Completing The Deal: Determinants Of Successful Tender Offers

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Abstract

This study of 991 tender offers that occurred between 1985 and 1994 tests how a set of factors influences the probability that tender offers will be successfully completed. The probability of tender offer success is increased by relatedness of the two firms, cross-border status, the existence of termination fees and pre-bid ownership of target stock. Two-tier transactions, hostile reactions, and competing bids negatively effect tender offer success. Implications for managers contemplating tender offers are discussed.

Introduction

Tender offers are often used to implement takeovers of publicly held companies. In 1994, the total value of tender activity in the economy exceeded 272 billion dollars, accounting for approximately 20.5% of all M&A activity by dollar volume (*Merger and Acquisitions*, 1995).

It is important to note that tender offer attempts are not always successful. Between 1977 and 1988, for example, only seventy-seven percent of the tender offers attempted were successful (*Mergerstat Review*, 1988, p. 85). Examples of recent failed tender offers include Martin Marietta's 1.8 billion dollar bid for Grumman Corporation in 1994 and QVC's 10.3 billion dollar bid for Paramount Communications in 1993.

Failed tender offers can cost bidding

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firms a considerable amount. Top management normally spends a significant amount of time identifying targets, planning the takeover, and executing the transaction. Failed tender offers can result in a waste of management time and efforts. Firms also tend to pay considerable amounts in fees to consulting firms to help them research and execute an offer. Turner Broadcasting, for example, paid E.F. Hutton 8 million dollars for its services in Turner's 1985 failed bid for CBS (Securities Data Company).

Managers of acquiring companies should be interested in factors that influence the probability of successful completion of a tender offers. This information will help managers of bidding firms pick their targets and structure their deals in ways that maximize the probability of success.

The purpose of this paper is to clarify and extend previous published research (Hoffmeister and Dyl, 1981; Walkling, 1985) that has

examined factors that affect the probability that an acquiring firm will successfully complete a tender offer. This paper employs a larger and more current data set than those used in past research of this topic. This paper also extends previous research by analyzing a variety of important variables not included in previous studies.

The first section of this paper discusses past research that has examined this issue and the contribution of the current study. The second section discusses the factors that are expected to affect tender offer success. The third and fourth sections discuss the methodology of the study and report the results, respectively. The fifth section discusses the results. The sixth section offers conclusions and the seventh section provides suggestions for future research.

I. Past Research and Contributions of the Current Study

A variety of books and articles offer practical guides on how to execute tender offers (see Clark, Gerlach, and Olson, 1996; Ernst & Young, 1994; Gaughan, 1991). Other books provide case studies of actual tender offers and can be used to glean information on why certain offers were successful or unsuccessful (see Taylor, 1987; Commons, 1985). While these sources provide valuable information it is important to note that they tend to rely on experts' opinions and specific cases. More rigorous statistical analyses of large samples of tender offers can contribute to the literature by identify more generalizable results.

Several empirical studies examine the tender offer outcome process from the point of view of the target firm (Raad and Ryan (1995), Cotter and Zenner (1994), Mikkelsen and Partch (1989)). These papers examine the probability that a firm that is confronted with a tender offer will be taken over either by the original bidder or by another suitor. It is important to note, however, that these studies do not analyze the probability that a certain acquirer will be successful. Thus, they do not examine characteris-

tics of specific acquirer's or their bids.

Some papers have empirically examined the probability that a tender offer will be successful from the point of view of the acquiring firm. Hoffmeister and Dyl (1981) examined 117 cash tender offers that occurred from 1977 through 1979. These authors found that firm size and hostile managerial reactions tend to have a significant effect on the probability of tender offer completion. Hostile tender offer attempts were less likely to be completed as were tender offers for large firms. Interestingly, the size of the bid premium was not found to influence the probability of a tender offer being successful. The bid premium was measured as the percent that the bid surpassed the target's stock price two weeks before the tender offer was filed with the SEC

Contrary to Hoffmeister and Dyl (1981), Walkling (1985) found that bid premiums were positively related to tender offer success. Walkling examined 158 offers that occurred between January, 1972 and December 1977. Walkling's measurement of the bid premium differed from that used by Hoffmeister and Dyl (1981). Walkling measured the premium as the percent by which the bid price exceeded the target firm's stock price two weeks before the offer was announced in the press. Since information about the transaction may slip out before the offer is filed with the SEC, Walkling argued that using the price change leading up to the announcement date rather than leading up to the filing date was a superior approach. Walkling's research also found that the percentage of shares owned by the bidder prior to making the offer enhanced the probability of success, as did a friendly response to the offer by the target firm.

The purpose of this paper is to analyze factors influencing tender offer outcomes from the acquiring firm's point of view. We use a larger and more recent data sample than previously published research and analyze the impact of variables not considered in past research. Prior empirical studies that examined factors in-

fluencing acquirers' tender offer success used data on tender offers occurring at least 16 years ago. In the last 16 years, the economic environment has changed dramatically. With the increased emphasis on globalization, cross-border takeovers of U. S. firms have increased during the past decade (Simpson, Flint & Potter 1991, Shearlock, 1995). Furthermore, while the Williams Act, which put regulations on tender offers, was passed in 1968, the market may not have fully adjusted to its provisions until the early 1980s (Gaughan, 1991, p 228). Examining a larger, more recent sample will give managers information that is more applicable to tender offers in the current environment. It may also help resolve the inconsistencies noted in past literature regarding the impact of premiums on tender offer success. This study analyzes a data sample containing 991 tender offers for U.S. firms attempted between January of 1985 and December of 1994.

Additional variables that have not been examined in past research are also analyzed in this paper in order to give a more complete view of the factors impacting tender offer success. For example, this study analyzes the impact of variables such as termination fees, family ownership of a target, nationality of target, and the type of consideration offered. Examining these variables contributes to our understanding of tender offer outcomes and has implications for managers.

II. Model Specification

The dependent variable in this study is whether the acquiring firm was successful with its tender offer. A tender offer was considered successful if Securities Data Company (SDC) coded it as completed in its M&A data base. SDC considered a transaction completed if the acquirer accepted tendered shares. This normally means that shareholders, as a group, have tendered at least the minimum number of shares specified in the offer. In some instances an acquirer may choose to purchase tendered shares even if minimum tender conditions have not been reached. An unsuccessful tender offer was iden-

tified as a offer that the bidder withdrew. An acquirer normally withdraws an offer because shareholders, as a group, failed to tender the minimum number of shares specified in the offer.

Independent variables are proposed that will impact the probability of enough shareholders tendered their shares to keep the acquiring firm from withdrawing its offer. These variables are grouped into characteristics of the target firm, characteristics of the bidding firm, or characteristics of the specific transaction that could impact the outcome.

A. Characteristics of Target Firms

Shareholders of a target firm may be less likely to tender their shares to an acquiring firm if the target has performed well in the recent past. Strong performance may lead investors to conclude that the firm's current managers are doing a good job and should remain in control of the firm. Strong past performance may also lead shareholders to believe that they can hold out for an even higher offer than the one proposed. Poor performance, on the other hand, may indicate that management of the target firm has done a poor job and needs to be replaced or that stockholders are looking to divest. Interestingly, Hoffmeister and Dyl (1981) found that target firm performance (as measured by price to earnings ratio) positively impacted tender offer success. Their results, however, were not strong.

If a significant portion of a business is family-owned, the family owners may be less likely to tender their shares for financial gain. Family owners often value control over the firm highly (Dyer, 1986). Thus, when compared to stockholders whose interest in the firm is strictly financial, family-owned firms' shareholders are predicted to be less likely to tender their shares. Past research has not examined this issue.

B. Characteristics of the Bidding Firm

Characteristics of the bidding firm that

are predicted to impact the probability of a successful tender offer are: 1) whether the bidder is in the same primary industry as the target, 2) whether or not the bidder is a U.S. based firm (cross-border vs. within-border transactions), 3) whether the bidder includes members of the target firm's management and 4) the percentage of the target's shares outstanding that were owned by the bidder the day that the tender offer was announced.

If a bidding firm is in the same industry as the target firm we expect the probability of a successful tender offer to be reduced. Antitrust authorities will be particularly interested in combinations of firms in the same industry since they may be viewed as anti-competitive. Managers of target firms may also vigorously resist being taken over by a bidder that is a rival since the bidder may already possess the needed management skills to run the target. This could make target firm managers' jobs redundant and jeopardize their positions (Walsh & Ellwood, 1991).

Whether or not the bidding firm is based in the U.S. is expected to impact whether a tender offer is successful or not. Bidders from outside the U.S. are expected to be more likely to complete transactions than U.S. bidders for two reasons. First, antitrust authorities may not be as interested in the combination of a U.S. firm and one from another country as they are in combinations of two U.S. firms (Simpson, Flint & Potter, 1991). Second, U.S. managers may be less likely to vigorously resist an offer made by a company located outside the U.S. since they may perceive it as less of a threat to their control of the target firm and job security.

We expect the probability of a transaction being completed to be higher if the bidder is comprised of managers of the target firm (management buy-outs). Managers of the target firm are expected to have the inside track with the board of directors of the target firm and will thus be more readily able to convince the board and stockholders that the tender offer is beneficial.

While past research has not examined

the impact of the first three bidder characteristics on the probability of a successful tender offer, past research has found that the percentage of shares owned by the bidder before the offer is made has a positive influence on tender offer success (Walkling 1985). Prior ownership of the target should increase a bidder's influence on the target's board of directors. This should increase the probability that the bidder will receive the board's cooperation and complete its offer.

C. Characteristics of the Transactions

The following transaction characteristics are proposed to impact tender offer success: the bid premium, the value of the proposed deal, whether the offer is two-tier or one-tier, the percentage of the target's shares that the acquiring firm is seeking to buy, whether target firm managers resist the offer, whether another bidder challenges the deal, and whether termination fees were part of the deal.

We expect that, the larger the bid premium, the greater the probability that a tender offer will be successful. If a bid premium is high, shareholders should tender their shares more readily than if a bid premium is low. As mentioned earlier, past research has not yielded consistent results on this issue (Hoffmeister and Dyl 1981, Walkling 1985).

Large transactions are predicted to be more difficult to complete than small transactions. Executing a large transaction may require access to huge amounts of capital. Furthermore, large transactions will tend to be made for firms with large amounts of assets. Managers of these firms are assumed to have more resources at their disposal to resist a tender offer. Hoffmeister and Dyl (1981) found that, in their sample, target size negatively impacted the probability of tender offer success.

Two tier transactions involve an offer of a high price for shares tendered early and a lower price for shares tendered later. The reason for structuring a bid in this fashion is to pressure shareholders to tender early in order to

get the high price. In a one tier deal, the bidder offers a stated price for shares during a given time period. No bonus (penalty) is given to shareholders who tender early (late). We expect two-tier deals to be more successful than one-tier deals. Past research has not examined this issue.

It is expected that the percentage of a target's shares that the bidder is seeking will be negatively related to tender offer success. If a bidder is only interested in acquiring a small percentage of a firm it will have to convince a lesser number of shareholders to tender their shares than a bidder who is seeking a large interest through the acquisition. Furthermore, a bidder that is asking for only a small percentage of shares may already be holding a significant interest in the target. Thus, it will be better able to control the target's board of directors than a firm will be that has little or no current ownership in the target and is seeking a large proportion of the target's outstanding shares. Contrary to our prediction, Hoffmeister and Dyl (1981) found no relationship between percentage of shares sought and tender offer success.

Resistance to the offer by target management has consistently been found to reduce the probability of tender offer success (Hoffmeister and Dyl, 1981; Walkling, 1985). There are a variety of creative ways that target firm managers can resist an offer. The objective of resisting an offer is either to remain independent or to elicit a second offer with a larger premium for shareholders. In either case, the goal is to foil the bid that is currently being offered.

If a tender offer is challenged by a rival bidder, we expect that the probability that the offer will be completed will be reduced. A rival bidder may offer a higher price to shareholders. A rival bidder may also be more appealing to managers. Managers would thus clear the path for the more friendly bidder. Walkling (1985) examined the impact of an existing bid on tender offer success. He found a small, negative impact. We analyze whether a competing bid before or after the bid in question affects tender offer

outcome.

Termination fees are payments that the target agrees to pay the bidder in the event that the proposed offer is unsuccessful. If a second bidder is able to assume control of the target, the target will still have to pay the termination fee to the initial bidder. Thus, in effect, the second bidder will be forced to pay the termination fee. Termination fees are therefore proposed to enhance the probability that an offer will be accepted. The termination fee will make the management of the target firm more likely to work for a successful completion of the deal and should help deter third parties from entering a bid. Past research has not examined this issue.

III. Methodology

Data for this study were drawn from Security Data Company's (SDC's) domestic mergers and acquisitions (M&A) database. This database contains information on proposed and completed M&A transactions involving U.S. targets where the value of the transaction exceeded 1 million dollars (all transactions are included after 1992), the value is undisclosed (the target is privately held or a subsidiary), or the purchase resulted in 5% or more ownership of the target. Tender offers announced from January of 1985 through December of 1994 were selected from this database.

From this initial data set, tender offers were chosen if they were for publicly held targets and if the tender offer had been completed or withdrawn by July of 1995. Partially completed or pending offers were deleted. The final data set contains 991 tender offers. Seven hundred and ninety-three of these proposed transactions were completed and 198 were withdrawn.

Data for the independent variables were obtained from the SDC database as well. Profitability of the target firm was measured by the average return on assets (ROA) for the firm for the two years preceding the acquisition. Three different specifications of the bid premium were used, i.e., the percentage premium the offer rep-

resents over the target's stock price 1 day, 1 week, and 4 weeks before the bid was announced in the press. The value of the transaction, the percentage of the target's sales held by the bidder before the offer was announced and the percentage of target firm shares sought in the acquisition were also measured as continuous explanatory variables.

Dummy variables were used to identify transactions where the target was family-controlled (as defined by SDC), the target and the acquiring firm shared the same primary SIC code, the acquiring firm was not U.S. based (cross-border deals), and the acquiring firm was composed of managers of the target firm. Dummy variables were also used to identify transactions where the offer was two-tier, the offer was hostile, a rival bidder joined the contest before or after the bid in question was made, and when a termination fee was included in the proposed deal.

The data were analyzed in three ways. First, the data were divided into groups based on each dummy explanatory variable. Chi-square tests were used to determine whether the completion rates for transactions falling into each category were significantly different than the completion rates for transactions not in the category. Second, the observations were divided into two groups based on whether the transaction was completed or withdrawn, and t-tests were used to examine differences in the earnings per share, bid premium, transaction value and percentage of ownership sought for the two groups.

Two sample t-tests and chi-square tests provide a good descriptive picture of the characteristics of completed versus withdrawn transactions. They do not, however, take into account intercorrelations among the explanatory variables. Therefore, a third statistical approach was used that takes into consideration intercorrelations among explanatory variables. A logit regression was used to analyze the impact of each explanatory variable on the probability that a tender offer will be successful while holding the other explanatory variables constant.

Some observations contained missing values for one or more of the independent variables. The maximum number of observations without missing values was used for each of the tests.

IV. Results

Table 1 displays the results of Chi-square tests on the probability that various types of tender offers were completed. Overall, 80% of the 991 tender offers in the sample were completed. This figure is consistent with the 77% figure reported by *Mergerstat Review* (1988) for the 1977 through 1988 period.

When examining various subsamples, no significant difference was found between the percentage of tender offers completed when the target was family-controlled versus offers where the target was not family-controlled. The percentage of within primary industry tender offers that were completed (82%) was greater than the percent of across primary industry tender offers that were completed (79%). The difference, however, was not statistically significant. Cross-border tender offers were more likely to be completed than within-border offers and management buyouts were more likely to be completed than other transactions. Eighty-nine percent of the cross-border offers were completed while only 78% of the within-border transactions were completed. The difference is significant at $p = .002$. Ninety one percent of the management buyouts in the sample were completed while only 79% of the non-management buy-outs were completed. This difference is significant at $p = .009$.

One-tier transactions were more likely to be completed than two-tier transactions. Eighty-one percent of the one-tier transactions were completed while only 72% percent of the two-tier transactions were completed. The difference is significant at $p = .03$.

Hostile bids and bids with competing bidders were less likely to be completed than other transactions. Only 43% of the hostile bids

Table 1
Completion Rates For Tender Offers: 1985-1994

Categories of Transactions	Number of Tender Offers in Each Category ^a	Number Completed in Each Category	Percent Completed in Each Category	Chi-square for Difference in Percent Completed
All Transactions in Sample	991	793	80%	
Family Controlled Targets	65	53	82%	
Non-Family Controlled Targets	926	740	80%	.10
Within Primary Industry	282	232	82%	
Across Primary Industry	709	561	79%	1.25
Cross Border	164	146	89%	
Within Border	828	648	78%	9.93***
Management Buy Outs	80	73	91%	
Non-Management Buy Outs	911	721	79%	6.86***
Two Tier Offers	112	81	72%	
One Tier Offers	879	712	81%	4.68**
Hostile Target Response	221	96	43%	
Friendly or Neutral Target Response	770	698	91%	238.00***
Competing Bidders	260	154	59%	
No Competing Bidders	728	636	87%	94.61***
Termination Fees	295	272	92%	
No Termination Fees	696	521	75%	38.97***

^a The maximum number of observations for which needed data were available were used for each category sub-sample.

* Significant at the .10 level; ** Significant at the .05 level; *** Significant at the .01 level.

Table 2
Characteristics of Completed and Withdrawn Tender Offers: 1985-1994

Characteristic	Mean Value for Completed Offers	Mean Value for With- drawn Offers	t-Statistic for difference in means	# of Observations ^a	
				Completed	Withdrawn
Return on Assets (ROA) Target	2.11	2.26	.21	731	175
One Day Stock Price Premium ^b	40.56	40.32	.08	651	145
One Week Stock Price Premium ^b	46.82	45.93	.27	648	144
Four Week Stock Price premium ^b	51.86	55.22	.95	647	143
Total Value of Offer (\$ millions)	594.80	979.10	2.80***	788	193
Percent of Target Held	9.24	5.87	3.53***	788	193
% of Target Sought Through Offer	77.92	88.34	3.04***	712	158

^a The maximum number of observations for which needed data were available were used for each category sub-sample.

^b Measured as the percent by which the offer exceeds the target's stock price the stated time before the offer is made.

* Significant at the .10 level; ** Significant at the .05 level; *** Significant at the .01 level.

were completed while 91% of the non-hostile bids were completed. The difference is significant at $p = .0001$. Fifty-nine percent of the transactions with competing bidders were completed while 87% of the transactions with no competing bidders were completed. The difference is significant at $p = .0001$. Bids that included termination fees were successful 92% of the time while bids with no termination fees were only successful 75% of the time. This difference is significant at $p = .0001$.

Table 2 shows how average measures for continuous variables compare between completed and withdrawn transactions. The ROA for the target firm was not significantly different for completed versus withdrawn transactions. Regardless of the measure used, bid premiums for completed transactions were not significantly different than the premiums for withdrawn transactions.

Completed transactions tended to be significantly smaller than withdrawn transactions. The average value of a completed transaction in the sample was 594.80 million dollars while the average value of a withdrawn transaction was \$979.10 million. This difference is significant at $p = .008$.

The percentage of the target held at announcement was significantly greater for transactions that were subsequently completed when compared to those that were withdrawn. Successful acquirers held 9.24% of the target on the day the offer was announced (on average) while unsuccessful acquirer averaged announcement day holdings of 5.87% of the targets outstanding stock. This difference is significant at $p = .0004$.

The percent of the target sought through the tender offer was lower in completed transactions when compared with withdrawn transactions. On average, acquiring firms in completed transactions were seeking 77.92% of the target through the tender offer. In withdrawn transactions, the acquiring firm, on average, was seeking 88.34% of the target. The difference is sig-

nificant at $p = .002$.

Table 3 displays the results of the logistic regression analysis. Three model specifications are displayed. They differ based on whether a 1-day, 1-week, or four-week measure of the premium was used. It is interesting to note that the signs of the estimated coefficients are not changed by the specification used. Only a few minor changes in significance levels were found across model specifications.

The probability of a successful tender offer was significantly enhanced by the acquiring firm being in the same primary industry as the target. The probability of success was also higher when the acquiring firm was not a U.S.-based corporation. An acquiring firm's use of a two-tier deal structure negatively influenced the probability of tender offer success while the presence of termination fees positively influenced the probability of tender offer success. The greater the percentage of the target held the day of the announcement the greater the probability that the tender offer would be successful. A hostile response by target firms' management to the tender offer and the presence of competing bidders significantly decreased the probability that the tender offer would be successful.

Regardless of the model specification, the ROA of the target, whether the target is family-controlled, whether the acquiring firm was composed of target firm managers, the bid premium, the value of the transaction, and the percent of the target being sought through the tender offer did not significantly impact the probability that an offer would be completed.

The model chi-square values for the three specifications range from 221.53 to 230.91 (each significant at $p \leq .00001$). Thus, for each model, we can reject the joint hypothesis that all of the coefficients are simultaneously equal to zero. When all possible pairs of observations with different outcomes are compared, the logistic models assign the observation where the tender offer was completed a higher probability at least 89% of the time regardless of the

Table 3
Results of Logistic Regression: 1985-1994^a

Independent Variable	Model 1	Model 2	Model 3
Intercept	2.31***	2.37***	2.38***
ROA of Target	.01	.009	.01
Family Owned Target	-.68	-.70	-.72
Within Primary Industry	.61**	.54*	.57*
Cross-Border (non-U.S. Acquirer)	.82**	.99**	1.06**
Management Buy Outs	.55	.64	.67
One Day Premium ^b	.003		
One Week Premium ^b		.002	
Four Week Premium ^b			.002
Total Value of Offer (\$millions)	.0001	.0001	.0001
Two-tier Transaction	-.77*	-.86**	-.88**
Percent of Target Held	.04*	.04**	.04**
Percent of Target Sought	-.001	-.001	-.001
Hostile Target Response	-2.62***	-2.53***	-2.49***
Competing Bidders	-1.40***	-1.41***	-1.44***
Termination Fee	1.04***	.98***	.98***
Number of Observations ^c	704	701	702
F-Value	30.91***	26.29***	221.53***
Percent of Concordant Predictions ^d	89%	89%	89%

^a Dependent variable equals the log of the probability that a tender offer is completed.

^b Measured as the percent by which the offer exceeds that target's stock price the stated time before the offer is made.

^c The maximum number of observations for which needed data were available were used for each category sub-sample.

^d This statistic shows the percentage of times that each model assigned a higher probability to the completed transactions when all possible pairs of observations with different outcomes are analyzed.

Significant at the .10 level; ** Significant at the .05 level; *** Significant at the .01 level.

Acquiring firms were also found to be more effective at completing offers if they were in the same primary industry as the target. This is contrary to our expectation that acquisitions within the same primary industry would be more difficult to complete due to fierce managerial resistance and antitrust implications. Perhaps the fact that the acquiring firm knows the business of its target well in a same industry acquisition allows it to better structure an offer for success. The period examined (1985 - 1994) was also marked by rather lenient enforcement of antitrust laws (Shleifer & Vishny, 1991). Thus, government agencies were not terribly active in blocking same industry tender offers during

specification.

the sample period.

V. Discussion

This study has many implications for managers who are contemplating a tender offer. As expected, bidding firms located outside the U.S. were found to be more successful at completing tender offers for U.S. firms than U.S. based acquiring firms were. This is probably due to reduced regulatory involvement and fewer domestic management concerns about loss of control and job security.

Several transaction specific variables were found to have a significant impact on the probability that an offer would be successful. Use of a two-tier transaction method negatively impacted the probability of a successful tender offer campaign. This was surprising given that a two-tier tender offer is normally used to entice shareholders to tender their stock quickly. It could be that two-tier tender offers are only used when the probability of success is low. Thus, we would not observe a large number of successful two-tier offers. It also may be that the target

firm's management uses the argument that the acquiring firm is trying to cause panic to get shareholders to tender their holdings. Therefore managers may be able to persuade shareholders that it is not in their best interests to tender but rather to remain calm and receive a higher value for their shares.

As expected, termination fees increased the probability of the tender offer being successful. Acquiring and target firm managers who want to enhance the probability that a given transaction will be completed may consider arranging for a termination fee. Future research could examine the optimal size and composition of termination fees for various types of transactions.

Univariate analysis indicated that the smaller the percentage of the target held by the bidder before the offer and the greater the percentage sought of the target through the tender offer the smaller the probability that the offer will be successful. Multivariate logit analysis found that prior holdings were positively related to tender offer success but that the percentage sought was not related. It is important to note that these two independent variables are significantly correlated. This correlation could reduce the power of our estimates and increase the probability of accepting the null hypothesis that the coefficients are not significantly different from zero. Thus, while we can confidently say that prior ownership increase the probability of tender offer success we are unable to draw solid conclusions on the impact of the percent of the target sought on tender offer success.

The results of this study support past research that found that a hostile response by the management of the target firm significantly reduced the probability that a tender offer would be successful (Hoffmeister & Dyl (1981), Walkling (1985)). In fact, this study found that the proportion of hostile tender offers that were completed was less than half the proportion of non-hostile tender offers that were completed (43% vs. 91%). Target firm managers should know that their resistance has a major impact on

whether a given acquirer can complete a tender offer. Acquiring firms are advised to secure the support of target management if they want to enhance the probability that a tender offer is completed.

As expected, tender offers are less likely to be completed when there are competing bidders. This supports the findings of Walkling (1985). Managers contemplating making tender offers should know that the probability of success would be reduced if competing bidders were present. Managers are also advised to avoid getting into a heated bidding war for a target. This can lead to the eventual acquiring firm paying too high of a premium for the target firm. This "winner's curse" can nullify the potential gain from a tender offer for the acquiring firm (Giliberto and Varaiya, 1989, Barney (1988)).

The size of the bid premium was not found to be a critical factor in determining whether or not a tender offer was completed. This was true regardless of whether the bid premium was calculated based on the target's stock price 1-day, 1-week, or 4-weeks before the offer was announced. Thus, we cannot find support for the notion that large bid premiums increase the probability that an offer will be completed. Our finding is in accordance with the results of Hoffmeister and Dyl (1981) but contrary to the findings of Walkling (1985). It is important to note that, if an acquirer made a series of bids, bid premium was calculated using the highest bid made. Thus, early bids that may have been unsuccessful because they were too low could have been sweetened. The important point to glean from this research is that final bid premium is does not appear to effect tender offer success. Thus, an insufficient final bid premium does not tend to be a deal breaker.

VI. Conclusions

Takeover attempts via the mechanism of tender offers often fail especially when they are contested. A failed attempt generally results in a waste of time, efforts, and money on the part of the bidding firm. Proper structuring and plan-

ning of the deal along with a careful selection of the target firm is therefore of dire importance in increasing the probability of success of a tender offer. This study has analyzed a large sample of tender offers that were announced during the past decade (1985-1994) and finds that the size of the final bid premium was not a significant determinant of the success of a tender offer. Target firm profitability also was not found to impact the success of a tender offer. The factors that tend to have a significant, positive, effect on the outcome of a tender offer include the following: similar industrial classification of acquirer and target, cross-border status (non-U.S. based acquirers), the existence of a termination fee and the percentage of the target firm held before the tender offer by the bidder. Factors that had a significant, negative, impact on tender offer success were: the use of a two-tier transaction method, hostile reactions of target managers, and the existence of competing bidders.

The results of this study imply that managers who are seeking to acquire other companies through tender offers should focus their efforts on firms within the same industry and include a termination fee. Managers should be aware that the probability of a successful tender offer for a U.S. firm is enhanced if the acquiring firm is not U.S. based and if target management does not have a hostile reaction to the offer. The results also indicate that firms may want to consider acquiring companies in stages, rather than all at once.

VII. Suggestions for Future Research.

Given the popularity of tender offers and the finding that only about 80% of proposed offers are completed, additional research on this topic is clearly warranted. Several avenues of research could extend the findings of this paper. This study, for example, found that non-U.S. acquirers are more likely to complete proposed offers for U.S. targets. The relative degree of success of tender offers made by bidding firms from different world regions i.e. Latin America, Europe, Japan, etc. would be a good topic for future research. This study also found that a

hostile reaction to any of the bids submitted by the acquiring firm dramatically reduced the probability that an offer would be completed. Future research examining what types of take-over defenses are the most difficult for a prospective acquirer to overcome would be enlightening.

References

1. Barney, J. B., "Returns to Bidding Firms in Mergers and Acquisitions: Reconsidering the Relatedness Hypothesis," *Strategic Management Journal*, Vol. 9, (special issue) pp. 71-78, 1988.
2. Clark, J. L., Gerlach J. T. and G. Olson, *Restructuring Corporate America*, The Dryden Press, Fort Worth, TX, 1996.
3. Commons, D. L., *Tender Offer: The Sneak Attack in Corporate Takeovers*, University of California Press, Berkeley, CA, 1985.
4. Cotter, J. F. and Zenner, M., "How Managerial Wealth Effects the Tender Offer Process," *Journal of Financial Economics*, Vol. 35, No. 1, pp. 63-97, 1994.
5. Dyer, G. W., *Cultural Change in Family Firms: Anticipating and Managing Family Transitions*, Jossey-Bass, San Francisco, CA, 1986.
6. Ernst & Young, *Mergers and Acquisitions: Back-to-Basics Techniques for the '90s*, John Wiley & Sons, New York, NY 1994.
7. Gaughan, P. A., *Mergers and Acquisitions*, Harper Collins Publishers. New York, NY, 1991.
8. Giliberto, S. M. and N. P. Varaiya, "The Winners Curse and Bidder Competition in Acquisitions: Evidence from Failed Bank Auctions," *Journal of Finance*, Vol. 44, No. 1, pp. 59-75, 1989.
9. Hoffmeister, R. A. and E. A. Dyl, "Predicting Outcomes of Cash Tender Offers," *Financial Management*, (Winter), pp. 27-36, 1981.
10. *Mergers and Acquisitions*, "Answering the Call of a Swifter Market," (May/June), pp. 50-58, 1995.

11. *Mergerstat Review*, Merrill Lynch, 1988.
12. Mikkelsen, W. H. and Partch, M. M., "Manager's Voting Rights and Corporate Control," *Journal of Financial Economics*. Vol. 25, No. 2, pp. 263-290, 1989.
13. Raad, E. and Ryan, R., "Capital Structure and Ownership Distribution of Tender Offer Targets: An Empirical Study," *Financial Management*, Vol. 24, No. 1, pp. 46-56, 1995.
14. Simpson, S. V., Flint, G. M. and N. F. Potter, "International M&A: United States," *International Financial Law Review* (January Supplement), pp. 124-131, 1991.
15. Shearlock, P, "Merger Monitor," *Banker*, Vol. 14, No. 831, pp. 16-19, 1995.
16. Shleifer, A. and Vishny, R., "Takeovers in the '60s and the '80s: Evidence and Implications," *Strategic Management Journal*, Vol. 12, Winter, pp. 51-59, 1991.
17. Taylor, J., *Storming the Magic Kingdom: Wall Street, The Raiders and the Battle for Disney*, Ballantine Books. New York, NY, 1987.
18. Walkling, R. A., "Predicting Tender Offer Success: A Logistic Analysis," *Journal of Financial and Quantitative Analysis*, Vol. 20, No. 4, pp. 461-478, 1985.
19. Walsh, J.P. and Ellwood, J. W., "Mergers, Acquisitions and the Pruning of Managerial Deadwood," *Strategic Management Journal*, Vol. 12, No. 3, pp. 201-217, 1991.