*** (2.75)	0.014 (0.82)	0.055** (2.14)
Auction status (1=Completed, 0= Withdrawn)				0.347*** (13.27)	0.368*** (11.96)
Multiple bid indicator		0.060* (1.83)	0.070* (1.77)	0.010 (0.32)	0.006 (0.18)
Stock offer		0.061*** (2.89)	0.034 (1.39)	0.028 (1.37)	0.001 (0.05)
Tender offer		0.159*** (8.35)	0.135*** (6.24)	0.092*** (4.78)	0.056*** (2.59)
Bidder Toehold		0.026 (0.64)	0.034 (1.22)	-0.054 (1.35)	-0.060** (-2.07)
Deal Attitude (1=hostile, 0 = friendly or unsolicited)		0.068** (2.05)	0.072* (1.79)	0.175 (5.53)	0.179*** (4.77)
Log market value of equity		-0.061*** (-9.77)	-0.069*** (-9.43)	-0.061 (-10.03)	-0.068*** (-9.75)
Target market-to-book assets			-0.010 (-1.25)		-0.010 (-1.29)
Target debt to total assets			-0.073 (-1.40)		-0.068 (-1.37)
Target free cash flow/total assets			0.077 (1.37)		0.073 (1.22)
Inside ownership			0.002 (0.05)		-0.010 (-0.21)
Year dummies	Yes	Yes	Yes	Yes	Yes
F-statistic (<i>p</i> -value)	9.34 (<0.001)	28.87 (<0.001)	18.82 (<0.001)	43.28 (<0.001)	28.95 (<0.001)
Adjusted R ²	0.027	0.088	0.112	0.151	0.190

Figures

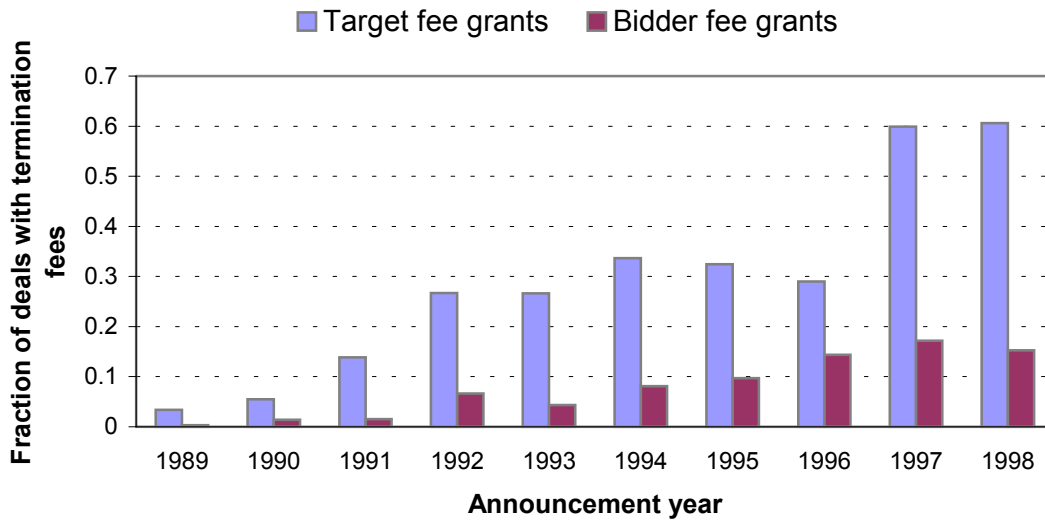


Figure 1. The fraction of merger transactions that include a termination fee provision. All transaction data is obtained from deals reported by SDC between January 1989 and December 1998. The reported data reflects our sampling restrictions described in Section 3 and includes a total of 3037 transactions.

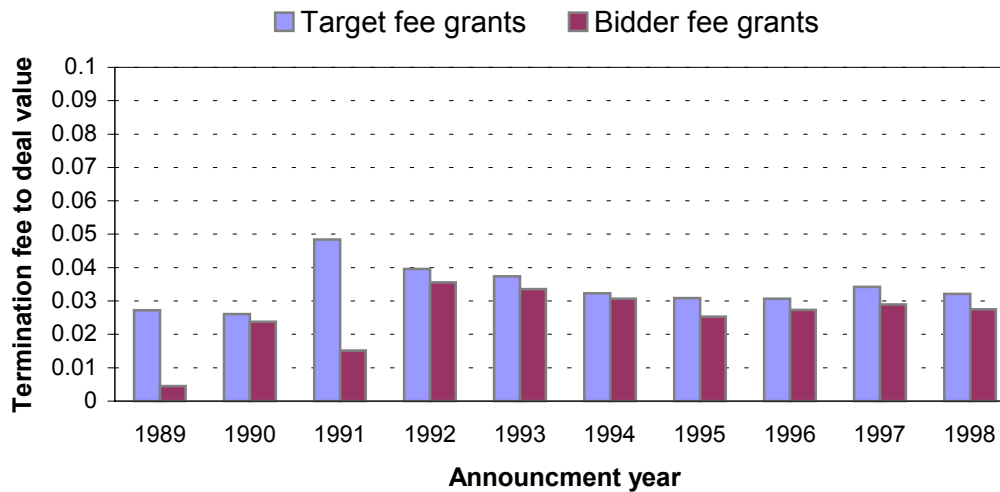


Figure 2. The mean ratio of termination fees to deal value. All transaction data is obtained from deals reported by SDC between January 1989 and December 1998. The reported data reflects our sampling restrictions described in Section 3 and includes a total of 3037 transactions.

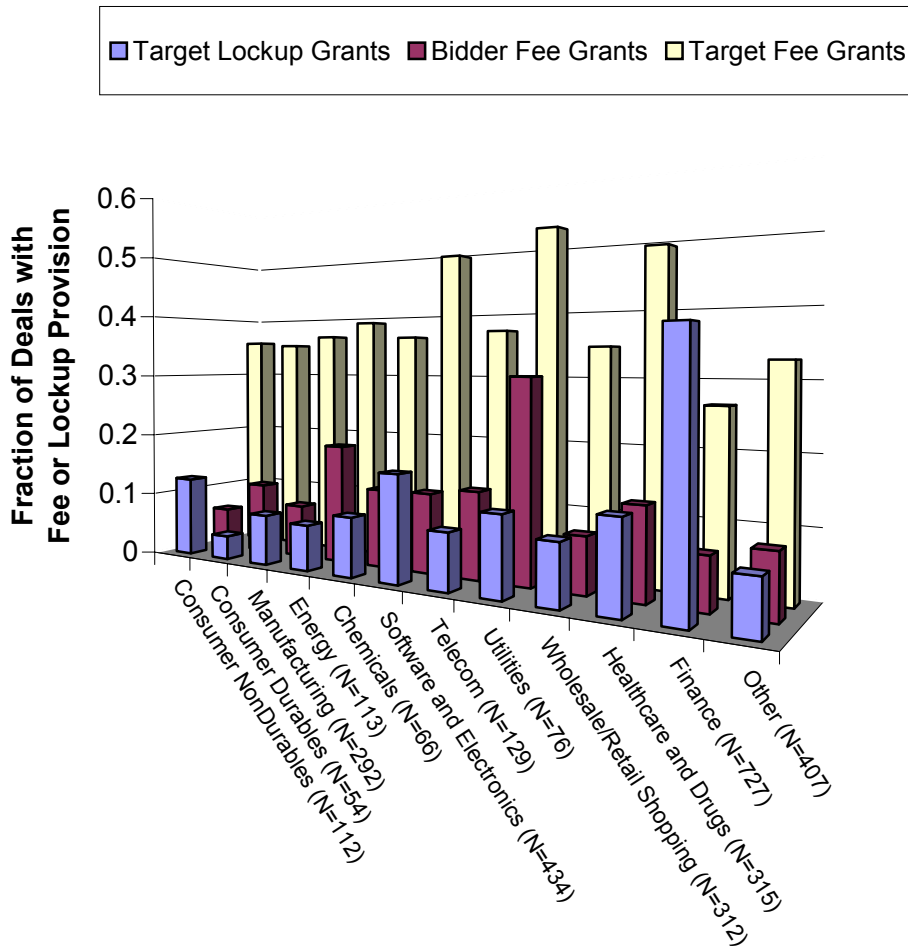


Figure 3. The incidence of termination fee and lockup provisions by merger target industry. All transaction data is obtained from deals reported by SDC between January 1989 and December 1998. The reported data reflects our sampling restrictions described in Section 3 and includes a total of 3037 transactions. Industry definitions coincide with the Fama-French (1997) industry definitions.