

The Bright Side of Bidder Competition

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Abstract

Previous research shows that bidding competition drives up takeover premiums and reduces acquirer returns. In this paper, we present a brighter side to bidder competition and show that the effect of competition depends on the identity of the competitor. Specifically, we find that when a corporate acquirer competes with a financial rather than a corporate bidder, the acquirer pays a significantly lower premium and earns a significantly higher abnormal return. We propose two potential explanations for these results - superior corporate acquirers or superior targets and deal structure. We find that the corporate acquirers competing with financial bidders do not earn superior returns in previous acquisitions where they did not compete with financial bidders; thus, the results cannot be explained by superior acquirers. We further show that the results cannot be explained by observable target firm differences and are strongest when the acquirer follows a bid by a financial firm rather than being the first to bid. These results suggest that the competing financial bidder identifies strong targets or deals based on unobservable characteristics and that these benefits may be passed on to the winning corporate bidder. Thus, this paper sheds light both on the impact of competition and financial bidders' abilities to identify value enhancing acquisitions.

1. INTRODUCTION

Previous research indicates that competition in mergers and acquisitions can be detrimental to the ultimate acquirer, increasing premiums paid and decreasing returns to acquiring firms. In this paper, we show that the effect of competition depends on the identity of the competing bidder. Specifically, we show that if a corporate acquirer competes with a financial bidder (such as a private equity firm) rather than another corporate bidder, then the premiums paid are significantly lower and returns are significantly higher, as illustrated in Figure 2. Further, comparing the premiums and returns of competing corporate acquirers to deals without competition shows that the negative effects of competition exist only for firms competing with other corporate bidders and are completely reversed; in fact there may even be a positive effect, for firms competing with financial bidders. Why does competing with financial bidders yield superior results? The evidence suggests that these benefits arise from the financial bidder's ability to identify strong targets and deals based on unobservable characteristics. The results are not explained by observable target or deal characteristics or superior skills of the corporate acquirer.

This paper builds on a vast literature examining acquirer returns and deal characteristics in the face of competition. According to theory, the threat of competition in an acquisition can impact the premium offered, the method of payment, and the returns to a successful acquisition [Bradley, Desai, and Kim (1988), Fishman (1988, 1989), Hirshleifer and Png (1989), Berkovitch and Narayanan (1990), and Eckbo, Giammarino, and Heinkel (1990)]. Consistent with theory, Bradley, Desai, and Kim (1988) show that competition decreases the returns to acquirers. However, several papers find that the number of bidders, a common measure of competition, has little or no impact on acquirer returns [Moeller, Schlingeman, and Stulz (2004), Schwert (2000) and Servaes (1991)]. Likewise, using SEC data on the number of bidders present prior to public announcement of the takeover, Boone and Mulherin (2008) show that bidder returns are not lower when they face high levels of competition. The only persistent empirical finding is that target announcement returns and offer premiums are higher when multiple bidders are present [Bradley, Desai and Kim (1988), Comment and Schwert (1995), Betton and Eckbo (2000)].

We build on the current literature on the effect of competition on acquisitions by examining how competition with a financial bidder impacts the deal structure, premium and returns to an acquirer. Understanding how the identity of the competitor impacts deal characteristics and returns is a relatively unexplored area of research. A few papers investigate how characteristics of the acquirer impact the probability of there being a competing offer, such

as Harford (1999) who shows that cash rich bidders are less likely to attract competition. But, we are not aware of any other paper that examines how the identity of the competitor affects deal characteristics or value of the transaction to the ultimate acquirer. We focus on the impact of competition from financial bidders versus other corporate bidders because financial sponsors play an important role in mergers and acquisitions. Over the last 27 years, 26 percent of all competing bids were made by financial sponsors. The presence of financial bidders peaked in 1988 when they made up 48 percent of all competing bids and resurged in the last several years when financial bidders made up 42 percent of all competing bids in 2007. Thus, when a corporate firm attempts to acquire, it often competes with a financial firm. This competition may impact the deal structure, the premium paid, and the return to the acquiring firm. For instance, since financial bidders typically undertake all-cash acquisitions, often financed with debt, corporate bidders facing competition from financial bidders may have to undertake highly leveraged cash transactions. Further, Barger, Schlingemann, Stulz, and Zutter (2007) show that private acquirers pay significantly lower premia than public acquirers. Thus, a corporate acquirer competing with a financial bidder (which is typically private) may win the auction at a lower premium than when it competes with another public corporate firm. If the presence of financial bidder competition affects debt financing, method of payment and the premium paid by a corporate acquirer, it can also have a significant impact on acquirer shareholder returns post-acquisition.

We test the impact of competitor identity on deal characteristics and acquirer returns using a sample of approximately 100,000 bids made between 1980 and 2007. Specifically, we examine how deal characteristics and returns differ if a corporate acquirer competes with another corporate bidder or with a financial bidder. We identify competing bids and then classify offers as coming from a single bidder (*Single Bidder sample*), a corporate bidder competing with at least one financial firm (*Financial Competition sample*), or a corporate bidder competing with only other corporate bidders (*Corporate Competition sample*). We focus our analysis on corporate acquirers since our question of interest is how competition from financial bidders impacts corporate strategic acquirers. Further, most previous research on the value of acquisitions to the acquirer focuses on corporate acquirers since financial sponsors are typically private and returns data are not available. Throughout the paper, the term acquirer refers to corporate strategic buyers.

We first examine deal characteristics of all bidders and successful acquirers. We find that acquirers pay a greater percentage of the transaction with cash and a greater percentage of the deals are all cash when the firm competes with a financial bidder instead of a corporate bidder.

Acquirers competing with financial bidders pay 76 percent of the transaction value in cash whereas those competing with other corporate bidders pay 56 percent in cash and those with no competition pay 51 percent. Further, acquirers competing with financial bidders finance 35 percent of the transaction value with debt whereas those competing with other corporate bidders finance only 19 percent. Both of these differences are significant at the one percent level. We also examine the premiums offered and find that firms offer a significantly *lower* premium when competing with financial versus corporate bidders. Acquirers competing with financial bidders offer an average premium of 30 percent, whereas those competing with other corporate bidders offer 46 percent and those with no competition offer an average premium of 45 percent. Further, in multivariate analysis explaining the premium, the coefficient on competitor type indicates that firms offer a significantly lower premium when competing with financial bidders after controlling for other factors that may influence premiums. Thus, all else equal, it is more likely that a bidding war with another corporate bidder will lead to higher, possible over-payment, than one against a financial bidder. Additionally, target and deal characteristics cannot explain the difference in the premium offered, suggesting that the nature of the competition and the identity of the competitor are key determinants of the difference in premiums offered.

We next ask if competing with a financial bidder affects acquirer returns. To investigate this question, we compare the returns of acquirers who compete against a financial bidder with returns of acquirers who compete against a corporate bidder. Similar to Bradley, Desai, and Kim (1988), we calculate the returns from 20 days before to 120 and 180 days after the announcement of the bid for corporate acquirers that win a bidding war. We find that firms earn much higher returns when they win against a financial bidder rather than a corporate bidder. Over the -20 to 180-day window, those competing with financial bidders earn a 9.55% greater cumulative abnormal return than those competing with other corporate bidders. The difference remains significant after controlling for other factors that have been shown to impact acquirer returns in a multivariate analysis. We confirm our results using calendar time returns and six- and twelve-month buy and hold returns. We also examine a narrower announcement window of -2 to +2 days to determine if the market expects the financial competition sample to do better than the corporate competition sample. We find that acquirers competing with other corporate bidders earn significantly negative announcement returns. Acquirers competing with financial bidders earn positive and higher abnormal announcement return, but the difference is not statistically significant. We further show that the joint (acquirer and target) returns in the financial competition sample is greater than those in the corporate competition sample, though again the difference is not significant. The returns to the targets are almost identical between these two

groups, suggesting that the higher joint return is due to the higher acquirer announcement return. One caveat in interpreting these results is that although the narrower window captures the acquisition announcement it may not include the announcement of a competing bid. Thus, we also examine the abnormal return at the announcement of a competing bid. We find that firms earn positive and significantly higher returns at the announcement of a competing bid from a financial rather than a corporate bidder, suggesting that competition from a financial bidder is good news.

The return results suggest that competition with a financial bidder is value-enhancing relative to competition with another corporate firm. To examine why, we propose two hypotheses: 1) Acquirers competing with financial bidders are different from those competing with other corporate bidders; thus the superior returns are due to acquirer abilities (*Acquirer Hypothesis*); 2) Targets or deals pursued by financial bidders are different from those pursued by corporate bidders alone and these differences drive the higher returns (*Target/Deal Hypothesis*). As a subset of the target/deal hypothesis, we propose that financial bidders may *identify* superior deals and that these benefits may be passed onto the corporate acquirer that follows the financial bidder.

To test the acquirer hypothesis, we examine if the acquirer competing with a financial bidder experiences superior returns in previous (non-competing) acquisitions, thus demonstrating its superior abilities. We find that these acquirers do not have better returns in earlier acquisitions and thus rule out acquirer ability as the explanation for our results. To test the target hypothesis, we first show that the targets in these two groups are not significantly different and that the results are robust to controlling for observable target characteristics. Thus, our results cannot be explained by observable differences in the target characteristics. As discussed earlier, the deal characteristics do differ between these two groups but the superior returns to those competing with financial bidders hold after controlling for these differences. However, this does not rule out the possibility that financial bidders are skilled at *identifying* targets with the potential for cost cuts or revenue growth not easily observable to the public. If this is true and explains our results, we would expect the superior returns to be concentrated in those acquisitions where the acquirers' bid followed the financial bidder's bid. To test this, we divide the sample into acquirers that followed another bid and those that were the first bidder. We show that the return results discussed above are concentrated in the sub-sample that follows a bid by a financial firm. In other words, firms earn a higher abnormal return if they follow the financial bidder than if they follow a corporate bidder. Specifically, acquirers earn almost 12 percent greater abnormal returns in the 180 days following the announcement if they follow a financial bidder rather than

following a corporate bidder. These results indicate that, at least in part, financial bidders identify ‘good’ targets or set favorable terms that benefit the ultimate winner. Thus, competition with a financial bidder is *beneficial* relative to competing with a corporate bidder or no competition.

In summary, we show that when competing with a financial bidder, acquirers pay more in cash, finance more with debt to pay for the transaction, pay lower premiums, and earn higher returns than if they were competing with a corporate bidder or if there was no competition. The returns are strongest when the acquirer follows rather than leads the financial bidder, suggesting that financial bidders *identify* superior targets or deals. There is also evidence to suggest that financial bidders *certify* superior deals since the reaction to the announcement of a competing bid by a financial firm is significantly greater than zero and higher than the announcement return to a competing bid by another corporate bidder. Thus, following financial bidders and competing against financial bidders is a value enhancing strategy employed by corporate acquirers.

This paper sheds light on two streams of literature. First, the paper shows that competition is not always detrimental and can have value enhancing benefits. Why does competing with, and in particular following, financial bidders lead to superior returns? The answer to this question is likely related to the source of gains from acquisitions. Gains from one corporate firm acquiring another corporate firm may be due to business synergies between the two merging firms or due to increasing the stand-alone value of the target.¹ In contrast, when a financial buyer acquires a corporate firm, the gain is primarily due only to an increase in the stand-alone value of the target. Thus, we can conjecture that in deals where a corporate acquirer purchases a target coveted by a financial bidder, there are significant gains to be had from improving the stand-alone value of the target firm in addition to any synergies that might arise from combining the two operating firms. In other words, private equity firms identify valuable targets, thus leading to the second contribution of this paper. The second contribution is to address the question: do financial sponsors, such as private equity firms, have superior skills in identifying target and negotiating M&A deals? This paper suggests yes.

One difficulty in understanding the impact of competition in acquisitions is what aspect of competition best defines a competitive environment. Boone and Mulherin (2007) identify the existence of an active and competitive takeover market prior to public announcement of an acquisition and suggest that traditional count measures of competition may not be complete. Specifically, they show that a substantial degree of competition occurs prior to the public

¹ Synergies arise for many reasons such as improved production efficiency (Maksimovic and Phillips 2001, 2002, Eckbo 1983, 1985, Fee and Thomas 2004, and Shahrur 2005) or increased market power (Kim and Singal 1993 and Shahrur 2005).

announcement of the acquisition, thus biasing downward the estimate of the degree of competition. Traditional measures of competition such as the number of bidders therefore do not fully reflect the degree of competition. Moeller, Schlingeman, and Stulz (2004 and 2005) note that competition is more intense during peak merger waves and use the total merger activity in an industry as an alternative measure of competition. In this paper, we focus on another aspect of competition to understand how competition impacts both acquirer returns and deal characteristics. We propose that not all competition is created equal and that the *identity* of the competitor may be as important, if not more important, than the number of competitors. Though the prior literature discusses the relation between the presence of competition and deal characteristics, few papers examine how the identity of the competing bidder impacts competition. We provide new insight into the importance of competition. Unlike other papers on competition that show either no effect or a negative effect of competition on acquirer returns, we show that some type of competition is *beneficial*. In addition to examining the impact of competitor characteristics on acquisition decisions, we also contribute to the literature on the effect of competition by revisiting how competition impacts the terms of the deal relative to single bidder transactions. We show that competition increases the cash used and decreases the premium offered in the transaction, particularly when the firm is competing with a financial bidder. Throughout the paper, we contrast our findings for the firms competing with financial bidders with those competing with corporate bidders and those facing no competition.

The rest of this paper is organized as follows. Section 2 describes the sample and data. Section 3 studies deal characteristics. Section 4 presents the stock return results and Section 5 concludes the paper.

2. SAMPLE

We obtain a sample of all mergers and tender offers announced from 1980 to 2007 where the target and acquirer were both U.S. firms from Security Data Corporation (SDC). The sample excludes all deals with a transaction value less than \$1 million. This initial sample is then divided into two categories – deals where only one bidder was present and deals where two or more bidders competed for the same target. To determine if there was bidding competition, we begin by treating every target where more than one bid is recorded in SDC as a potential subject of bidding competition. If SDC records exactly two bids for the same target, we use the following criteria to classify the two bids as competing bids. Bids are considered competing if one of the two bids is completed with more than 50 percent of the target's shares acquired, or if both bids

are completed, one completed bid is a majority acquisition and the other completed bid is a minority acquisition and:

- (i) SDC specifically flags the two as competing bids. *or*
- (ii) The announcement date of the two bids is no more than 12 months apart, the first bid is not completed before the second bid is announced, and neither bid is a divestiture (since with divestitures it is not clear if firms are bidding on the same assets).

If SDC records more than two bidders for the same target, the same criteria listed above are used to classify the bids as competing bids. However, we relax the explicit criteria that all bids must occur within 12 months. We allow for the possibility that when multiple (greater than two) bidders are present, bidding competition can drag on for longer than a year between the first and last bid. Even though we do not require multiple bids to occur within one year we find that approximately 95% of the multiple-bidder competitions were concluded within a 12-month period and the remaining 5% of multiple-bidder competitions were concluded within a 24-month period. Combining the two-bidder and multiple-bidder competitions, we have 4,471 bidders which we refer to as the *Competing Bidders sample*. This sample includes the successful acquirers and the unsuccessful competing bidders. Deals that do not qualify as competed deals are considered to be single-bidder deals provided 50 percent of the target shares are sought. Our *Single-Bidder sample* comprises of 96,345 single-bidder deals which include both successful and unsuccessful bidders.²

Our primary question of interest is how the identity of the competitor impacts the deal characteristics and returns to the ultimate corporate acquirer. We therefore further sub-divide our *Competing Bidders sample* into the *Corporate Competition sample* and the *Financial Competition sample*. The *Corporate Competition sample* includes 3,321 corporate bidders that compete only with corporate bidders. The *Financial Competition sample* includes 547 corporate bidders that compete with at least one of 470 financial bidders; thus, the *Financial Competition sample* is made up of a total of 1,017 bidders. The remaining 133 bidders are financial firms that compete only with other financial firms. The division of the *Competing Bidders sample* into these groups is illustrated in Figure 1.

² Though the sample of single bidders is large, many of these deals involve small and/or private targets for which data are limited. Thus, the number of observations in our tests is often limited to a much smaller number of observations, as noted in the Tables. We use as large of a sample as possible in each test.

3. SUMMARY STATISTICS AND ANALYSIS OF DEAL CHARACTERISTICS

3.1 Target and Acquirer Summary Statistics

In Table 1, we provide summary statistics for the bidders, targets, and deal characteristics. In this table, we provide statistics for corporate bidders in Panels A-C and financial bidders in Panel D. Specifically, Panel A describes the corporate bidders, Panel B describes the targets sought after by corporate bidders, Panel C describes deal characteristics where the bidders are corporate buyers, and Panel D describes deal characteristics where the bidders are financial buyers (including both those in the Financial Competition sample and those where only financial firms compete among themselves). In all panels except Panel B, summary statistics are provided for all deals and for the subset of deals in which the bidder is successful (statistics for successful deals are provided in brackets). Panel B summarizes target characteristics, which will not vary by bidder in the Competing Bidder sample. We provide only deal characteristics summary statistics for the financial bidders because the majority of these are private and thus firm level data are not available.

Panel A of Table 1 compares corporate bidder characteristics across the three (Single Bidder, Corporate Competition, and Financial Competition) samples. All data on bidder characteristics are obtained from Compustat. Bidders in the Financial Competition sample and Corporate Competition sample are larger relative to bidders in the Single-Bidder sample. Bidders in the Corporate Competition sample and Financial Competition sample both have higher market leverage (book value of total debt divided by market value of assets) than bidders in the Single-Bidder sample. Bidders in the Financial Competition sample have significantly lower market-to-book ratio, lower quick ratio, and lower asset turnover relative to both the Corporate Competition sample and the Single-Bidder sample.

Panel B of Table 1 compares target characteristics across the three samples. All data on target characteristics are obtained from Compustat. Targets in the Corporate Competition sample are larger as measured by market value of assets than targets in the Single Bidder and Financial Competition samples. Thus, when corporate bidders compete with each other, they chase larger targets than in cases where bidding competition is absent or when the competitor is a financial bidder. Targets in the Financial Competition sample have higher book leverage than the Single Bidder sample. There are no differences in the market leverage of targets across the three samples. Targets in the Single-Bidder sample have higher market-to-book relative to their industry than targets in both the Financial and Corporate Competition samples. Targets in the Financial Competition sample have higher return on assets as compared with the Single-Bidder

and Corporate Competition samples. Overall, Panel B shows that targets in the Financial versus Corporate Competition samples differ on a few dimensions. In subsequent analysis, we will therefore control for target differences.

To examine if one sub-sample is more likely to go after the ‘hot’ targets, we also examine the ex-ante probability that the target firm becomes a target. To estimate this probability, we use the predictive regression from Palepu (1986). To employ this analysis, we use a sample of all firms on Compustat with market value over \$1 million from 1980 to 1989 and estimate the predictive logit where the dependent variable is equal to 1 if the firm became a target during this period and 0 otherwise. The explanatory variables are described in detail in the appendix of Palepu (1986). We use the coefficients from this estimation to calculate the probability a firm in our sample during the 1990 to 2007 period becomes a target. We present the probability for this portion of our sample in the last line of Panel B of Table 1. We find that the Financial Competition sample goes after targets that have a slightly higher probability of being a target but this difference is small and not significantly different from zero.

3.2 Deal Characteristics: Method of Payment, Debt Financing and Target Premia

In this section, we test the impact of the identity of the competitor on deal characteristics. Specifically, we examine whether the nature of a merger deal offered by corporate bidders differs conditional on whether they face competition from financial bidders or other corporate bidders. We examine several deal characteristics but concentrate on three characteristics of the deal – percentage of deal value paid in cash, amount and percentage of debt-financing obtained to fund the acquisition, and the premium offered to target shareholders.

Panel C of Table 1 compares deal characteristics across the three samples for corporate bidders and, for further comparison; Panel D of Table 1 presents the deal characteristics of financial bidders. The transaction value (*TV*), obtained from SDC, is the total amount paid by the acquirer to complete the acquisition purchase excluding fees. *TV* is higher for competed deals in both the Corporate Competition and Financial Competition samples relative to single-bidder deals. This suggests that the targets purchased in deals with competition are larger. We also examine the relative size of the target and acquirer, which is calculated as *TV* divided by market value of assets of the acquiring firm. Market value of assets is the book value of total debt plus market value of equity. The relative size of target firms across the three samples is indistinguishable. *Days to Completion*, measured as the difference between the announcement date of the first bid and the effective date of the successful acquirer, is significantly higher for both the Corporate and Financial Competition samples relative to the single-bidder sample. The

percentage of hostile deals is higher in the competition samples (both Corporate and Financial) relative to the Single Bidder sample. Tender offers are the most likely in the Financial Competition sample and the least likely in single-bidder sample.

Panel C also presents summary statistics on the method of payment and premium paid. The percentage of deal value offered in cash is the lowest for the single-bidder sample (41.79 percent), higher if another corporate bidders is present as a competitor (57.12 percent), and highest if a financial competitor is present (76.13 percent). All the differences are significant. A comparison with Panel D illustrates that corporate bidders in the Financial Competition Sample use a similar level of cash as financial bidders. The financial bidders shown in Panel D offer 78.74 percent of the deal value in cash, on average. Not surprisingly, the pattern of percentage offered in stock is exactly the opposite, with single-bidder deals offering the highest percentage in stock (44.90 percent) and bidders in the Financial Competition sample offering the lowest percentage in stock (13.19 percent). Also not surprisingly, the financial bidders in Panel D offer much less in stock (4.33 percent for the financial bidders facing competition). Similar results hold for the percentage of deals that are pure cash or pure stock. The Single Bidder sample has the highest fraction of pure stock deals and the lowest fraction of pure cash deals. The Financial Competition sample has the highest fraction of pure cash deals and the lowest fraction of pure stock deals; again, they resemble the financial bidders. These statistics indicate that the identity of the competitor influences the method of payment. To understand these results, it is important to note that financial buyers pay primarily with cash. In our sample, the average (median) financial buyer pays of 77 (100) percent of deal value in cash. Corporate bidders, on the other hand, pay an average (median) of 51 (55) percent of deal value in cash. We conjecture that corporate acquirers offer more cash if they face competition from a financial bidder as compared with competition from yet another corporate bidder because cash is an attractive method of payment from the point of view of target shareholders.

Since corporate bidders in the Financial Competition sample pay a higher fraction of the deal value in cash, we test whether they have to borrow more in order to do so. In this test, we compare the amount borrowed by corporate acquirers for the explicit purpose of financing the acquisition. SDC provides a text description of the details of sources of financing for many deals. Often the text description includes the dollar amount borrowed from banks or through the issue of bonds. We read through the text description for successful deals in the Corporate Competition and Financial Competition samples.³ All types of bank financing (e.g., line of credit, revolving facility, bridge loans), and any bonds, notes, and debentures issued by the bidder are added up to

³ We do not collect this variable for the single-bidder sample or for the financial bidders.

arrive at one figure for total debt financing of the acquisition. The average dollar amount of debt financing, *Debtfin* (\$), taken by corporate bidders in the Financial Competition and Corporate Competition samples is provided in Panel C of Table 1. Corporate acquirers in the Corporate Competition sample borrowed on average \$141 million to pay for the acquisition. Corporate acquirers in the Financial Competition sample borrowed on average \$306 million. The difference between the two amounts is statistically significant at the 1 percent level. We also compare the amount of debt financing scaled by transaction value of the merger, *Debtfin* (%) across the two samples. Corporate acquirers in the Corporate Competition sample borrow 19.5 percent of the total deal value. Corporate acquirers in the Financial Competition sample borrow 35.4 percent of the total deal value. The difference between the two is statistically significant at the 1 percent level. These results are consistent with the notion that corporate acquirers who face competition from financial bidders borrow more in order to offer more of the deal value in cash.

Next, we examine the effect of financial bidder competition on the takeover premia offered by corporate acquirers. The takeover premium is the most critical component of the deal, since it indicates how the expected gains from the acquisition are to be shared by the target and acquiring shareholders. There are several reasons why takeover premia might be affected by the existence of financial bidder competition. Financial bidders enjoy some advantages on the negotiating table vis-à-vis corporate bidders. Financial buyers often retain key management personnel after the acquisition is completed relative to a strategic corporate acquisition. Their modus operandi is to give ‘ownership’ to talent within the target firm in order to achieve the desired cost and revenue synergies. Acquisitions by corporate buyers, on the other hand, are more likely to result in a diminished role of target firm’s senior management as overlapping divisions and operations are integrated. Acquisitions by corporate buyers are more likely to encounter objections from regulatory authorities on anti-trust issues. Although corporate bidders are sometimes successful in satisfying anti-trust concerns by undertaking necessary or mandated divestitures, they face the risk of failure due to anti-trust objections, which financial bidders do not. All else equal, these factors may tilt the target’s management in favor of accepting the offer from the financial bidder. To compensate for these negotiating advantages that financial bidders have, corporate bidders may have to offer higher premia to make their deal more attractive relative to that offered by the financial bidder. Alternatively, if a corporate bidder faces competition from another corporate bidder, both would likely offer similar packages to management or at least have similar incentives to do so. This argument suggests that corporate acquirers offer higher takeover premia when they face competing bids from financial bidders

relative to what they would have offered if the competing bidder was yet another corporate bidder.

An alternative line of thought suggests exactly the opposite relation between target premia and financial bidder competition. Barger, Schlingemann, Stulz, and Zutter (2007) find that public acquirers pay significantly higher acquisition premia than private acquirers. They argue that managers with lower ownership (as in public firms) may be willing to pay more than is optimal for shareholders because of the increase in prestige and perks that comes with managing large firms. Private buyers on the other hand have a high ownership stake and would rather walk away from an acquisition than pay too high a premium. If financial buyers, who are usually private firms, pay lower premia as found by Barger, Schlingemann, Stulz, and Zutter (2007), then competing with them may be easier in terms of the premia that need to be offered. That is, a corporate buyer could offer a lower takeover premium when competing with a financial bidder relative to the premium that would have to be offered in order to compete with a publicly traded corporate bidder.

To test these two hypotheses, we first compare the average takeover premium offered by corporate bidders in the Corporate Competition and Financial Competition samples. The target takeover premium, *Premium*, is calculated as the price per share offered by the acquirer less the target's share price four weeks prior to the merger announcement divided by the target's share price four weeks prior to announcement. Panel C of Table 1 shows that corporate bidders in the Corporate Competition sample pay a premium of 44.6 percent while corporate bidders in the Financial Competition sample pay a premium of 34.5 percent. The difference between the two is statistically significant at the 1 percent level. Thus, initial univariate tests suggest that corporate bidders pay lower premia when facing financial bidder competition possibly because financial bidders themselves pay low takeover premia. The lower premium offered by corporate bidders in the Financial Competition sample mirrors that offered by financial bidders, who offer 37 (36) percent when there is (no) competition as shown in Panel D Table 1. Further, the Financial Competition sample pays a significantly lower premium relative to the Single-Bidder sample, whereas the Corporate Competition sample pays the same premium as the Single-Bidder sample.

Of course, the lower premia may be due to differing deal or target characteristics; thus, we further test this hypothesis using a multivariate analysis of takeover premia, which is presented in Table 2. We first re-visit the finding of Barger et al. that private buyers pay lower premia than public buyers. Since our paper focuses on the difference between financial bidders and corporate bidders, we check whether the Bargeon et al. result can be generalized to corporate versus financial bidders. We do this by examining whether financial bidders offer lower premia

than corporate bidders. To abstract from issues relating to the existence of competing bids, we restrict this test to the sample of deals in which only one bidder was present. Specifically, we run the following regression for the full Single Bidder Sample for which all data are available.

$$\begin{aligned}
 PREMIUM_i = & \alpha_0 + \alpha_1 BIDDER_TYPE_i + \alpha_2 TTERMFi + \alpha_3 POISON_i + \alpha_4 HOSTILE_i \\
 & + \alpha_5 CASH_i + \alpha_6 TOEHOLD_i + \alpha_7 FINSERV_i + \alpha_8 TENDER_i + \alpha_9 SAMEIND_i \\
 & + \alpha_{10} ACQ_PUBLIC_i + \varepsilon_i
 \end{aligned} \tag{1}$$

The dependent variable, PREMIUM, described earlier is the takeover premium. The key variable of interest is BIDDER_TYPE, which is a dummy variable equal to one if the bidder is a financial bidder and zero if it is a corporate bidder. Control variables are as follows. TTERMFi is the target termination fee. A target termination fee clause requires that the target pay the acquirer a fixed cash amount if the target decides to cancel its merger agreement with the bidder. It is included as a control variable because Officer (2003) finds that target termination fees are associated with higher takeover premia. POISON is dummy variable equal to one if the target has a defensive poison pill in place. Since poison pills increase the negotiating power of target firms, they may result in higher takeover premia for target firms. HOSTILE is a dummy variable equal to one if SDC flags the deal attitude as hostile and zero otherwise. If the acquirer is hostile to the target management, they may offer the shareholders a higher premium in an attempt to override the views of the target management. CASH is the percentage of deal value offered in cash. TOEHOLD is a dummy variable equal to one if the acquirer holds more than 5 percent of target stock just prior to announcement of the acquisition. A toehold effectively lowers the cost of an acquisition by reducing the percentage of target stock that must be acquired to obtain control; therefore, bidders who own a toehold may be willing to offer higher premia. FINSERV is a dummy variable equal to one if the acquirer and the target belong to the financial services industry. TENDER is a dummy variable equal to one if the deal involved is a tender offer. Since tender offers often involve an attempt to bypass target management, bidders may offer higher takeover premia in order to win target shareholder approval. SAMEIND is a dummy variable equal to one if the target and acquirer belong to the same industry. FINSERV and SAMEIND are included as a control variable because Officer (2003) finds that bid premia are lower when both parties belong to the financial services industry or when both parties belong to the same industry. ACQ_PUBLIC is a dummy variable equal to one if the acquirer is public and zero if it is private.

The regression in Equation (1) differs slightly from Barger, Schlingemann, Stulz, and Zutter (2007) because we focus on the difference in premia offered by corporate bidders versus

financial bidders whereas Barger, Schlingemann, Stulz, and Zutter (2007) examine the difference in premia offered by public versus private buyers. However, the difference is marginal. In the sample of 5,584 single-bidder deals used in Equation (1), 548 bidders are financial bidders. Of these, 61 percent are private financial firms. The remaining 5,036 firms are all corporate bidders, of which 76 percent are public firms. The first column of Table 2 presents the results of Equation (1). The negative and significant coefficient on the dummy *BIDDER_TYPE* indicates that financial bidders, on average, offer significantly lower takeover premia than corporate buyers. This finding is consistent with Barger, Schlingemann, Stulz, and Zutter's (2007) argument that private buyers would rather walk away from a deal than pay a price they consider to be too high.⁴

The summary statistics presented in Panel C of Table 1 suggest takeover premia offered by a corporate bidder are likely to be higher when two corporate bidders compete with each other rather than cases where a corporate bidder competes with a financial bidder. To further test the impact of the identity of the competition on the premium controlling for deal characteristics, we estimate the following regression for corporate bidders in the Competing Bidder sample.

$$\begin{aligned}
 \text{PREMIUM}_i = & \alpha_0 + \alpha_1 \text{FINCOMP}_i + \alpha_2 \text{TTERM}_i + \alpha_3 \text{POISON}_i + \alpha_4 \text{HOSTILE}_i \\
 & + \alpha_5 \text{CASH}_i + \alpha_6 \text{TOEHOLD}_i + \alpha_7 \text{FINSERV}_i + \alpha_8 \text{TENDER}_i + \alpha_9 \text{SAMEIND}_i \\
 & + \alpha_{10} \text{ACQ_PUBLIC}_i + \varepsilon_i
 \end{aligned} \tag{2}$$

In Equation (2), *PREMIUM* is the takeover premium offered by a corporate bidder. *FINCOMP* is a dummy variable equal to one if the corporate bidder faces competition from a financial bidder and zero otherwise. The control variables are the same as in Equation (1). Estimates of Equation (2) are presented in the second column of Table 2. The coefficient on *FINCOMP* is negative and significant at the 1 percent level. Thus, corporate bidders pay lower takeover premia when the competing bidder is a financial bidder instead of another corporate bidder. Panel B of Table 1 indicates that targets differ in many dimensions between these two groups. To allow for the possibility that this lower takeover premium is driven by differences in target characteristics, we include a number of target characteristics as control variables in the third column of Table 2. Specifically, we control for target market-to-book, leverage, cash to net assets ratio, return on assets, cash flow margin, quick ratio, and asset turnover. We find that differences in target

⁴ The coefficient on *ACQ_PUBLIC* is insignificant in column 1, which differs from the results presented in Barger, Schlingemann, Stulz, and Zutter (2007) because our *BIDDER_TYPE* variable subsumes the public-private dummy variables. In untabulated results, when we exclude *BIDDER_TYPE*, the coefficient on *ACQ_PUBLIC* is significant, consistent with Barger, Schlingemann, Stulz, and Zutter (2007).

characteristics cannot explain the lower premia offered by corporate buyers when competing with financial bidders.

To summarize, we find that the presence of financial bidders affects the deal characteristics of corporate bidders. First, financial bidder competition forces corporate bidders to offer a greater fraction of the deal value as a cash payment. Second, in the face of financial bidder competition, corporate bidders borrow larger amounts in order to fund the acquisition. Third, competing with a financial bidder is cheaper in terms of takeover premia that need to be offered relative to competing with a corporate bidder.

4. Returns Analysis

4.1 Returns: Summary Statistics

In the previous section, we show that it is cheaper to compete with financial bidders than with corporate bidders. Takeover premia offered by corporate bidders are significantly lower if they compete with financial bidders instead of corporate bidders. These results suggest that buyers competing with a financial bidder are less likely to overpay for targets relative to buyers competing with other corporate bidders. To further investigate this possibility, we examine acquirer performance. Specifically, we ask: Do corporate acquirers deliver better shareholder returns by purchasing targets coveted by financial bidders? To answer this question, we compare the cumulative abnormal returns (CARs) earned by successful corporate acquirers in the Financial Competition sample with the CARs earned by successful corporate acquirers in the Corporate Competition sample. Recall that corporate acquirers in the Financial Competition sample face at least one competing bid from a financial bidder whereas corporate acquirers in the Corporate Competition sample face competing bids from other corporate bidders only. In this analysis, we are interested in returns to the ultimate acquirer to measure the ‘success’ of the transaction and therefore limit our sample to the winning corporate bidder or corporate acquirer.⁵ Abnormal returns of the corporate acquirers are calculated as the acquirer return minus the return on a value-weighted market index.⁶

Figure 2 plots the CARs of successful corporate acquirers in the two competing bidder samples as well as the single bidder sample from 20 days before the merger announcement till 180 days after the merger announcement. We see that in the days following the merger announcement, CARs of corporate acquirers in the Financial Competition sample lie well above

⁵ A related question is: how do the announcement returns of the financial bidders or acquirers compare to the corporate bidders? Unfortunately, these data are not available since the majority of financial bidders are private. Further, this analysis is not necessary to answer our question of interest.

⁶ Untabulated abnormal returns calculated using a Market Model yield similar results.

the CARs of corporate acquirers in the Corporate Competition sample and the Single Bidder sample. Although the graph does not tell us if the difference between the CARs is statistically significant, it suggests that corporate bidders who buy the targets pursued by financial bidders deliver higher shareholder returns than corporate bidders who buy targets that only other corporate bidders are interested in.

In Panel A Table 3, we present the acquirer CARs for the -20 to 120-, -20 to 180-, and -2 to 2-day windows. We show that returns are higher for the Financial Competition sample as compared with the Corporate Competition sample in all subperiods, and the difference is statistically significant in the two longer subperiods. We also present the announcement returns to the target and the combined returns to the acquirer and target over of the -2 to +2 day window. The target announcement return does not differ between the Corporate and Financial Competition samples. Similar to the acquirer returns, the combined returns are higher but not significantly different between the two subsamples.

Although we are primarily interested in comparing the performance of corporate acquirers in the two competition samples, for completeness, we also present CARs for corporate acquirers in the Single Bidder sample. Univariate results indicate that acquirer returns are higher for the Financial Competition than for the Single Bidder sample in both the longer windows and the difference is statistically significant for the -20 to 180 window. Additionally, the -2 to +2 day window results show that the acquirer and combined (target) returns are significantly lower (higher) in the Corporate Competition sample relative to the Single Bidder sample.

Mitchell and Stafford (2000) argue that the Calendar-Time Portfolio Approach (CTPA hereafter) is a more reliable methodology of estimating the long-term abnormal performance. CTPA was first used by Jaffe (1974) and Mandelker (1974), and strongly advocated by Fama (1998) and is another important way to assess the long-term performance after major corporate events. We use CTPA as a robustness check to assess the relative long-term performance of corporate bidders competing with financial versus other corporate bidders. To calculate the calendar time abnormal returns, in each calendar month, we form corporate (financial) event portfolios which include all acquirers in the Corporate (Financial) Competition sample that announced acquisitions within the prior 6 months. We then calculate the event portfolio returns using the stock returns of the participating companies in the corresponding calendar month. To calculate the abnormal return, we first estimate the Fama-French three-factor model as follows:

$$R_{p,t} - R_{f,t} = \alpha_p + \beta_p (R_{m,t} - R_{f,t}) + \lambda_p SMB_t + h_p HML_t + \varepsilon_{p,t} \quad (3)$$

where $R_{m,t}$ is the value-weighted market return, $R_{f,t}$ is the risk free return, SMB_t is the difference between the returns of a portfolio of small stocks and a portfolio of large stocks, HML_t is the returns of a high BE/ME portfolio and a low BE/ME portfolio, and $R_{p,t}$ is the value weighted return of the event portfolio where the subscript p represents either the corporate competition event portfolio or the financial competition event portfolio.

The long-term abnormal performance is captured by the intercept, $\hat{\alpha}_p$. However, this measure is not clean due to the “joint-test problem”. That is, abnormal performance can arise because of the failure of the Fama-French three-factor model (or market efficiency) or because of the events per se. To obtain a cleaner measure, we follow Mitchell and Stafford (2000) and decompose the intercept into two components: the expected abnormal returns and the abnormal return due to the acquisition announcements. We use a bootstrap method to estimate the expected abnormal return, $\bar{\alpha}_p$. The difference $(\hat{\alpha}_p - \bar{\alpha}_p)$ is then the long-term abnormal return due to the acquisition announcements. In simulating the random samples, we maintain the key characteristics of the event portfolios unchanged. In each time of random sampling, we require that the sample has the same calendar-time frequency, and at each month, the portfolios of the randomly selected companies have the same size-BE/ME composition as the corresponding event portfolios.

We estimate the t -statistic as:

$$t_p = \frac{\hat{\alpha}_p - \bar{\alpha}_p}{\hat{s}_p} \quad (4)$$

where, \hat{s}_p is the standard error of the intercept estimate $\hat{\alpha}_p$.

To measure the difference in the long-term performance of acquirers competing with corporate and financial bidders, we subtract the long-term abnormal return of those competing with corporate bidders, $(\hat{\alpha}_{CORP} - \bar{\alpha}_{CORP})$, from the long-term abnormal return of those competing with financial bidders, $(\hat{\alpha}_{FIN} - \bar{\alpha}_{FIN})$. The standard error of the difference is estimated using the pooled regression:

$$R_{p,t} - R_{f,t} = \alpha + \beta(R_{m,t} - R_{f,t}) + \lambda SMB_t + h HML_t + \tilde{\alpha} d_{p,t} + \tilde{\beta}(R_{m,t} - R_{f,t}) \times d_{p,t} + \tilde{\lambda} SMB_t \times d_{p,t} + \tilde{h} HML_t \times d_{p,t} + \varepsilon_{p,t} \quad (5)$$

where $d_{p,t}$ is a dummy variable that is equal to 1 if the competition is from a financial bidder and 0 otherwise. We use the standard error, $\hat{s}_{\tilde{\alpha}}$, of $\tilde{\alpha}$ to form the t -statistic for the null hypothesis that the long-term performance of the Corporate Competition sample is not different from that of the Financial Competition Sample:

$$t_{diff} = \frac{(\hat{\alpha}_{FIN} - \bar{\alpha}_{FIN}) - (\hat{\alpha}_{CORP} - \bar{\alpha}_{CORP})}{\hat{s}_{\tilde{\alpha}}} \quad (6)$$

We report the long-term abnormal returns for the corporate and financial acquirers as well as their difference in Table 3 Panel B. The results indicate that over the 6 months following announcements, acquirers in the Financial Competition sample experience positive abnormal returns where as abnormal returns of acquirers in the Corporate Competition sample are not significantly different from zero. The difference in the abnormal returns of the two samples is statistically significant. Thus, consistent with the CAR results, the 6-month CTPA indicates that acquirers in the financial competition sample outperform acquirers in the corporate competition sample.

Given the dramatic difference in the longer window CARs and calendar time returns of the Financial Competition sample relative to the Corporate Competition and Single-Bidder samples, it may seem surprising that the differences are insignificant over the -2 to +2 announcement window. In fact, for this window, acquirer returns of the Single Bidder sample are the highest of the three groups, and the Financial Competition sample acquirer return is not significantly different from zero. One possible reason for the lack of significance in the announcement returns is that the announcement return may not be as informative when competition exists because information is revealed over a longer window. This is one reason why we focus our analysis on the longer windows. However, to investigate announcement returns further, we allow for the possibility that significant information may be released around the day that a subsequent competing bid appears. Thus, we examine the returns of acquirers who bid first on the date that a competing bid appears. We conjecture that competition from a financial bidder is good news relative to competition from another corporate bidder. Thus, the announcement return to a corporate first bidder should be higher when a competing bid appears from a financial bidder relative to a competing bid from another corporate bidder. In Table 4, we present returns for corporate first bidders over the -2 to +2-day window surrounding the announcement of a subsequent competing bid by a financial bidder or a corporate bidder. On average (at the median), corporate first bidders experience a 2.03 (1.37) percent return on the announcement of a competing bid by a financial bidder and a return of only 0.22 (0.20) percent on the announcement

of a competing bid by a corporate bidder. These differences are statistically significant at the 10 percent level. Thus, the market's reaction to the appearance of a competing bid supports our hypothesis that competition from a financial bidder is good news relative to competition from another corporate bidder. It also indicates that in the competing bid sample, a longer window is needed to capture the market's reaction.

4.2 Returns: Multivariate Analysis

In Table 3, we show that corporate acquirers in the Financial Competition sample experience significantly greater returns relative to those in the Corporate Competition sample over the -20- to 120-day window and -20- to 180-day window surrounding the announcement of their own bid. To further examine the impact of competitor identity on acquirer returns, we conduct a multivariate analysis of the CARs surrounding an acquirer's own bid announcement date. Table 5 presents estimates of the following regression equation:

$$\begin{aligned}
 CAR_i = & \alpha_0 + \alpha_1 FINCOMP_i + \alpha_2 CASH + \alpha_3 STOCK_i + \alpha_4 PREMIUM_i + \alpha_5 RELSIZE_i + \alpha_6 AMB_i \\
 & + \alpha_7 POISON_i + \alpha_8 TOEHOLD_i + \alpha_9 TPUB_i + \alpha_{10} DEBTFIN + \alpha_{11} TTERM_i + \alpha_{12} SAMEIND_i \\
 & + \alpha_{13} DAYS_COMPLETE_i + \varepsilon
 \end{aligned} \tag{7}$$

In Equation (7), CAR is the cumulative abnormal return earned by successful corporate acquirers over the (-20, +180) window.⁷ *FINCOMP* is a dummy variable equal to 1 if the corporate acquirer faced competition from a financial bidder and zero otherwise. In Column 1 of Panel A Table 5, we compare the Financial Competition sample with the Single-Bidder sample to determine if the univariate difference shown in Table 3 remains after controlling for deal characteristics. Thus, in this column, we only include the Single-Bidder sample and the Financial Competition sample. In the remaining columns of Table 5, we include the Financial and the Corporate Competition samples to determine if the return to the acquirers in the Financial Competition sample is significantly greater than those in the Corporate Competition Sample after controlling for target and deal characteristics. We control for a number of variables previously shown to impact acquirer returns. *CASH* is the percentage of deal value paid in cash. *STOCK* is the percentage of deal value paid using acquirer stock. *PREMIUM* is the premium above current market value offered by the acquirer. *RELSIZE* is the transaction value of the deal divided by the market value of the acquirer. *AMB* is acquirer's market-to-book ratio in the year preceding the announcement year. *POISON* is a dummy variable equal to one if the target has a defensive

⁷ We repeat this analysis using the -20 to +120 window and get similar results.

poison pill in place. *HOSTILE* is a dummy variable equal to one if the deal attitude is hostile. *TOEHOLD* is a dummy variable equal to 1 if the percentage of target's stock held by the bidder is greater than 5% at announcement. *TPUB* is a dummy variable equal to 1 if the target is a publicly traded firm and zero otherwise. *DEBTFIN* (not available for the single bidder sample) is the dollar amount of debt financing used to pay for the transaction. *TTERMF* is the target termination fee. *SAMEIND* is a dummy variable if the corporate acquirer is in the same industry as the target, using 3-digit SIC codes. *DAYS_COMPLETE* is the number of days from the announcement of the bid by the winning acquirer until the deal is complete.

The first column of Panel A Table 5 contains estimates of Equation (7) using the Single Bidder and Financial Competition samples. In this analysis, the coefficient on *FINCOMP* is positive and significant, confirming the univariate finding that corporate acquirers who face financial bidder competition perform significantly better than corporate acquirers who face no competition at all. In Column 2, we compare the Financial and Corporate Competition samples. Again, the coefficient on the dummy variable *FINCOMP* is positive and statistically significant. Thus, corporate acquirers who face competition from financial bidders significantly outperform corporate acquirers who face competition from only other corporate bidders. This is the key result of the paper and illustrates a potential *bright side* to bidder competition. In column 3, we repeat this analysis including target characteristics as control variables and the results remain.

It could be argued that over a 180-day window, buy-and-hold returns would be a more appropriate measure of returns earned by acquiring firm shareholders. To address this concern, we use monthly return data to calculate the buy-and-hold abnormal returns (BHARs) earned by acquiring shareholders relative to Fama-French size and book-to-market matched portfolios. We calculate BHARs for a 6-month period as a substitute for the (-20, +180) CARs. To analyze whether the superior performance of corporate acquirers in the Financial Competition sample relative to the Corporate Competition sample persists in the long run, we also compute BHARs for a 12-month period. We substitute the 6-month BHARs and the 12-month BHARs as dependent variables in Equation (7) above. Results are presented in Panel B Table 5. Note that in these regressions, the explanatory variable of interest is *FINCOMP*. We find that *FINCOMP* is positive and statistically significant for both the 6-month BHAR and the 12-month BHAR. Thus, our findings are robust to using BHARs instead of CARs. Moreover, corporate acquirers in the Financial Competition sample continue to outperform the corporate acquirers in the Corporate Competition sample for up to 12 months after the announcement date.

4.3 Why Are Returns Higher When Firms Compete with Financial Bidders

In this section, we investigate possible explanations for why corporate acquirers competing with financial bidders have significantly greater abnormal returns than corporate acquirers competing with corporate bidders. We consider two possible explanations. The first is a self-selection explanation. It is possible that corporate acquirers who compete with financial acquirers are inherently better at delivering value from acquisitions. In other words, like Financial bidders, some Corporate bidders are better at picking and/or managing targets. We refer to this as the *Acquirer Hypothesis*. To test this hypothesis, we further examine acquisitions by firms in the Financial Competition sample. If the corporate acquirers in the Financial Competition sample were simply ‘better’ acquirers, we would expect to see similar strong performance in all of their acquisitions. Thus, we examine acquisitions by corporate acquirers in the financial competition sample between 1980 and 2007 when the corporate acquirer did not face bidding competition. Since these deals did not face competition, they appear in our Single Bidder sample. We therefore divide the corporate acquirers in the Single Bidder sample into two groups. The first group contains single-bidder deals undertaken by acquirers who at *any* other date in our sample period competed with financial bidders for a different target. We further limit this first group into a sub-group of single-bidder deals undertaken by acquirers who at some *later* date competed with financial bidders for a different target firm.⁸ The second group, which serves as a benchmark, contains all single-bidder deals undertaken by acquirers who at no point in our sample period competed with financial bidders. Thus, the benchmark deals are single-bidder deals that do not appear in the first group. If acquirers in the Financial Competition sample are skilled at identifying and consummating value-enhancing acquisitions, we should find evidence that the first group (and its sub-group) significantly outperforms the benchmark sample of single-bidder deals. We calculate the mean CARs for each group for the three event windows used earlier. Results are presented in Table 6. We find that the abnormal returns of the three groups are indistinguishable over all three event windows. Thus, we find no evidence to support the hypothesis that acquirers who chose to compete with financial bidders are more skilled at delivering value from any acquisition they undertake. Rather, the superior performance is concentrated in deals where financial bidder competition is present. Additionally, summary statistics in Table 1 show that successful corporate acquirers in the Financial Competition sample have lower market-to-book, lower quick ratio, lower cash to net assets, but higher cash flow

⁸ Since we calculate CARs over a (-20, +180) event window, we drop observations where a corporate buyer is involved in a single-bidder deal within 6 months of competing with a financial buyer on another deal.

margin as compared with successful corporate acquirers in the Corporate Competition samples. Thus, a comparison of common acquirer characteristics does not support the notion that corporate acquirers who choose to compete with financial bidders are fundamentally more efficient or better-run firms. We therefore conclude that the Acquirer Hypothesis does not explain the superior returns.

The second potential explanation for the better performance of acquirers in the Financial Competition sample is that the targets pursued are different. We refer to this as the Target Hypothesis. In the previous analysis, we control for target characteristics and our results remain; thus, observable target characteristics do not explain why corporate acquirers do better when they compete with financial bidders. However, it is possible that financial bidders have the ability to identify better targets based on characteristics that are not easily observable. That is, corporate acquirers do better when they compete with financial bidders because financial bidders identify superior targets. If this is the case, then we would expect the higher returns of the financial competition sample to be concentrated in those instances where the corporate acquirer follows (rather than leads) the financial bidder. To test this hypothesis, we divide corporate acquirers in the Financial Competition into two groups: 1) *First Bidders* in the Financial Competition sample are corporate acquirers who were first bidders and subsequently faced competition from financial bidders; and 2) *Followers* in the Financial Competition sample are corporate acquirers who entered the bidding competition after observing a first bid from a financial bidder. If our results are driven by financial bidders identifying better targets, then the superior performance should be stronger in the Followers subgroup. Figure 3 plots the CARs of First Movers and Followers in the Financial Competition sample from 20 days prior to announcement till 180 days after announcement. The same graph also shows the CARs of all successful acquirers in the Corporate Competition sample. We see that CARs of *First Bidders* in the Financial Competition sample mostly lie below CARs of the Corporate Competition sample. CARs of *Followers* in the Financial Competition sample in contrast lie consistently and significantly above CARs of the Corporate Competition sample. Thus, a visual comparison of CARs in the two samples provides credence to the hypothesis that buying targets identified by financial bidders helps deliver higher shareholder value.

We put this hypothesis to more rigorous testing by first comparing mean cumulative abnormal returns across the different samples and then subjecting the CARs to a multivariate analysis. Table 7 presents a univariate analysis of acquirer average CARs over three event windows – (-2,+2), (-20,+120) and (-20,+180). The univariate results show that the superior performance of the Financial Competition sample is stronger when a corporate acquirer follows a

financial bidder rather than being the first bidder. In the follower subsample, all returns for the Financial Competitor sample are higher than those for the Corporate Competitor sample. Specifically, the Financial Competition sample earns 11.2 and 12.8 percent greater returns over the (-20, +120) and (-20, +180) periods, respectively. Further, both of these differences are significantly different from zero. Thus, following financial bidder and winning is a value enhancing strategy.

In Table 8, we examine the difference in the follower and first bidder returns in a multivariate analysis similar to that in Table 5. Specifically, column 1 (2) includes only bids where the firm is the first bidder (follows another bidder).⁹ Column 1 shows that first movers that later face competition from a financial bidder do not significantly outperform those facing later competition from corporate bidders. Column 2 confirms the univariate results and shows that for the follower subgroup, firms competing with financial bidders significantly outperform the sample competing with corporate bidders; thus, following financial bidders by bidding on and winning the same target is a value-enhancing strategy. These results imply that financial bidders have superior abilities in identifying good takeover targets (and possibly negotiate favorable terms) and firms benefit from joining the competition and winning against financial bidders. This paper is one of the first to identify a benefit to the acquirer of competition in the M&A market.

5. CONCLUSION

Though the prior literature discusses the relation between the presence of competition and deal characteristics, few papers examine how the identity of the competing bidder impacts competition. The identity of the competitor may be particularly important when the competitor is a financial sponsor. We therefore investigate the influence of competing with financial rather than corporate bidders. We find that firms competing with financial bidders pay a larger fraction of deal value in cash and finance a larger fraction of the deal value with debt relative to those competing with corporate bidders. Moreover, the bid premium needed to win against a financial bidder is lower than the bid premium needed to win against a corporate bidder. Further, acquirers who win targets coveted by financial bidders earn significantly higher abnormal returns than acquirers who win targets pursued only by other corporate bidders.

⁹ Both columns present analysis similar to column 2 of Panel A Table 5. However, in the Follower subsample the FINCOMP variable subsumes the TPUB variable and thus we do not include TPUB in column 2. Further, we do not include target characteristics in Table 8 because the availability of these data limit our sample, making too few observations to estimate the model with the further subsample breakdown in Table 8.

The return results suggest that competing with a financial bidder is value-enhancing relative to competing against a corporate firm. To further understand the impact of competitor identity, we propose two hypotheses: better acquirer and better targets. We show that the acquirers do not have superior abilities by examining previous (non-competing) acquisitions. We examine the target hypothesis by controlling for target characteristics and the results persist. We therefore conclude that observable target differences do not drive the superior returns. We then turn to the conjecture that financial sponsors have the ability to identify good targets based on unobservable firm characteristics and/or negotiate favorable terms. To test this hypothesis, we divide the sample into those that followed another bid and those that were the first bidder. We show that the results discussed above are stronger for those that follow another bid. We further show a positive abnormal return to the announcement of a competing bid from a financial bidder and show that this abnormal return is significantly greater than the return when a competing bid is announced from another corporate bidder. This paper therefore provides some of the first evidence of a *benefit* from competition in mergers and acquisitions. The paper also highlights the role of financial sponsors, such as private equity, in a successful merger and acquisition transaction and thus complements the recent work of Boone and Mulherin (2009), who show that joint bidding by private equity consortiums does not facilitate collusion and does not have any negative effects.

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Table 1: Descriptive Statistics

This table presents deal characteristics, acquirer characteristics, and target characteristics for successful and unsuccessful tender offers or mergers announced by corporate acquirers between 1980 and 2007. Panels A-C present statistics for corporate bidders and Panel D presents statistics for financial bidders. The first column contains descriptive statistics of 96,345 single bidder deals announced by corporate acquirers. The second column contains descriptive statistics of 3,321 competed deals in which all bidders were corporate buyers. The third column contains descriptive statistics of 547 competed deals announced by corporate bidder who faced competition from at least one financial bidder. Data for all deals is provided first. Data for successful deals only is provided below in square brackets. *TV*, obtained from SDC, is the total amount paid by the acquirer to complete the acquisition purchase excluding fees. *TV/Assets* is TV divided by the target's market value of assets. Market value of assets is the book value of total debt plus market value of equity. *Relative size* is TV divided by market value of assets of the acquiring firm. *Days to Completion* is the number of days between the announcement date of the first bid and the effective date of the successful acquirer. *Cash (Stock)* is the percentage of deal value offered in cash (stock). *Pure Cash (Stock) Deals* is the percentage of deals that offer only cash (stock). *Hostile Deals* is the fraction of deals in which the deal attitude of the acquirer was hostile to target management. *Tender Offers* is the fraction of deals in which a tender offer was made to shareholders. *Public, Private and Subsidiary Target* capture the fraction of deals in which the target was a public firm, private firm or a subsidiary respectively. *Debt Financing (\$ mln)* is the dollar amount of debt financing raised by the bidder to pay for the acquisition. *Debt Financing (%)* is *Debt Financing (\$ mln)* divided by *TV*. *Book Assets* is book value of total assets. *Market Equity* is market value of equity calculated as common stock outstanding times share price. *Premium* is the premium offered above the target's pre-announcement market value. It is calculated as the price per share offered by the acquirer minus the target's share price four weeks prior to the merger announcement divided by the target's share price four weeks prior to the announcement. *Market Assets* is calculated as book value of total debt (total long term debt plus debt in current liabilities) plus market value of equity. The following variables for the acquirer are reported as deviations from the industry median: *Acquirer Book Leverage* is calculated as book value of total debt divided by *Book Assets*, where book value of total debt is total long-term debt plus debt in current liabilities. *Acquirer Market Leverage* is calculated as book value of total debt divided by *Market Assets*. *AMB* is acquirer market-to-book ratio calculated as *Market Assets* divided by *Book Assets*. *Acquirer Quick Ratio* is calculated as current assets minus inventories divided by current liabilities. *Acquirer Asset Turnover* is calculated as net sales over *Book Assets*. *Acquirer ROA* is acquirer return on assets calculated as net income over *Book Assets*. *Acquirer Cash Flow Margin* is calculated as operating income before depreciation over net sales. *Acquirer Cash to Net Assets* is acquirer's cash and cash equivalents divided by *Book Assets* less cash and cash equivalents. The *Target's Book Leverage*, *Target Market Leverage*, *Target Market to Book Ratio*, *Target Quick Ratio*, *Target Asset Turnover*, *Target ROA*, *Target Cash Flow Margin*, and *Target Cash to Net Assets* are calculated as described for acquirers. Again, all target variables are reported as deviations from the industry median. Superscripts a, b, and c denote significance at the 1%, 5%, and 10% levels respectively.

PANEL A: CORPORATE BIDDER CHARACTERISTICS						
	Single Bidder	Corporate Competition	Financial Competition	Difference		
	(1)	(2)	(3)	(1)-(2)	(2)-(3)	(1)-(3)
	All [Successful]	All [Successful]	All [Successful]	All [Successful]	All [Successful]	All [Successful]
Acquirer Book Assets	3,331 [3,285]	5,646 [5,564]	5,398 [4,541]	-2,315 ^a [-2,279] ^a	248 [1,023]	-2,066 ^b -1,256
Acquirer Market Assets	8,176 [8,199]	11,771 [11,320]	12,441 [11,326]	-3,595 ^a [-3,120] ^b	-670 [-6]	-4,265 ^c [-3,126]
Acquirer Market Equity	3,927 [4,016]	5,049 [4,864]	5,816 [6,503]	-1,121 ^b [-848]	-766 [-1,639]	-1,887 [-2,486]
Acquirer Book Leverage	2.16% [1.35%]	3.36% [3.65%]	3.90% [0.79%]	-1.19% [-2.29%]	-0.53% [2.85%]	-1.73% [0.56%]
Acquirer Mkt Leverage	-0.46% [-0.71%]	1.68% [0.83%]	3.01% [1.87%]	-2.14% ^a -1.54% ^b	-1.33% -1.03%	-3.47% ^b -2.58%
Acquirer Mkt to Book	0.773 [0.74]	0.51 [0.53]	0.10 [0.16]	0.26 ^a [0.21] ^c	0.41 ^b [0.37] ^c	0.67 ^a [0.58] ^c
Acquirer Quick Ratio	0.66 [0.68]	0.55 [0.60]	0.21 [0.12]	0.11 [0.07]	0.34 ^b [0.48] ^c	0.45 ^b [0.56] ^c
Acquirer Asset Turnover	0.042 [0.039]	0.046 [0.012]	-0.052 [0.023]	-0.003 [0.027]	0.098 ^c [-0.011]	0.094 ^c [0.016]
Acquirer ROA	-0.03 [-0.018]	-0.01 [-0.017]	0.01 [0.022]	-0.02 ^b [-0.005]	-0.02 [-0.039]	-0.04 [-0.048]
Acq. Cash Flow Margin	-0.15 [-0.115]	-0.097 [-0.146]	0.033 [0.047]	-0.05 [-0.192]	-0.13 [-0.03]	-0.181 [-0.163]
Acq. Cash to Net Assets	0.17 [0.169]	0.16 [0.164]	0.093 [0.039]	0.01 [0.005]	0.07 [0.12] ^c	0.08 [0.13] ^c

PANEL B: TARGET CHARACTERISTICS						
	Single Bidder	Corporate Competition	Financial Competition	Differences		
	(1)	(2)	(3)	(1)-(2)	(2)-(3)	(1)-(3)
Target Book Assets	1,011	1,560	830	-549 ^a	729	180
Target Market Assets	1,617	2,403	1,247	-785 ^a	1,156 ^c	370
Target Market Equity	490	627	343	-136 ^b	283	146
Target Book Leverage	4.44%	2.55%	-1.66%	1.88%	4.22%	6.11% ^c
Target Market Leverage	5.76%	6.99%	5.42%	-1.22%	1.56%	0.3%
Target Market to Book	0.168	-0.015	-0.21	0.18 ^a	0.20 ^b	0.38 ^a
Target Quick Ratio	0.66	0.57	0.43	0.09	0.14	0.22
Target Asset Turnover	0.12	0.13	0.14	-0.01	-0.01	-0.02
Target ROA	-0.07	-0.04	0.01	-0.03 ^a	-0.05 ^b	-0.075 ^b
Tar. Cash flow Margin	-0.17	-0.07	-0.003	-0.01 ^a	-0.07	-0.17 ^c
Tar. Cash to Net Assets	0.21	0.10	0.13	0.11 ^a	-0.03	0.074
Public Target	0.11	0.58	0.78	-0.67 ^a	-0.20 ^a	-0.47 ^a
Private Target	0.84	0.34	0.15	0.50 ^a	0.18 ^a	0.68 ^a
Subsidiary Target	0.04	0.07	0.05	-0.03 ^a	0.02	-0.01
Probability Target	57.28%	57.38%	60.11%	-0.01%	-2.73%	-2.83%

PANEL C : CORPORATE BIDDER DEAL CHARACTERISTICS						
	Single Bidder	Corporate	Financial	Differences		
	(1)	Competition	Competition	(1)-(2)	(2)-(3)	(1)-(3)
	All	All	All	All	All	All
	[Successful]	[Successful]	[Successful]	[Successful]	[Successful]	[Successful]
Transaction Value (TV)	214.4	871.4	707.8	-493.3 ^a	163.67	-493.3 ^a
	[215.7]	[904.4]	[697.3]	[-688] ^a	[207.08]	[-481] ^a
TV/Assets (market)	0.74	0.59	0.53	0.15 ^b	0.06	0.21
	[0.75]	[0.62]	[0.55]	[0.13]	[0.07]	0.20
Relative Size	0.27	0.29	0.40	-0.017	-0.11	-0.13
	[0.25]	[0.23]	[0.25]	[-0.017]	[-0.02]	[-0.001]
Days to Completion	-	-	-	-	-	-
	[41]	[122.82]	[112.43]	[-81] ^a	[10.39]	[-71] ^a
Hostile Deals	0.27%	8.06%	10.42%	-7.79% ^a	-2.35% ^c	-10.14% ^a
	[0.12%]	[4.53%]	[10.48%]	[-0.44%] ^a	[-5.94%] ^a	[-10.36%] ^a
Tender Offers	1.72%	16.86%	20.01%	-15.14% ^a	-3.25% ^c	-18.30% ^a
	[1.84%]	[21.73%]	[32.66%]	[-19.8%] ^a	[-10.92%] ^a	[-30.1%]
Cash	41.79%	57.12%	76.13%	-15.33% ^a	-19.01% ^a	-34.33% ^a
	[42.02%]	[56.28%]	[76.11%]	-14.25% ^a	[-19.83%] ^a	[-34.1%] ^a
Stock	44.90%	27.99%	13.19%	16.91% ^a	14.80% ^a	31.71% ^a
	[44.67%]	[29.37%]	[15.16%]	[15.29%] ^a	[14.21%] ^a	[29.51%] ^a
Pure Cash Deals	29.41%	46.56%	66.12%	-17.14% ^a	-19.55% ^a	-36.70% ^a
	[29.27%]	[45.16%]	[66.15%]	[-15.89%] ^a	[-20.98%] ^a	[-36.87%] ^a
Pure Stock Deals	33.72%	20.64%	9.47%	13.07% ^a	11.17% ^a	24.25% ^a
	[33.34%]	[20.90%]	[10.93%]	[12.44%] ^a	[9.97%] ^a	[22.42%] ^a
Debt Financing (\$ mln)						
		[141.12]	[305.58]		[-164.45] ^a	
Debt Financing (%)						
		[19.46%]	[35.37%]		[-15.9%] ^a	
Premium	44.50%	44.63%	34.50%	-0.13%	10.12% ^a	9.99% ^a
	[44.29%]	[46.27%]	[29.73%]	[-1.97%]	[16.53%] ^a	[14.56] ^a

PANEL D : FINANCIAL BIDDER DEAL CHARACTERISTICS

	Single Bidder	Competition	Difference
	All [Successful]	All [Successful]	All [Successful]
Transaction Value (TV)	352 [315]	803 [771]	-450 ^a [-455] ^a
TV/Assets (market)	0.58 [0.59]	0.48 [0.49]	0.10 ^a [0.10] ^a
Days to Completion	[32]	[118]	[-86] ^a
Hostile Deals	0.6% [0.07%]	8.0% [4.0%]	-7.5% ^a [-4.0%] ^a
Tender Offers	2.4% [2.4%]	20% [26%]	-18% ^a [24%] ^a
Cash	68.42% [69.33%]	78.74% [78.72%]	-10.31% ^a [-9.38%] ^a
Stock	16.69% [15.11%]	4.33% [3.98%]	12.35% ^a [11.12%] ^a
Pure Cash Deals	58% [58.4%]	61% [61.7%]	-3% [-3%]
Pure Stock Deals	13.05% [11.3%]	2.7% [2.6%]	10.3% ^a [8.6%] ^a
Premium	36% [36%]	37% [39%]	-1% [-3%]

Table 2: The Determinants of Target Premium

Column I of Table 2 shows a regression based on a sample of successful and unsuccessful single-bidder deals initiated either by a corporate or a financial bidder. In the single bidder sample, the dependent variable, PREMIUM, is the premium offered by the financial or corporate bidder above the target's pre-announcement value. It is calculated as the price per share offered by the acquirer minus the target's share price four weeks prior to the merger announcement divided by the target's share price four weeks prior to the announcement. BIDDER TYPE is a dummy variable equal to 1 if the bidder is a financial bidder and zero if it is a corporate bidder. Columns II and III of Table 2 present regressions based on a sample of successful and unsuccessful bids made by corporate bidders who faced at least one competing bidder. The dependent variable, PREMIUM, is the premium offered by the corporate acquirer over and above the target's pre-announcement value. FINCOMP is a dummy variable equal to one if the competing bidder is a financial bidder and zero if the competing bidder is another corporate acquirer. The following control variables are included in both regressions. TTERMF is the target termination fee. POISON is a dummy variable equal to one if the target has a defensive poison pill in place. HOSTILE is a dummy variable equal to one if the deal attitude is hostile. CASH is the percentage of the deal value offered in cash. TOEHOLD is a dummy variable equal to 1 if the percentage of target's stock held by the first bidder is greater than 5% at announcement. FINSERV is a dummy variable equal to one if the acquirer and target belong to the financial services industry. TENDER is a dummy variable equal to 1 if the deal involved a tender offer. SAMEIND is a dummy variable equal to one if both the acquirer and the target are in the same industry. ACQ_PUBLIC is a dummy variable equal to 1 if the acquirer is a publicly traded firm and zero otherwise. Target characteristics are defined in the description of Table 1. t-statistics presented in absolute values and based on robust standard errors are in parenthesis. The superscripts a, b, and c represent significance at the 1%, 5%, and 10% levels respectively.

	Single Bidder	Corporate Bidders in Completed	
	Sample	Deals	
	I	II	III
BIDDER TYPE: Fin. Bidder Dummy	-0.077 (3.57) ^a		
FINCOMP: Fin. Competition Dummy		-0.093 (3.03) ^a	-0.110 (2.86) ^a
TTERMF: Target Termination Fee	-0.102 (0.56)	-1.429 (1.38)	-0.664 (0.52)
POISON: Target Poison Pill Dummy	-0.106 (2.33) ^b	-0.048 (1.22)	-0.100 (1.93) ^c
HOSTILE: Hostile Dummy	-0.039 (1.29)	-0.059 (1.77) ^c	-0.030 (0.71)
CASH: % Deal in Cash	0.066 (3.62) ^a	-0.032 (0.82)	-0.069 (1.26)
TOEHOLD: Acq. Toehold Dummy	-0.072 (2.84) ^a	-0.056 (1.60)	-0.049 (1.10)
FINSERV: Financial Industry Dummy	-0.067 (5.01) ^a	-0.044 (1.44)	-0.209 (1.59)
TENDER: Tender Offer Dummy	0.042 (2.45) ^b	0.117 (3.89) ^a	0.134 (3.48) ^a
SAMEIND: Same Industry Dummy	-0.004 (0.29)	0.027 (0.92)	0.040 (1.11)
ACQ_PUBLIC: Acquirer Public Firm	0.016 (0.92)	0.069 (2.39) ^b	0.061 (1.63)
Target Market to Book			-0.049 (2.27) ^b
Target Market Leverage			-0.019 (0.20)
Target Cash to Net Assets			-0.080 (2.12) ^b
Target ROA			0.295 (2.25) ^b
Target Cash Flow Margin			-0.142 (2.62) ^a
Target Quick Ratio			0.006 (0.44)
Target Asset Turnover			0.021 (0.65)
Intercept	0.567 (9.47) ^a	0.514 (4.16) ^a	0.270 (1.62)
Year Dummies	Yes	Yes	Yes
Observations	5584	1205	770
R-squared	0.05	0.08	0.12

Table 3: Univariate Analysis of Cumulative Abnormal Returns of Corporate Acquirers

PANEL A of this table compares the cumulate abnormal returns (CARs) of corporate acquirers who win bidding competition against either financial bidders or against other corporate bidders. CARs are presented for the (-2,+2), (-20, +120), and (-20, +180) windows surrounding the bid announcement date of the winning corporate acquirer. ‘Financial Competition Sample’ refers to the sample of winning corporate acquirers who faced competition from at least one financial bidder. ‘Corporate Competition Sample’ refers to the sample of corporate acquirers who faced competition from other corporate bidders only. “Single Bidder Sample” refers to the sample of corporate acquirers who faced no competing bids. Abnormal returns are calculated as the acquirer’s return minus a value-weighted market index. Parenthesis contain Patell Z-statistics or t-statistics as indicated.

PANEL B presents abnormal returns of corporate acquirers and financial acquirers estimated using the Calendar –Time Portfolio Approach (CTPA). The abnormal returns are measured by the event portfolio excess returns relative to Fama-French three factor model. The event portfolios include all (corporate/financial) companies that announce acquisitions within the prior 6 months. Value weighted portfolio returns are calculated using the participating stocks in each calendar month, and the excess returns (relative to the 30-day Treasury Bill rate) are regressed on the Fama-French three factors. The intercept is then decomposed into two components: the expected abnormal return and the abnormal return due to the announcements. We bootstrap the expected abnormal return with 1,000 randomly selected samples requiring that each of the random samples has the same calendar-time frequency, and at each month, the portfolio of randomly selected companies has the same Size-BE/ME composition as the corresponding event portfolio. The difference between the intercept of the Fama-French three-factor regression and the bootstrapped expected abnormal return measures the abnormal return due to the acquisition announcements. t-statistics presented in absolute values are in parenthesis. Superscript a, b, and c indicate significance at the 1%, 5%, and 10% levels respectively.

PANEL A

	I Single Bidder Sample	II Financial Competition Sample	III Corporate Competition Sample	I-II	II-III	I-III
	Mean CAR (Patell Z)	Mean CAR (Patell Z)	Mean CAR (Patell Z)	Difference (t-statistic)	Difference (t-statistic)	Difference (t-statistic)
Combined CARs over (-2, +2) window	2.51% (24.07) ^a	4.19% (3.98) ^a	0.79% (3.63) ^a	-1.68% (1.03)	3.40% (1.22)	1.71% (2.32) ^b
Target CARs over (-2, +2) window	22.16% (156.2) ^a	28.25% (7.53) ^a	28.55% (28.55) ^a	-6.09% (1.46)	0.3% (0.05)	-6.38% (3.62) ^a
Acquirer CARs over the (-2+2) window	1.65% (22.39) ^a	0.93 (0.29)	-0.36% (2.87) ^a	0.72% (0.58)	1.29% (1.26)	2.01% (4.39) ^a
Acquirer CARs over the (-20, +120) window	4.27% (10.33) ^a	10.53% (2.20) ^b	3.81% (2.80) ^a	-6.25% (1.51)	6.72% (1.67) ^c	0.46% (0.29)
Acquirer CARs over the (-20, +180) window	5.08% (9.83) ^a	14.13% (2.78) ^a	5.02% (3.46) ^a	-9.06% (1.82) ^c	9.12% (1.95) ^c	0.06% (0.03)

PANEL B

Calendar Time Returns

	Financial Competition Sample	Corporate Competition Sample	Difference
6-month Calendar Time Abnormal Return	1.812 (2.401) ^b	-0.132 (-0.449)	1.945 (2.401) ^b

TABLE 4
Cumulative Abnormal Returns of Corporate Acquirers at Announcement of Competing Bid

This table presents mean and median cumulative abnormal return (CAR) of corporate acquirers who made the first bid. CARs are calculated for the (-2, +2) announcement window surrounding the day a subsequent competing bid appeared either from a financial bidder or from a corporate bidder. Abnormal returns are calculated as the acquirer's return minus a value-weighted market index. t-statistics presented in absolute values are in parenthesis. The superscripts a, b, and c represent significance at the 1%, 5%, and 10% levels respectively.

	Competing bid from Financial Bidder	Competing bid from Corporate Bidder	Difference- in-Means (t-statistic)
Mean CARs	2.03%	0.22%	1.86% (1.78) ^c
Median CARs	1.37%	0.26%	
Pearson χ^2		3.71 ^c	
Wilcoxon Rank Test		1.74 ^c	

Table 5: The Determinants of Cumulative Abnormal Returns to Winning Corporate Acquirers

In PANEL A, the dependent variable is the Cumulative Abnormal Return (CAR) to winning corporate bidders over the (-20,+180) window, calculated as the acquirer's return minus the return on a value-weighted market index. In PANEL B, the dependent variable is the 6-month or 12-month buy-and-hold abnormal return (BHARs) to winning corporate bidders. BHARs are calculated relative to Fama-French size and book-to-market matched portfolios. FINCOMP is a dummy variable equal to 1 if the corporate acquirer faced bidding competition from a financial bidder (regardless of who made the first bid) and 0 if the corporate acquirer faced competition from other corporate bidder. CASH is the percentage of the deal value offered in cash. STOCK is the percentage of deal value offered in stock. PREMIUM is the premium offered above the target's pre-announcement market value. It is calculated as the price per share offered by acquirer minus the target's share price four weeks prior to the merger announcement divided by the target's share price four weeks prior to the announcement. RELSIZE is the transaction value of the deal divided by acquirer market value thirty days prior to announcement. AMB is acquirer market-to-book ratio in the year preceding the announcement year. POISON is a dummy variable equal to one if the target has a defensive poison pill in place. HOSTILE is a dummy variable equal to one if the deal attitude is hostile. TOEHOLD is a dummy variable equal to 1 if the percentage of target's stock held by the first bidder is greater than 5% at announcement. TPUB is a dummy variable equal to 1 if the target is a publicly traded firm and zero otherwise. DEBTFIN is the dollar amount of debt financing used to pay for the transaction. TTERMF is the target termination fee. SAMEIND is a dummy variable equal to 1 if target and acquirer belong to the same 4-digit SIC code. *DAYS_COMPLETE* is the number of days from the announcement of the bid by the winning acquirer until the deal is complete. The remaining variables are defined in the description of Table 1. The t-statistics presented in absolute values and based on robust standard errors are in parenthesis. Superscripts a, b, and c indicate significance at the 1%, 5%, and 10% levels respectively.

PANEL A: CARS (-20,+180)

FINCOMP: Fin. Competition Dummy	0.230	0.211	0.363
	(2.71) ^a	(2.32) ^b	(2.71) ^a
CASH: % Deal in Cash	-0.001	0.003	-0.001
	(0.87)	(0.98)	(0.42)
STOCK: % Deal in Stock	-0.001	0.003	-0.001
	(0.94)	(0.79)	(0.44)
PREMIUM: Premium Offered	0.065	0.079	0.099
	(1.54)	(1.46)	(1.41)
RELSIZE: TV/Acq. Mkt Value	0.027	-0.001	-0.009
	(3.21) ^a	(0.09)	(0.28)
AMB: Acquirer Market to Book	-0.012	-0.009	-0.004
	(3.40) ^a	(4.58) ^a	(0.66)
POISON: Target Poison Pill Dummy	-0.276	-0.087	-0.117
	(2.26) ^b	(1.56)	(1.11)
TOEHOLD: Acq. Toehold Dummy	0.145	0.011	0.153
	(1.89) ^c	(0.10)	(1.13)
TPUB: Target Public Firm	0.162	0.042	-0.016
	(0.62)	(0.45)	(0.13)
DEBTFIN: \$ Debt Financing		0.004	0.004
		(2.26) ^b	(1.43)
TTERM: Target Termination Fee	0.757	-1.222	-0.149
	(0.88)	(0.56)	(0.04)
SAMEIND: Same Industry Dummy	0.010	0.173	0.174
	(0.40)	(3.15) ^a	(1.81) ^c
DAYS_COMPLETE: # days	-0.000	0.000	0.000
	(0.41)	(0.78)	(0.98)
Target Asset Turnover			-0.118
			(1.68) ^c
Target Cash to Net Assets			-0.047
			(0.38)
Target Cash Flow Margin			-0.084
			(0.80)
Target Market Leverage			-0.064
			(0.26)
Target Market to Book			-0.068
			(1.12)
Target ROA			-0.162
			(0.57)
Target Quick Ratio			-0.025
			(0.70)
Intercept	0.136	-0.398	-0.111
	(0.47)	(1.16)	(0.26)
Year Dummies	Yes	Yes	Yes
Observations	846	193	113
R-squared	0.13	0.25	0.46

PANEL B: BHARS

	BHAR 6-month		BHAR 12-month	
FINCOMP: Fin. Competition Dummy	0.203 (2.96) ^a	0.271 (3.02) ^a	0.304 (2.44) ^b	0.322 (1.80) ^c
CASH: % Deal in Cash	0.005 (3.04) ^a	0.005 (1.83) ^c	0.006 (1.84) ^c	0.002 (0.37)
STOCK: % Deal in Stock	0.004 (2.63) ^a	0.004 (1.60)	0.004 (1.42)	0.002 (0.30)
PREMIUM: Premium Offered	-0.002 (0.05)	0.056 (0.92)	-0.073 (1.04)	0.018 (0.20)
RELSIZE: TV/Acq. Mkt Value	-0.011 (0.29)	-0.001 (0.01)	-0.148 (2.37) ^b	-0.219 (2.65) ^b
AMB: Acquirer Market to Book	-0.008 (8.16) ^a	-0.005 (1.50)	-0.007 (4.01) ^a	-0.001 (0.25)
POISON: Target Poison Pill Dummy	-0.094 (1.90) ^c	-0.025 (0.32)	-0.025 (0.18)	0.179 (1.08)
TOEHOLD: Acq. Toehold Dummy	-0.082 (1.14)	-0.021 (0.22)	0.117 (0.89)	0.058 (0.29)
TPUB: Target Public Firm	0.039 (0.71)	0.079 (1.18)	0.160 (1.12)	0.221 (1.35)
DEBTFIN: \$ Debt Financing	0.002 (1.52)	0.002 (0.93)	0.008 (3.58) ^a	0.011 (2.68) ^a
TTERM: Target Termination Fee	-0.170 (0.11)	0.721 (0.32)	-0.798 (0.30)	-0.884 (0.17)
SAMEIND: Same Industry Dummy	0.106 (2.75) ^a	0.113 (1.58)	0.133 (2.15) ^b	0.069 (0.56)
DAYS_COMPLETE: # Days	0.000 (0.90)	0.000 (1.02)	0.000 (0.91)	0.000 (0.98)
Target Asset Turnover		-0.083 (1.66)		-0.111 (0.88)
Target Cash to Net Assets		-0.115 (1.35)		-0.207 (1.63)
Target Cash Flow Margin		-0.177 (2.17) ^b		-0.303 (2.35) ^b
Target Market Leverage		0.400 (3.15) ^a		0.495 (2.44) ^b
Target Market to Book		-0.080 (1.58)		-0.105 (1.24)
Target ROA		0.548 (2.22) ^b		0.759 (1.87) ^c
Target Quick Ratio		0.030 (1.24)		0.026 (0.83)
Intercept	-0.792 (4.02) ^a	-0.830 (2.44) ^b	-1.031 (2.74) ^a	0.284 (0.44)
Observations	166	96	164	96
R-squared	0.36	0.64	0.36	0.60

Table 6**Cumulative Abnormal Returns of Single-Bidder Deals Undertaken by Acquirers in the Financial Competition Sample**

This table presents Cumulative Abnormal Returns (CARs) of corporate acquirers in the Financial Competition sample after they announced single-bidder acquisitions. Column I is restricted to single-bidder acquisitions undertaken prior to the acquisitions in the Financial Competition sample. Column II includes any single-bidder acquisition undertaken either before or after the acquisitions in the Financial Competition sample. Column III contains the benchmark No Competition sample. Acquirers that appear in Column I and II are excluded from Column III. The z-statistics and t-statistics presented in absolute values are in parenthesis, as labeled in the header. Superscripts a, b, and c indicate significance at the 1%, 5%, and 10% levels respectively.

	I	II	III	Difference I-III	Difference II-III
	Prior Single- Bidder Acquisitions by Corporate Acquirers in Financial Competition Sample	All Single Bidder Acquisitions by Corporate Acquirers in the Financial Competition Sample	Benchmark: Single Bidder Sample		
	CAR (Patell z-stat) [N]	CAR (Patell z-stat) [N]	CAR (Patell z-stat) [N]	CAR (t-stat)	CAR (t-stat)
CARs over the (-2+2) window	0.76 (1.51) ^c [149]	0.72 (2.83) ^a [400]	1.12 (18.32) ^a [21,670]	-0.35 (0.46)	-0.40 (0.84)
CARs over the (-20, +120) window	4.26 (2.76) ^a [149]	2.32 (2.38) ^a [400]	2.32 (4.96) ^a [21,670]	1.94 (0.61)	-0.0 (0.03)
CARs over the (-20, +180) window	4.49 (2.08) ^b [149]	2.56 (2.03) ^b [400]	1.79 (1.75) ^b [21,670]	2.7 (0.71)	0.77 (0.36)

Table 7: Univariate Analysis of Cumulative Abnormal Returns of First Movers and Followers

This table compares the cumulate abnormal returns (CARs) of corporate acquirers who win bidding competition against either financial bidders or against other corporate bidders. CARs over the (-2,+2), (-20, +120), and (-20, +180) windows are presented. ‘Financial Competition Sample’ refers to the sample of corporate acquirers who faced competition from at least one financial bidder. ‘Corporate Competition Sample’ refers to the sample of corporate acquirers who faced competition from other corporate bidders. Abnormal returns are calculated as the acquirer’s return minus a value-weighted market index. ‘First Mover Sample’ refers to the sample of winning corporate acquirers who were first bidders and faced subsequent competition from either financial bidders or corporate bidders. ‘Follower Sample’ refers to the sample of winning corporate acquirers who entered the bidding competition after observing a bid from a financial bidder or a corporate bidder. Parenthesis contain Patell Z-statistics or t-statistics presented in absolute values as indicated. The superscripts a, b, and c represent significance at the 1%, 5%, and 10% levels respectively.

Event Window	Group	I	II	I-II
		Financial Competition Sample	Corporate Competition Sample	Difference
		Mean CAR (Patell Z)	Mean CAR (Patell Z)	(t-statistic)
(-2, +2)	First Mover Sample	0.98 (1.57) ^c	-0.20 (1.10)	1.18 (0.66)
	Follower Sample	0.90 (0.81)	-0.42 (2.69) ^a	1.32 (1.05)
(-20, +120)	First Mover Sample	2.97% (0.42)	4.44% (2.32) ^a	-1.47% (0.23)
	Follower Sample	14.76 (2.43) ^a	3.57 (1.86) ^b	11.18 (2.16) ^b
(-20, +180)	First Mover Sample	6.77% (1.23)	3.87% (1.56) ^c	2.90% (0.41)
	Follower Sample	18.26 (2.55) ^a	5.46 (3.11) ^b	12.79 (2.12) ^b

Table 8: Multivariate Analysis of Cumulative Abnormal Returns of First Movers and Followers

The dependent variable is the Cumulative Abnormal Return (CARs) to winning corporate acquirers over the (-20, +180) window. FINCOMP is a dummy variable equal to 1 if the corporate acquirer faced bidding competition from a financial bidder and 0 if the corporate acquirer faced competition from another corporate bidder. Remaining variables are as defined in Table 5. 'First Mover Sample' refers to the sample of winning corporate acquirers who were first bidders and faced subsequent competition from either financial bidders or corporate bidders. 'Follower Sample' refers to the sample of winning corporate acquirers who entered the bidding competition after observing a bid from a financial bidder or a corporate bidder. t-statistics presented in absolute values and based on robust standard errors are in parenthesis. Superscripts a, b, and c indicate significance at the 1%, 5%, and 10% levels respectively.

	FIRST MOVER SAMPLE	FOLLOWER SAMPLE
FINCOMP: Fin. Competition Dummy	0.018 (0.10)	0.273 (2.00) ^b
CASH: % Deal in Cash	-0.006 (1.04)	0.008 (0.68)
STOCK: % Deal in Stock	-0.004 (0.77)	0.007 (0.60)
PREMIUM: Premium Offered	0.348 (1.64)	0.038 (0.64)
RELSIZE: TV/Acq. Mkt Value	-0.027 (0.79)	-0.008 (0.40)
Acquirer Market to Book	0.025 (0.72)	-0.008 (3.88) ^a
POISON: Target Poison Pill Dummy	0.182 (0.60)	-0.121 (1.48)
TOEHOLD: Acq. Toehold Dummy	0.081 (0.44)	0.183 (1.14)
TPUB: Target Public Firm	0.302 (0.64)	
DEBTFIN: \$ Debt Financing	-0.024 (0.75)	0.003 (1.66)
TTERM: Target Termination Fee	0.217 (0.04)	-3.394 (1.06)
SAMEIND: Same Industry Dummy	0.177 (1.51)	0.183 (2.72) ^a
DAYS_COMPLETE: # Days	0.000 (1.53)	0.000 (0.20)
Intercept	-0.136 (0.16)	-0.922 (0.79)
Observations	53	140
R-squared	0.69	0.30

Figure 1: Sample Breakdown

This figure describes the breakdown of the sample used throughout this paper. The sub-sample names in bold are used in the paper.

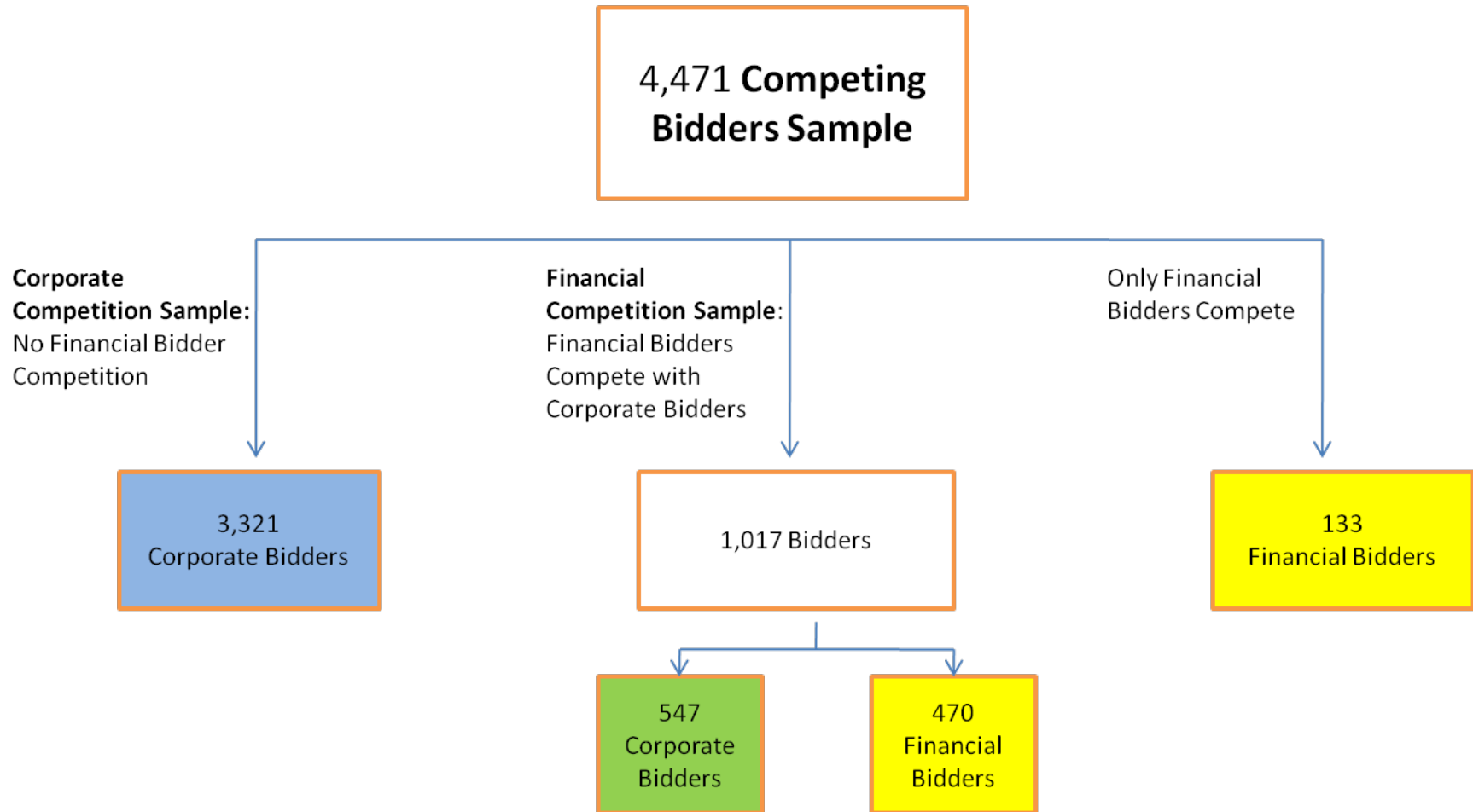


Figure 2: Cumulative Abnormal Returns of Corporate Acquirers

This figure shows the cumulative abnormal returns (CARs) of winning corporate acquirers from 20 days prior to merger announcement until 180 days after merger announcement. The dashed line shows CARs for corporate acquirers who faced competition from other corporate bidders (Corporate Competition Sample). The solid line shows CARs for corporate acquirers who faced competition from financial bidders (Financial Competition Sample). The dotted line shows CARs for acquirers in the Single Bidder Sample. Abnormal returns are calculated as the acquirer's return minus a value-weighted market index.

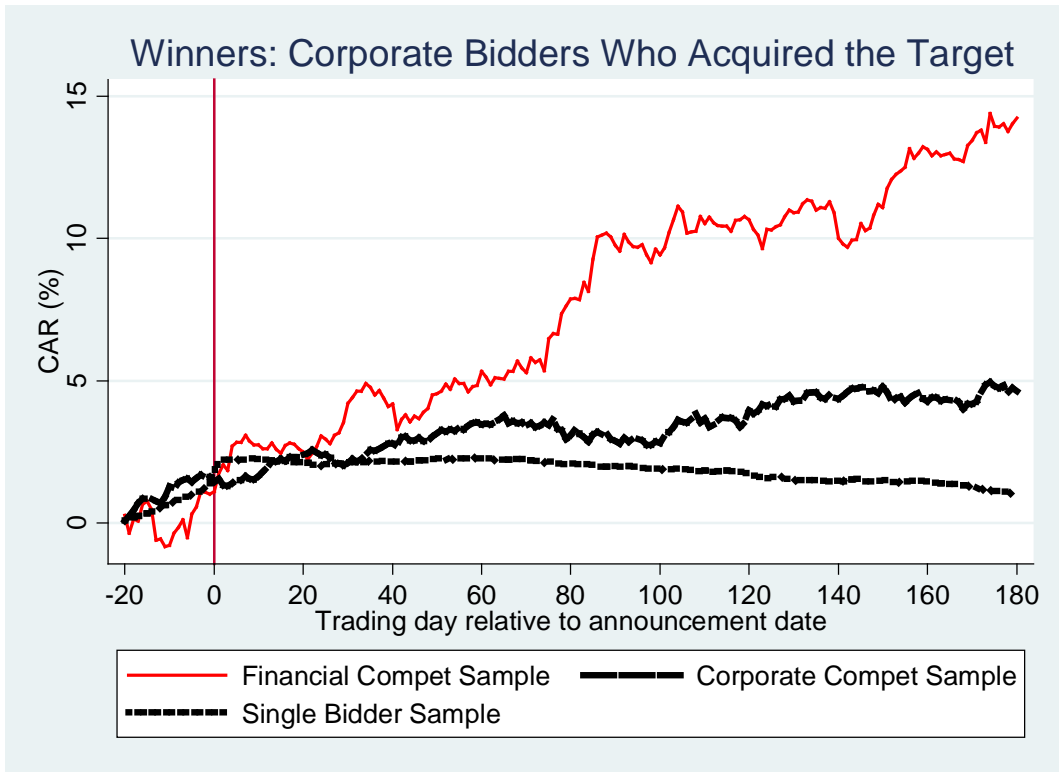


Figure 3: Cumulative Abnormal Returns of Corporate Acquirers Conditional on Bidding Order

This figure shows the cumulative abnormal returns (CARs) of corporate acquirers who won a bidding competition from 20 days prior to merger announcement till 180 days after merger announcement. The dashed line shows CARs for corporate acquirers who made a competing bid after observing a first bid from a financial bidder (Follower: Financial Competition Sample). The solid line shows CARs for corporate acquirers who bid first and faced subsequent competition from financial bidders (First Mover: Financial Competition Sample). The dotted line shows CARs for corporate acquirers who faced competition only from other corporate bidders (Corporate Competition Sample). Abnormal returns are calculated as the acquirer's return minus a value-weighted market index.

