When are toeholds not toeholds?

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Abstract

It is well documented in the mergers and acquisitions literature that acquirers rarely establish a toehold prior to making a control offer for a target. Between 1990 and 2005, SDC recorded toeholds in only 1.21% of the 3,548 control offers for public companies. The infrequency of toeholds is not suggestive of infrequent inter-corporate investments – over the same period, SDC reported 3,323 partial, or non-control, acquisitions of public companies. In our working sample of 2,981 control offers, close to 8% were preceded by a partial acquisition in the prior two years. The purpose of this paper is twofold – first, to document the characteristics of partial acquisitions and secondly, to examine the motivation for establishing a position in a merger target while not following through with a control offer.

We examine the long-run performance of targets in partial acquisitions prior to the transaction and find that partial acquisitions involving poorly-performing targets are more likely to be followed by control offers. However, in over 85% of these cases, the acquirer of control is not the same firm as the partial buyer. We find evidence suggesting that the abnormal return at the time of the partial acquisition may be in anticipation of a subsequent control offer. In our sample, financial bidders are the major participants in partial acquisition.

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1. INTRODUCTION

It is well documented in the mergers and acquisitions literature that acquirers rarely establish a toehold[3] prior to making a control[4] offer for a target. Between 1990 and 2005, SDC recorded toeholds in only 1.21% of the 3,548 control offers for public companies. The infrequency of toeholds is not suggestive of infrequent inter-corporate investments – over the same period, SDC reported 3,323 partial, or non-control, acquisitions of public companies. In our working sample of 2,981 control offers, close to 8% were preceded by a partial acquisition in the prior two years. The purpose of this paper is twofold – first, to document the characteristics of partial acquisitions and secondly, to examine the motivation for establishing a position in a merger target while not following through with a control offer.

The role and potential value to a bidding firm of holding a toehold has been well documented. Choi (1991) defines a toehold as the accumulated position of five percent or more of a target, and finds a positive and significant announcement effect on the target firm's share value at the time of the control offer, and that having a toehold increases the probability of a takeover by the holder. Betton, Eckbo and Thorburn (2009) find that since 1980 toehold bidding has significantly declined and that when it occurs, it is large (20%). They also find that toehold bidding is associated with hostile takeover.

In contrast to a merger, a **partial acquisition (PA**) represents a unique corporate transaction – there is a change in the ownership structure of the target firm, but the target remains an independent entity [Akhigbe, Madura, and Spencer (2004)]. There is empirical evidence showing that partial acquisitions have a positive valuation effect for target shareholders during the announcement period [Akhigbe et al., (2004), Akhigbe et al., (2007)]. In addition, Choi (1991) finds that having a stake of at least 5% allows investors to influence management since he finds that these stakes are related to management turnover and proxy contests to replace the board of directors. According to

[3] Toehold is defined as a small ownership stake in the target established by the bidder prior to the control offer.

[4] A control offer/acquisition is defined as the first deal which leads to the bidder owning more than 50 percent of the target firm after the transaction.

Akhigbe et al. (2004), the benefit of a partial acquisition to the target firm's shareholders is that the new block holder can act as a monitor thereby reducing agency problems by increasing both monitoring and the threat of management turnover. Akhigbe et al. (2004) consider partial acquisitions as a threat of complete takeover.

Both the target and bidding firms' shareholders tend to benefit from partial acquisitions since these imply improved post-partial-acquisition performance of the target relative to its poor performance prior to the partial acquisition [Choi (1991)]. As such, the announcement of the partial acquisition will increase the stock price of the target and the bidder will then have the option to later sell the stock at a higher price, assuming there is an improvement in the target's performance. Another option available to the partial bidder is to subsequently seek control of the target, assuming the bidder has the financial means. Therefore, partial acquisitions are expected to increase the risk of a complete takeover. Akhigbe, Martin, and Whyte (2007) study the characteristics affecting the probability of a control acquisition. Their study shows that corporate partial bidders are more likely to subsequently acquire control of the target firm. They also find that the probability of a control acquisition is positively related to the size of the acquired stake.

Betton and Eckbo (2000) find that toehold bidders have positive cumulative abnormal returns around the announcement of the partial acquisition but the results are insignificant. Similar evidence is presented by Lindqvist (2004a) for bidders with stakes in target product market rivals ("outside toehold").

In this paper, our focus is on the partial or stake acquisition rather than on the role of the toehold in explaining the results of a control offer. Our empirical analysis begins by examining the abnormal returns to both acquirers and targets in both pure partial acquisitions and those that are subsequently followed by control offers. We examine the long-term market performance of partially-acquired target firms who either do or do not subsequently experience a control acquisition. Moreover, we try to identify variables which will be useful in predicting which partial acquisitions will be followed by a control acquisition.

Our results show that the cumulative abnormal returns (CARs) to target firms of toehold are higher than the CARs to target firms of outside-toehold at the time of partial acquisitions but the significance is marginal. We observe that there are more outside-toeholds than toeholds and the outside-toehold bidders are more likely to be financial institutions.

We find that those partial acquisitions involving poorly-performing targets are more likely to result in control offers. However, in more than 85% of the cases, the acquirer of control is not the same firm as the partial buyer. We also find that when the target is subsequently taken over in the next two years, the bidders making the initial partial acquisition are more likely to be non-financial firms. As expected, the cumulative abnormal return at the announcement of the partial offer is positive, and higher if there is subsequently a control offer within the next two years. We find that the abnormal return to the target of a partial acquisition gradually decreases after the announcement if there is no control offer in the next two years, suggesting that the abnormal return at the time of the partial acquisition may be in anticipation of a subsequent control offer (see Figure I).

The remainder of the paper is as follows. The next section discusses the related literature. Section 3 describes the hypotheses. Section 4 describes the data and Section 5 the methodology. Analysis and summary of results are presented in Section 6 and Section 7 concludes.

2. RELATED LITERATURE

One of the advantages of having a toehold is that it allows the bidder to learn more about the target, thus leading to better decision-making concerning any expected takeover of the target. Conversely, if a rival bidder takes control of the target, the original bidder can profit by selling its toehold at a premium [Betton and Eckbo (2000), Lindqvist (2004a)].

Choi (1991) studies the valuation consequences of control-related outcomes that follow toehold acquisitions. He finds that toeholds assist value-enhancing control transfers (takeovers) including internal mechanisms like proxy fights and management

turnover. While Choi's (1991) results support the anticipated takeover hypothesis and the control transfer hypothesis (increase management efficiency through takeover and internal transfer of control), the results do not support the undervaluation hypothesis. He also finds that prior to the toehold announcement, the target firms have negative abnormal returns, implying that poor performance and/or management inefficiency promote toehold acquisitions which are expected to bring value-enhancing control transfer.

Betton and Eckbo (2000) study the impact of premiums and toeholds on outcome probabilities and expected payoffs over the period 1971-1990. In their sample, approximately half of the initial bidders have a toehold. The prevalence of toeholds in their sample is due to the inclusion of the 1980's. They find that the greater the bidder toehold, the lower the probability of competition. At the time of the initial bid, they find that each of the offer premium and the toehold size increases the probability of a successful single-bid contest. In their sample, toeholds are largest in successful single-bid contests and smallest in multiple-bid contests. The abnormal returns to successful target shareholders are large and significant, and higher in multiple-bid contests compared to single-bid contests. Moreover, the abnormal returns are highest if the initial bidder takes control of the target. The offer premium in successful deals is higher in single-bid contest than in multiple-bid contests. They find that the toehold size is negatively correlated with the target firm's resistance. Lower bid premiums as well as lower pre-bid target stock price runups are associated with greater bidder toeholds. While target shareholders' expected payoff is positively related to the bid premium and probability of competition, the expected payoff is negatively related to the bidder's toehold.

Betton, Eckbo and Thorburn (2009) developed a two-stage model to explain why toehold bidding is rare given it has so many advantages. Their results support their model which that the probability of toehold bidding decreases, and the size of toehold increase, given the optimal toehold size. Moreover, their model associates toehold bidding with hostile takeover.

In an oligopolistic market, each firm plays an important role, unlike under a perfect competition where no single player can affect the industry through a merger [Stigler (1950)]. The implication of a merger or acquisition in an oligopolistic market is that the general price increases will benefit not only the bidder but also other firms in the industry. We can therefore say that in such a market an acquisition creates an external benefit. Since rival firms will benefit at the cost of the bidder, the latter will have a lower incentive to proceed with the merger. In this situation, even though a merger is profitable, it may be more profitable for each firm to stand as an outsider [Kamien and Zang (1990)]. Lindqvist and Stennek (2001) call this situation the insiders' dilemma. They test and support the insiders' dilemma hypothesis, that even though a merger is profitable it does not occur. Lindqvist (2004a) evaluates partial acquisition strategies and shows that having an outside-toehold eliminates the insiders' dilemma, thereby implying that all profitable mergers occur. Control acquisitions will benefit the target's rival firms in an oligopolistic market, reducing the bidder's incentive to make the acquisition. By owning part of the rival (outside-toehold), the bidder will not only benefit from the acquisition itself but also through its fractional ownership of the rival firm.

Roy (1988) uses a stylized model based on the accounting notion of measuring the profitability of targets separately from that of bidding firms. His work shows that from a profit maximization point of view, it is usually optimal to partially acquire a target. As such, the bidder's gain is a function of the percentage acquired and the offer price. While Roy (1988) uses cash as the financing method, he claims that using stock or mixed financing should not alter the optimal acquisition fraction since all financing methods are comparable from an economic point of view. Akhigbe et al. (2004) study the impact of a partial acquisition (restructuring) by studying the target over time. Their results do not support the hypothesis that partial acquisitions will increase long-term performance due to an increase in discipline of target management. Akhigbe et al. (2007) find that targets of partial acquisition experience positive announcement effects and that the gains are greater for those target firms which subsequently become acquisition targets. Moreover, they find that partial acquisitions by corporate bidders are more prone to result in a full acquisition.

Jensen and Ruback (1983) find evidence indicating that corporate takeovers create value. While the target firm shareholders benefit, the bidding firms do not lose. They classify the sources of gains from acquisitions into synergies, financial motives, increased market power, and changes in inefficient target management.

Bradley, Desai, and Kim (1983) investigate the rationale behind interfirm tender offers by examining the returns realized by the stockholders of firms that were targets of successful tender offers and those of unsuccessful offers. They find that the share prices of unsuccessful targets fall back to pre-offer levels within five years, the share prices of successful targets experience additional significant positive revaluation. These results are more consistent with the synergy hypothesis than the information hypothesis. They also find that if the tender offer is rejected, there is a positive revaluation of the target anticipating a future successful acquisition bid. In addition, Bradley, Desai, and Kim (1988) find that tender offers increase the combined value of target and bidder firms by an average of 7.4 percent. Their results show that competition among bidding firms increases the returns to targets firms but decreases the returns to acquirers. Finally, they find that in multiple-bidder acquisitions, the total synergistic gains are larger.

3. HYPOTHESES

We hypothesize that a bidder will make a partial acquisition if the expected future stand alone value of the target is higher than the current stand alone value; if the target is likely to be a subject to a control offer (thus the partial bidder wants to gain from the expected offer premium); or the bidder wants acquire a toehold before making a control offer.

In the literature, there is evidence that the announcement effect of partial acquisitions and control acquisitions on the target firms' shareholders is positive [for example see Akhigbe et al. (2007), Bradley, Desai, and Kim (1983)]. Consistent with the literature, we hypothesize that the announcement effect of partial acquisitions and control acquisitions for the different samples and subsamples to be positive to the target firms'

shareholders. For definitions of various samples and subsamples, please refer to the samples description in Appendix A.

If the market can predict, on average, which partial acquisitions will or will not be followed by control acquisitions then we would expect PFC to have a more positive announcement effect than PP. Therefore, we hypothesize that the announcement effect of partial acquisitions to target firms' shareholders will be higher for PFC than for PP. Moreover, we expect that the announcement effect of partial acquisitions to be more positive to the target shareholders of PFC1 than PFC2 because if the market can predict which partial acquisitions will be followed by control acquisitions, then the market is more likely to correctly forecast earlier control offers. In addition, we also expect the announcement effect of control acquisitions on the target shares of PFC1C to be lower than that of PC because a portion of the control announcement effect was anticipated at the time of the partial acquisition in the case of PFC1C.

We hypothesize that the abnormal returns to PP will decline after the partial acquisition if the abnormal return was in anticipation of a future takeover and remain constant if the source of the gain was a revaluation of the stand-alone value of the target. This is similar to Bradley et al. (1983).

While Akhigbe et al. (2007) suggest that partial acquisitions made by financial bidders are negatively related to control takeovers; they do not provide any further details. Given the large number of partial acquisitions, we expect a significant number of these partial acquisition bidders to be financial institutions. We expect financial bidders to be less likely to go for control and more likely to make partial acquisitions in anticipation of future control offers. This is because their objective is not to take control of the target but rather they expect the target to be taken over by another firm. Therefore, we hypothesize that there are more financial bidders at the time of partial acquisitions than at the time of control acquisitions. We also hypothesize that there are more financial bidders in PP than in PFC if PP long-term pre-announcement stock performance is better than that of PFC. The reasoning is as follows. If the target has good stock performance prior to the announcement of partial acquisition (implying lower risk) and since financial

bidders do not enjoy as much synergy as non-financial bidders, it is in their advantage to invest in such firms. Furthermore, the announcement effect of partial acquisitions to the target shareholders will be lower if the bidder is a financial institution because financial bidders are less likely to offer high premium [Dittmar, Li, and Nain (2008)] as they do not enjoy the potential synergy gains.

Since financial bidders invest in less risky companies (for reasons mentioned above) we hypothesize that the long-term performance of PP prior to the announcement to be better than that of PFC. In addition, we hypothesize that the long-term performance of PC prior to the announcement is better than that of PFC1C and PFC2C. The reasoning behind this hypothesis is that if target firm performance has been good then there is less risk in taking control of this target.

If the long-term performance prior to the announcement of PP is indeed different from that of PFC then we make the further hypothesis that PFC is a function of prior performance.

We hypothesize that the expected abnormal return to toehold target shareholders is different from that of outside-toehold target shareholders around the announcement of the partial acquisitions. For instance, if the market can differentiate an outside-toehold transaction from a toehold transaction, then we expect the latter to have higher CARs. This is because the benefit to toehold target shareholders will be higher when the bidder will make the control offer. Following the same rationale, we hypothesize that the expected abnormal returns to the outside-toehold target shareholders to be higher compared to that of non-outside-toehold target shareholders in the PP sample.

On the bidder side, we hypothesize the bidders of PFCC to experience a more positive announcement effect compared to bidders in PC. This follows from the assumption that the partial acquisition is a signal of a future control acquisition. Therefore, the control announcement effects will be lower for target firms of PFCC since it is anticipated, thus implying better CARs for bidders of PFCC compared to bidders of PC.

Since the outside-toehold bidders are expected to gain at the announcement of the control offer of a rival target, we hypothesize a more positive (or less negative effect) announcement effect to these bidders compared to those non-outside-toehold bidders in PC around the time of control offers. The rationale is as follows. If we assume the bidder has a negative CAR at the announcement of the control offer (to control rival target) then on the outside-toehold target side, we expect a positive effect upon the announcement of the control offer of its rival [Lindqvist (2004a)]. Since the bidder has an outside-toehold, he will benefit from that holding/investment. Moreover, we expect the bidder of the toehold to have better CARs than the bidder of the outside-toehold at the announcement of control offer because of the direct relation in toehold compared to outside-toehold.

4. DATA

The data used in this study is from the Securities Data Corporation (SDC) Platinum and the Centre for Research in Security Prices (CRSP) databases. The deal announcements are from SDC Platinum and the stock returns are from CRSP. From 1990 to 2005, there were 35,336 deals announced in the U.S. where the targets are public companies. After dropping the targets with SIC codes between 6000 and 6999 inclusive and between 9000 and 9999 inclusive, representing financial firms and public administration firms respectively, the sample size is reduced to 25,180. Removing repurchases and self-tender further reduces the sample to 15,161 announcements. From this sample, there are 11,043 completed deals. We then require firms to be listed on AMEX, NASDAQ or NYSE and this criterion reduces the sample size to 8,607. We are able to identify only 7,289 of these target firms in CRSP. Table 1 summarizes the sample construction process.

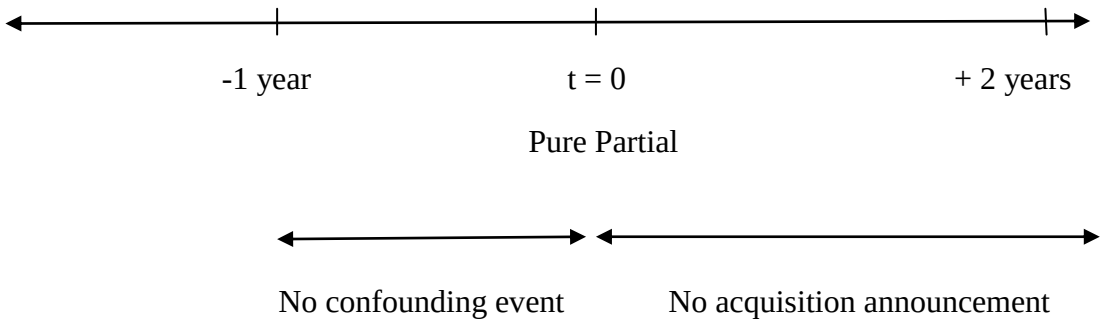
Of the 7,289 observations, 3,323 or 45.59% were partial acquisitions, that is, deals where the bidder owns less than 50 percent of the target after the transaction. This definition of partial acquisition does not differentiate a transfer of ownership from one blockholder to another blockholder. As long as SDC reports a deal where ownership of the target firm by the bidder is less than 50 percent of target firm after the transaction, we

consider this deal as a partial acquisition. We treat deals where the bidder was seeking control but owns less than 50 percent after the transaction as partial acquisitions.

4.1 Pure Partial

We define the ***Pure Partial*** (PP) as a deal where there is a partial acquisition of a target and that neither partial nor control acquisitions for this target occur within the following two years. This requirement means there was neither announcement of partial acquisition nor announcement of control acquisition for the target firm within 520 business days from the announcement date of the partial acquisition under analysis. We exclude deals occurring in 1990 (in order to remove any deals with confounding events in the year prior to the announcement) and in 2004 and 2005 (in order to confirm the subsequent two years of inactivity). In addition, ten deals were dropped as the target and bidder have a common ultimate parent. After excluding 49 observations with confounding events, the final sample consisted of 1,430 deals.

Figure 1 – Pure Partial Timeline



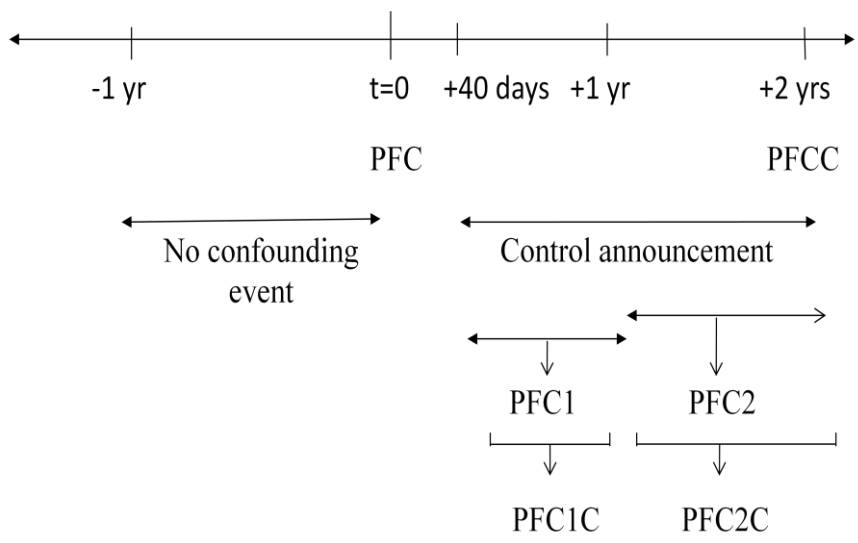
4.2 Partial Followed by Control

We define partial followed by control (PFC) as a deal where within two years (520 business days) after the announcement of the partial acquisition, the target is the subject of a successful control acquisition. In order to identify partial acquisitions that are followed by control offers, we once again exclude deals in 1990, 2004, and 2005 for the

same reasons outlined in the pure partial sample construction. Based on these criteria, we have a sample of 364 observations. We also drop 60 cases where the control acquisition occurs within 40 trading days of the partial acquisition as we assume that these two transactions are sufficiently close in time to be considered part of the same transaction. Thirteen cases were also dropped as the target and bidder had the same ultimate parent. After excluding 55 observations containing confounding events from 1992 to 2003, the final sample consists of 236 observations.

PFC1 is a sub-sample of PFC with 125 observations where the control acquisition (CA) occurs in the first year and PFC2 is a subsample of PFC consisting of 111 observations, is where the CA occurs in the second year after the partial announcement (see Table 2). We also consider the valuation effects at the control offer following the partial in following three subsamples - PFCC (the control offer following the partial), PFC1C (the control offer within one year of the partial) and PFC2C (the control offer within the second year after the partial).

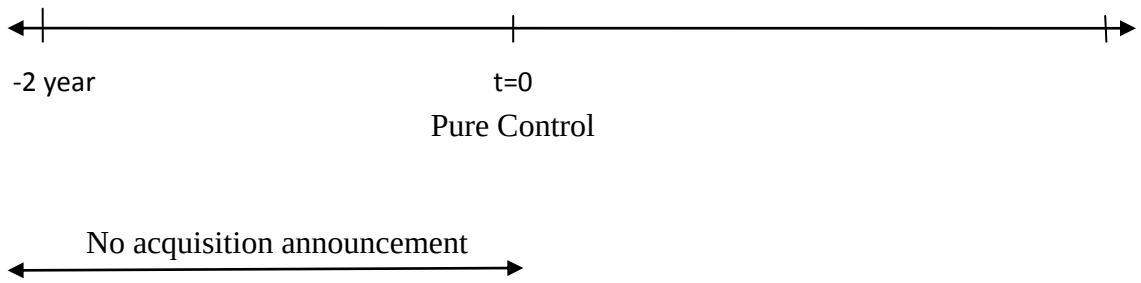
Figure 2 – Partial Followed by Control Timeline



4.3 Pure Control

The control sample – the deals that result in the bidder owning more than 50 percent of the target after the transaction – consists of 3,479 observations. The ***Pure Control*** (PC) sample is obtained by dropping observations where the targets experienced a partial acquisition within two years (520 business days) prior to the announcement of the control acquisition. This reduces the sample size to 3,014. To ensure that these targets did not have any partials two years before the control bid, we drop observations prior to 1992 (174 observations). Once again, we drop 95 observations where the target and the bidder share the same ultimate parent, resulting in a final sample of 2,745 deals (see Table 2).

Figure 3 – Pure Control Timeline



4.4 Virtual Control

In order to determine if any observed effects at the announcement of the partial are actually due to the partial or are part of the anticipation of the subsequent control offer, we create a ***Virtual PFC*** (VC) sample. This sample is a set of pseudo-partial dates determined by taking the distribution of days prior to a control acquisition observed in the PFC sample and using that distribution to assign a partial acquisition announcement date to the pure control deals. Then we select those only in the second year by choosing the deals where the number of days between the pseudo-partial and control is between 261

and 520 days, inclusively. Our VC sample consists of 1,287 observations. VC has the same distribution of differences in days between PA and CA as PFC2 (see Figure III).

4.5 Toehold Partial Acquisitions

We identify the toeholds, defined earlier as a deal when a bidder buys less than 50 percent of a target firm before making a control offer to the same target at a later period, by comparing the bidders of PFC to those of PFCC. If the bidders have the same CUSIP, meaning the bidder who makes the partial acquisition is that making the control offer, then we classify the observation as a toehold. We have 33 observations of toehold after excluding confounding events (Table 2).

4.6 Outside-toehold

To identify the outside-toeholds in the samples, we merge PFC with PC and PFCC by acquirer CUSIP and investigate if any of the control bidders completed partial acquisitions in the previous two years in the same industry (defined by the two- and three-digit SIC codes). We drop cases where the target of the partial acquisition is the same as the target of the control acquisition since these are not outside-toeholds. In our final PFC sample, there are 75 outside-toeholds based on two-digit SIC codes and 49 outside-toeholds based on three-digit SIC codes. We replicate these steps with the PP sample and our final PP sample consists of 325 (138) outside-toeholds based on two- (three-) digit SIC codes.

4.7 Bidder

From the 8,607 completed deal observations, we were able to identify only 2,598 U.S public bidders in CRSP. We then merge each of the samples discussed above with those 2,598 observations to find the sample of bidders. **B_PFC** contains the same deals as those in the PFC sample, except that we now consider the bidders instead of the targets. We were able to identify 55 such observations in CRSP. The sample size is smaller since there are more private bidders in partial acquisitions. **B_PFCC** is the sample of bidders for PFCC with 156 observations, **B_PC** is the sample of bidders for PC with 1,364 observations, and **B_PP** is the sample of bidders for PP with 137 observations.

To identify the outside-toehold bidders at the time of the control acquisitions, we take the following steps. Of the 8,607 (see Table 1) observations, 3,855 are partial acquisitions. In only 463 cases, we are able to identify the U.S. bidders in CRSP. We then merge the 156 B_PFCC and 1,364 B_PC with these 463 observations of U.S. partial bidders by bidders' PERMNO. We consider only cases where the first two-digit of the SIC codes of the target firms at the partial acquisitions are equal to those at the control acquisitions. This criterion reduces the sample to 289 observations. We then consider observations where the number of business days between the partial acquisition and the control acquisition is at most 520 days (two years) and drop ten duplicate observations. Our final sample consists of 58 bidder observations, of which 23 are toehold partial acquisitions and 35 are outside-toehold partial acquisitions.

5. METHODOLOGY

5.1 Event Study

In order to determine the effect of partial and control acquisitions, we conduct event studies where the event of interest is the announcement of the partial/control acquisition[5]. We use the market model or the market-adjusted model (when it is not feasible to get the pre-event estimation) to estimate the expected returns of the stock assuming the event does not take place.

Using the EVENTUS software, we estimate the daily mean cumulative abnormal return (CARs) for various intervals around the announcement date to measure the announcement effect of partial and control acquisitions. The market model was used to estimate the expected returns. The 240 day estimation period ends 21 days before the announcement (event) date and is required to have a minimum of 100 days of returns. The CAR is the cumulated difference between the actual returns and the expected returns estimated under the market model. The following event windows were used: (-1,0), (0,+1), (0,0), (-1,+1), (-3,+3), (-5,+5), and (-10,+10) for all samples and subsamples. The results are reported in Table 3.

[5] This description of an event study methodology is from MacKinlay (1997).

Furthermore, we examine the target monthly cumulative abnormal returns from three months prior to the partial announcement to 12 months after the announcement month for the PP, PFC2, and VC samples in order to test the hypothesis that the abnormal return to the announcement of the partial was due to merger anticipation. This approach is similar in spirit to Bradley, Desai, and Kim (1983) who test whether merger gains are due to expected synergies or target revaluations. The market model was used to estimate the expected returns with an estimation period ending six months before the announcement (event) date. We require a minimum of 36 months of data for the event to be included. The results are reported in Figure I.

Bidders with SIC codes between 6000 and 6999 from SDC are classified as financial bidders. This definition of financial bidder does not distinguish the different types of financial bidders such as venture capitalists, hedge funds, mutual funds, etc. We use the proportion test to examine whether the proportion of financial bidders in partial acquisitions (PP+PFC) is equal to the proportion of financial bidders in the control acquisition sample. Tables 4 and 5 summarize the results of different tests comparing the participation rates of financial and non-financial bidders as well as comparing the mean and median CARs for the sub-samples.

We use regression analysis to test if PFC and the existence of financial bidders explain part of the cumulative abnormal returns. Following Basu, Dimitrova and Paeglis, (2009) we use the following control variables:

(1) percentage acquired,

(2) stock: a dummy variable taking the value of one if stock was used as a medium of exchange and zero otherwise,

(3) firm size: the natural logarithm of market capitalization of the target calculated by multiplying the number of shares outstanding with the firm's stock price 60 days prior to the announcement (see Table 6).

We use the methodology of Choi (1991) to analyze the target firm's performance prior to the partial acquisition. We estimate the CAR from month -60 to

month +3, where month 0 is the announcement month. This approach is similar to that of Choi (1991) except that we use the market-adjusted model, where the abnormal returns are the difference between actual returns and market returns. Since we are looking at five years prior to the announcement date, we have to drop many more observations if we use the market model due to confounding events in our estimation period. Moreover, if we use the market model, we will need at least five more years of stock returns prior to the beginning of the event window. Therefore, we need more than ten years of stock returns which would significantly reduce the size of our sample. Bouwman, Fuller, and Nain (2009) use the market-adjusted method for a similar reason. The results are reported in Figure IV for partial acquisitions and in Figure V for control acquisitions.

We do a crude test using the market adjusted model to estimate prior_CARs, that is, prior stock performance (CAR from 60 month to one month prior to the announcement) as an independent variable in a logit regression to predict PFC. Following Basu, Dimitrova and Paeglis, (2009) we control for firm size by using the natural logarithm of market capitalization of the target, determined 60 days prior to the announcement. The results are reported in Table 7.

5.2 Outside-toehold

We create a dummy variable named OT2 (OT3) which is equal to one if the partial acquisition of the target is an outside-toehold based on two- (three-) digit SIC codes and zero if the acquisition is a toehold. We use this variable as an independent variable and the cumulative abnormal returns over the window (-1,+1) as the dependent variable to test if the difference in CARs is significantly higher for toehold target firms compared to outside-toehold target firms. We expect the coefficient estimates of OT2 (OT3) to be negative. Following Basu, Dimitrova and Paeglis, (2009) we use the following control variables:

(1) percentage acquired,

(2) firm size, which is the natural logarithm of market capitalization of the target, which is calculated by multiplying the number of shares outstanding with the firm's stock price 60 days prior to the announcement (see Table 8).

We use the outside-toehold dummy variable described in the Data section as the independent variable and the cumulative abnormal returns over the window (-1,+1) as the dependent variable to test if the outside-toeholds have higher CARs than non-outside-toehold in the PP sample. Following Basu, Dimitrova and Paeglis, (2009) we control for percentage of shares acquired and firm size. The results are reported in Table 9.

5.3 Bidder

An event study similar to the one described earlier is performed to determine the effect of acquisition announcement on the bidders' firm value. We use the market model and daily returns with the sample criterion employed earlier in the target samples. We have four samples B_PFC, B_PP, B_PFCC, and B_PC with 55, 137, 156 and 1364 observations, respectively. The results are reported in Table 10.

We are able to identify only 22 observations where the bidders have a toehold and 34 observations where the bidders have an outside-toehold. From the B_PC sample, we classify those observations without an outside-toehold as B_PC_non-outside-toehold. In order to calculate the significance of the difference in mean and median CARs between bidders with toehold and bidders with outside-toehold, we use the t-test and the Wilcoxon signed rank test, respectively. The same procedures and test statistics are used to calculate the difference in mean and median CARs between bidders with outside-toehold and those without outside-toehold in the PC sample. The results are reported in Table 11.

6. ANALYSIS AND SUMMARY OF RESULTS

From the sample characteristics in Table 2, we observe a higher frequency of financial bidders participating in partial acquisitions (76%) compared to control acquisitions (21%). Moreover, there is a greater percentage of financial bidders in PP (77%) than in PFC (69%). We observe that the use of cash as a medium of exchange is more prevalent in partial acquisitions. We can also observe that the PFC has a higher CAR over the window (-1,+1) than does PP. From this table, we see that the average

offer premium based on seven days before the announcement date is higher for PP than PFC.

In Table 2, we see that the mean (median) CAR for pure control acquisitions is 22.59% (17.93%). However, the combined mean (median) CAR for the partial and its one year subsequent control offer [10.39% (3.34%) + 14.10% (9.83%) or 24.49% (13.17%)] is comparable to the mean and median CARs of pure control transaction sample. In the case of the two-year partial followed by control the values are 4.53% (1.90%) + 16.30% (14.26%) or 20.83% (16.16%). Once again, the CAR of the combined partial and control is comparable to the CAR for the pure control acquisitions. These results suggest that bidders use substitution pricing to take into account the effects of prior acquisition attempts even when the prior attempt was up to two years before and did not involve the control bidder. These results are tested in Table 12.

The CARs of the target around the announcement date are provided in Table 3. The mean and median CARs are positive and significantly different from zero in each of the various windows. This implies a positive announcement effect of partial and control acquisitions on target firms. Our results are consistent with prior studies such as Akhigbe et al., (2004) and Akhigbe et al., (2007) and support our hypothesis.

We test the differences in mean and median CARs of PP and PFC samples. In Table 3, we see that the differences in means and medians are significant, similar to results in Akhigbe et al., (2007). This implies that, in general, partial acquisitions which are followed by control acquisitions have a more favourable announcement effects than do those which are not followed by control. These results support the hypothesis that, on average, the market can predict which partial acquisitions will and will not be followed by control acquisitions.

Comparing the mean CARs between PFC1 and PFC2, we find that the CARs of PFC1 have a higher mean than do those of PFC2 in all of the event windows. These differences are significant at the five percent level (Table 3). However, the differences in medians are insignificant thus implying that PFC1 has a more favourable announcement effect than PFC2 but that the distribution of CARs is affected by outliers.

At the time of control acquisition, PFC1C has a lower average CAR than PC. The differences in means and medians are highly significant (Table 3), implying that a control acquisition in a company with no previous partial acquisition is more favourable than a control acquisition where the target has a history of partial acquisitions. This result further implies that PFC1C are anticipated events and that part of the abnormal return is captured at the time of partial. We will discuss this in the substitution pricing section.

We follow Bradley et al., (1983) methodology to analyze the post-partial acquisition performance of the target (Figure I) in order to determine if the abnormal return observed at the announcement of the pure partial acquisition is in anticipation of a future control acquisition. Surprisingly, we observe a more favourable effect in the announcement month for a pure partial than for partials subsequently followed by control offers. The CAR from three months prior to the announcement month to one year post-announcement is an increasing function of the number of post-announcement months for PFC2 while it is decreasing for PP. Based on these results, PFC2 appear to perform better than PP in the post-partial acquisition period. We also observe that the monthly CAR around the announcement month is higher for PP than PFC2. These results are consistent with the view that part of the announcement effect of partial acquisitions is in anticipation of future control offers, also is consistent with Bradley et al., (1983).

Interestingly, upon the examination of Figure II, which divides the PP sample into financial and non-financial bidders, we observe that the CARs to target firms are significantly higher when the bidder is a non-financial firm. Moreover, the CARs to target of non-financial bidder firms are an increasing function over time while those of targets of financial bidders are a decreasing function over time. Since the number of observations of non-financial and financial bidders are 110 and 614, respectively, the trend in CARs to PP in Figure I is primarily driven by the financial bidders

Akhigbe et al., (2007) find that financial bidders are unlikely to go for control acquisitions. We observe a high proportion of financial bidders in both the PP and PFC samples. We test the difference in proportion of financial bidders between partial and control acquisitions and find that the difference is positive and highly significant (see

Table 4). This result is consistent with Akhigbe et al., (2007), and suggests that financial bidders participate more frequently in partial acquisitions than in control acquisitions. The proportion of financial bidders is significantly greater in PP than in PFC, implying that financial bidders participate more in pure partials than in partials that are subsequently followed by control offers. Therefore, these results support our hypotheses.

Since our results support the hypothesis that financial bidders are more frequent at the time of partial acquisitions than at the time of control acquisitions, we further analyze the effect of financial bidders on abnormal returns. We test the differences in mean and median CARs between financial bidders and non-financial bidders for the various samples employed in this study. We find differences in means and medians are negative and highly significant in the PP, PFC, and PC samples (Table 5). These results imply that when the bidder is a financial firm, the CARs to the target firms are lower compared to that of a non-financial bidder. These results support our hypotheses and are consistent with the literature suggesting that financial acquirers are more likely to offer a lower premium than corporate bidders [see, for example, Dittmar, Li, and Nain (2008)].

Our results from the regression analysis (see Table 6), show the effect of both financial bidders and PFC on CARs. We see that the cumulative abnormal returns are lower in both partial acquisitions and control acquisition when the bidder is a financial institution, which support our hypothesis and is consistent with Dittmar, Li and Nain (2008). We observe that PFCs produces higher CARs than do PPs, again consistent with the results in Table 3. At the time of the control offer, PFCC produces lower CARs than do PCs, consistent with our results in Table 3. The coefficient estimate of the percentage of shares acquired is positive and significant. We control for stock as a medium of exchange around control acquisition and not around partial acquisition (because there are only three cases in partial acquisition where stock is used as a medium of exchange). This coefficient estimate is negative and highly significant, implying that when stock is used as the medium of exchange in an acquisition, the benefit to target shareholders is lower. The last control variable that we use is the size of the target, which we calculate as the

natural logarithm of market capitalization. The coefficient of this variable is negative and significant in both the partial sample and control sample.

The long-term stock performance from Figure IV, which displays CARs from 60 months prior to the announcement month (month 0) to three months after announcement, shows that PP perform better than the market prior to the partial acquisition, while PFC performance prior to the partial acquisition announcement is worse than the market. We test the differences in average CAR from 60 months to one month prior to the announcement month between the PFC and PP and the result is negative (-0.54 percent) and significant at the one percent level. From this analysis, we can conclude that PP firms have better performance prior to the partial while PFC firms underperformed prior to the partial. These results are consistent with our hypothesis that financial bidders invest in firms which are performing better than the market and in PP.

We conduct a similar analysis for the control acquisitions (Figure V) and we observe that PC performs better than PFC1C and PFC2C prior to the control acquisition announcement. This is consistent with our hypothesis and implies that firms with poor performance need some kind of monitoring [see Choi (1991)] before being a target for CA.

The above results suggest that PFC is a function of prior CARs. The results from the logit regression (Table 7), which tests the hypothesis that long-term stock performance prior to the announcement of the partial acquisition can be used to predict PFC, support our hypothesis. The negative and significant coefficient of Prior_CARs implies that targets with high stock performance are less likely to be PFCs. This result is consistent with our previous results. We also observe the coefficient of CARs over the window (-1,+1) is positive and significant, which is consistent with the results in Table 3. From Table 2, we observe that there are only 236 PFC and 1,430 PP, implying the conditional probability of a firm being a target for control acquisition given the target had a partial acquisition is 14.17 percent. The unconditional probability for control over that same period ranges from two to almost seven percent [Fig.1 from Betton, Eckbo, and Thorburn (2008)].

Our results from Table 8 support our hypothesis that outside-toehold (based on two-digit SIC codes) target firms have lower cumulative abnormal returns compared to that of toehold target firms around the announcement of partial acquisition but the significance is low (significant at the 10 percent level). Using outside-toehold with three-digit SIC codes gives us insignificant results. In this regression, we did not include a dummy variable for financial bidders since in more than 85% of the transactions the bidder was a financial institution. We also find that there are more outside-toeholds than toeholds.

We do not find any significant difference between the cumulative abnormal returns to the outside-toehold target firms and the cumulative abnormal returns to non-outside-toehold target firms in the PP sample. These results are reported in Table 9.

In our sample, bidders of partial acquisitions do not have significant cumulative abnormal returns around the announcement of the partial acquisitions. Bidders of control acquisitions have negative and significant CARs around the announcement of control acquisitions (see Table 10). In general, bidders of PC have lower CARs than bidders of PFCC but the differences in CARs are insignificant.

Around the announcement of control acquisitions, bidders with toehold and outside toehold do not have significant abnormal returns. The difference in CARs between bidders with toehold and bidders with outside-toehold around the announcement of control acquisitions are insignificant. In the B_PC sample, the difference in CARs between bidders with outside-toehold and bidders without outside-toehold are insignificant (see Table 11).

7. CONCLUSION

Our results suggest that acquisitions (both partial and control) benefit target shareholders due to the positive acquisition announcement effect. The abnormal returns are higher for PFC than PP at the time of partial acquisition. At the time of control acquisition, the abnormal returns of PC are higher than that of PFCC. Financial bidders are more frequent in partial acquisitions (especially in PP) than corporate bidders. While

financial bidders are negatively correlated to the CARs, PFCs are positively correlated to the CARs and PFCC are negatively correlated to CARs.

Prior to the partial acquisition, pure partial target firms have better performance while those partial followed by control underperformed. Post partial acquisition, however, the latter firms perform better than do the former.

Based on the above evidence, we see that partial acquisitions are very frequent and appear to be in anticipation of control offers. However, these control offers rarely materialized and are infrequently carried out by the partial bidder. Control bidders appear to take into account the effects of prior partial acquisitions activity in setting their offer premium.

There is some weak evidence suggesting that the announcement effect of PA is higher for toehold targets firm than outside-toehold target firms. Concerning the premium, we find that the premium of PC is comparable to the sum of the premium of PFC and PFCC.

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9. APPENDICES

Samples Description

Sample	DESCRIPTION
PP	PP is pure partial (i.e., no partial acquisition or control acquisition occurs within the two years following the partial acquisition).
PC	PC is a pure control acquisition (i.e., control acquisition where there was no prior partial acquisition of the target within the last two years).
PFC	PFC is partial acquisition followed control (i.e., there is a partial acquisition followed by control acquisition within two years following the partial acquisition).
PFC1	PFC1 is partial acquisition followed by a control acquisition within a year of the partial. Subset of PFC.
PFC1C	PFC1C is the same as PFC1 but at the time of control acquisition (i.e., the control announcement is within a year after the partial announcement).
PFC2	PFC2 is partial acquisition followed by a control one in the second year of the partial acquisition. Subset of PFC.
PFC2C	PFC2C is the same as PFC2 but at the time of control acquisition (i.e., the control announcement is in the second year after the partial announcement).

Figure I. Monthly CARs from month -3 up to +12 around Partial Acquisitions

Month relative to announcement month (t=0). PP stands for Pure Partial (i.e., no partial acquisition or control acquisition within the two years following the partial acquisition); PFC2 stands for Partial followed by Control in the second year of the partial acquisition (i.e., partial acquisition followed by control acquisition in the second year following the partial acquisition); VC stands for Virtual Control (which is a subsample of PC where we assign a partial acquisition date to each observation replicating the PFC2). In calculating the CARs, confounding observations are excluded.

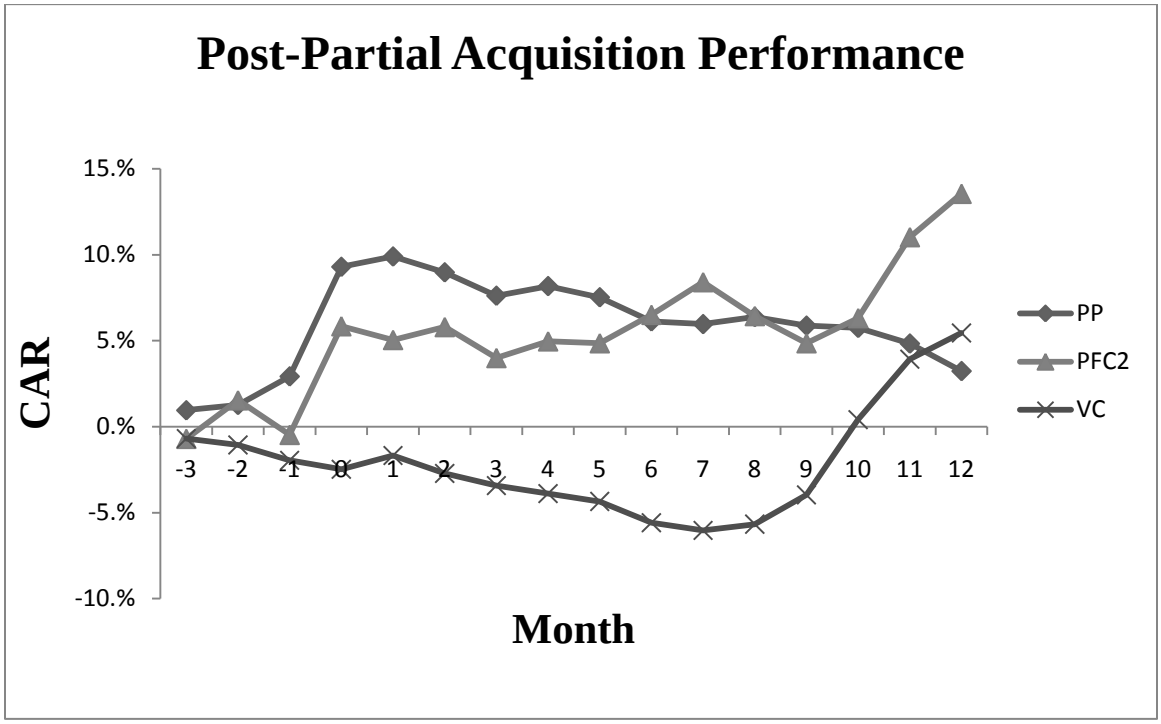

Figure II. Monthly CARs from month -3 up to +12 for PP

Month relative to announcement month (t=0). PP_N-Fina stands for Pure Partial (i.e., no partial acquisition or control acquisition within the two years following the partial acquisition) where the bidder is a non-financial firm (110 observations); PP_Fina stands for Pure Partial (i.e., no partial acquisition or control acquisition within the two years following the partial acquisition) where the bidder is a financial firm (614 observations. In calculating the CARs, confounding observations are excluded.

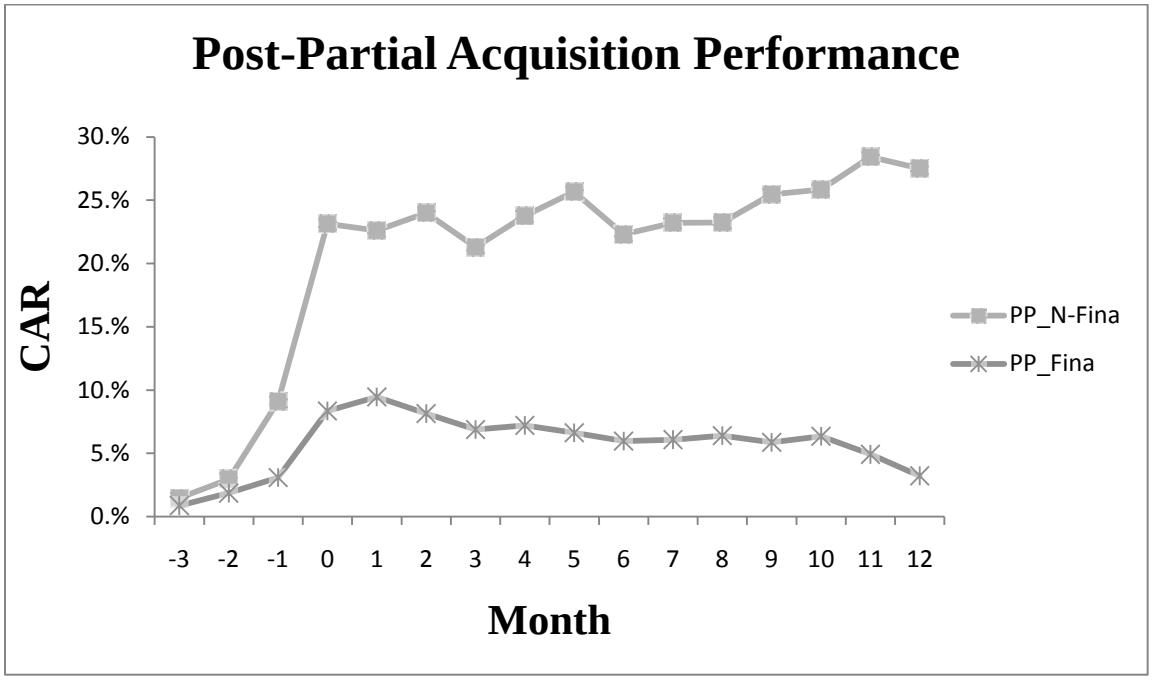

Figure III. Distribution of PFCC and VC by Month

Month 3 is 40 days after announcement date and month 24 end 520 days after announcement date. PFCC is partial followed by control at the time of control, (i.e., the control announcement is within two years after the partial announcement). VC is virtual PFC, i.e., pseudo-partial dates assign to PC from the distribution of days (second year only) between PFC and PFCC. PFC is partial acquisition followed by a control offer (i.e., a partial acquisition followed by control acquisition within two years of the partial acquisition).

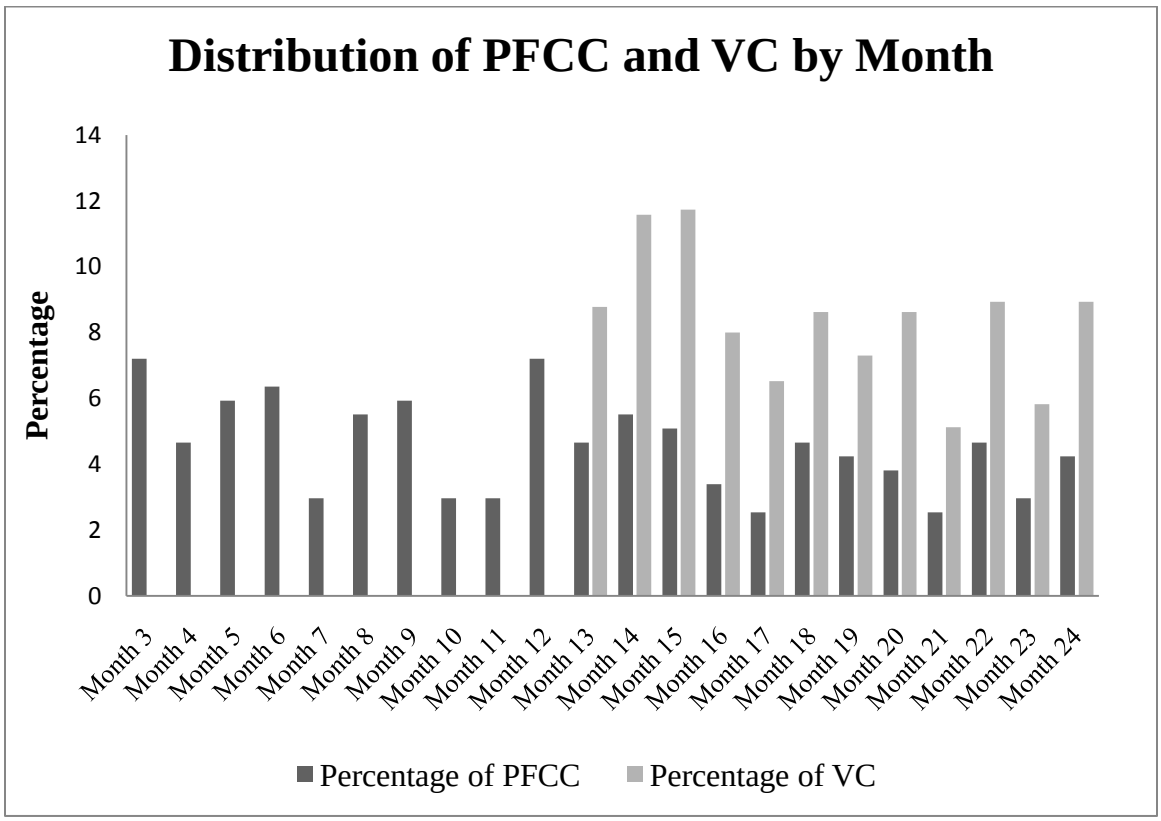

Figure IV. Monthly CARs from month -60 up to +3 for Partial Acquisitions

Month relative to announcement month (t=0). PP stands for Pure Partial (i.e., no partial acquisition or control acquisition within the two years following the partial acquisition): PFC stands for Partial followed by Control (i.e., partial acquisition followed by control acquisition within two years following the partial acquisition): VC stands for Virtual Control (which is a subsample of PC where we assign a partial acquisition date to each observation replicating the PFC2).

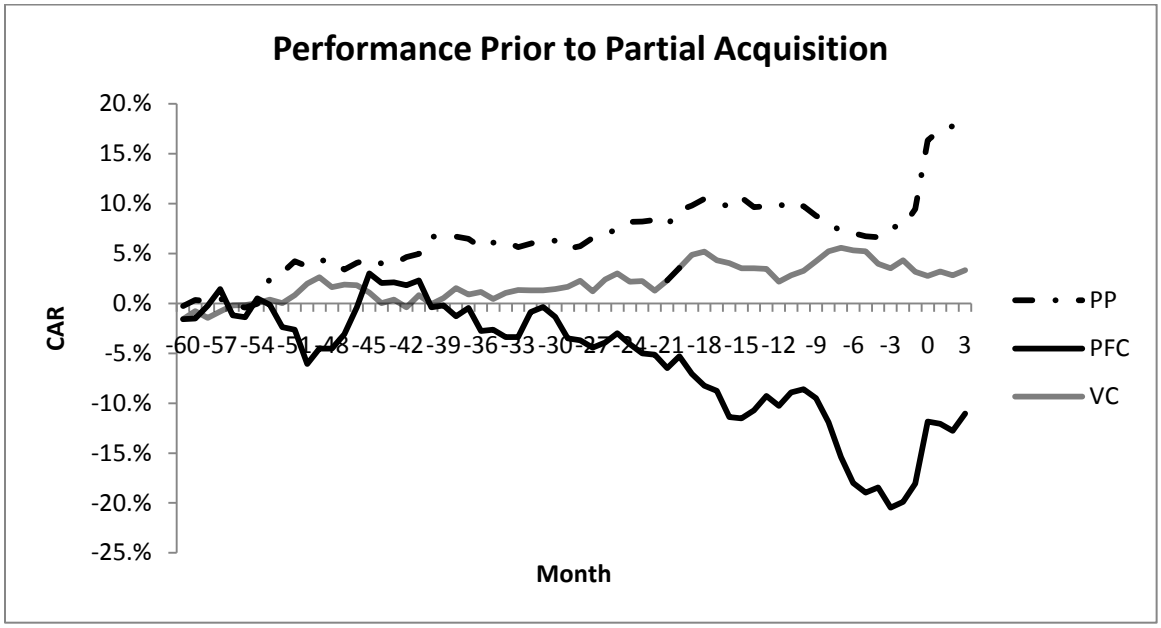

Figure V. Monthly CARs from month -60 up to +3 for Control Acquisitions

Month relative to announcement month (t=0). PC stands for Pure Control (i.e., control acquisition where there was no prior partial acquisition of the target within the last two years). PFC1C is the same as PFC1 but at the time of control acquisition (i.e., control acquisition following a partial acquisition within a year after the partial announcement). PFC2C is the same as PFC2 but at the time of control acquisition (i.e., control acquisition following a partial acquisition in the second year of the partial announcement).

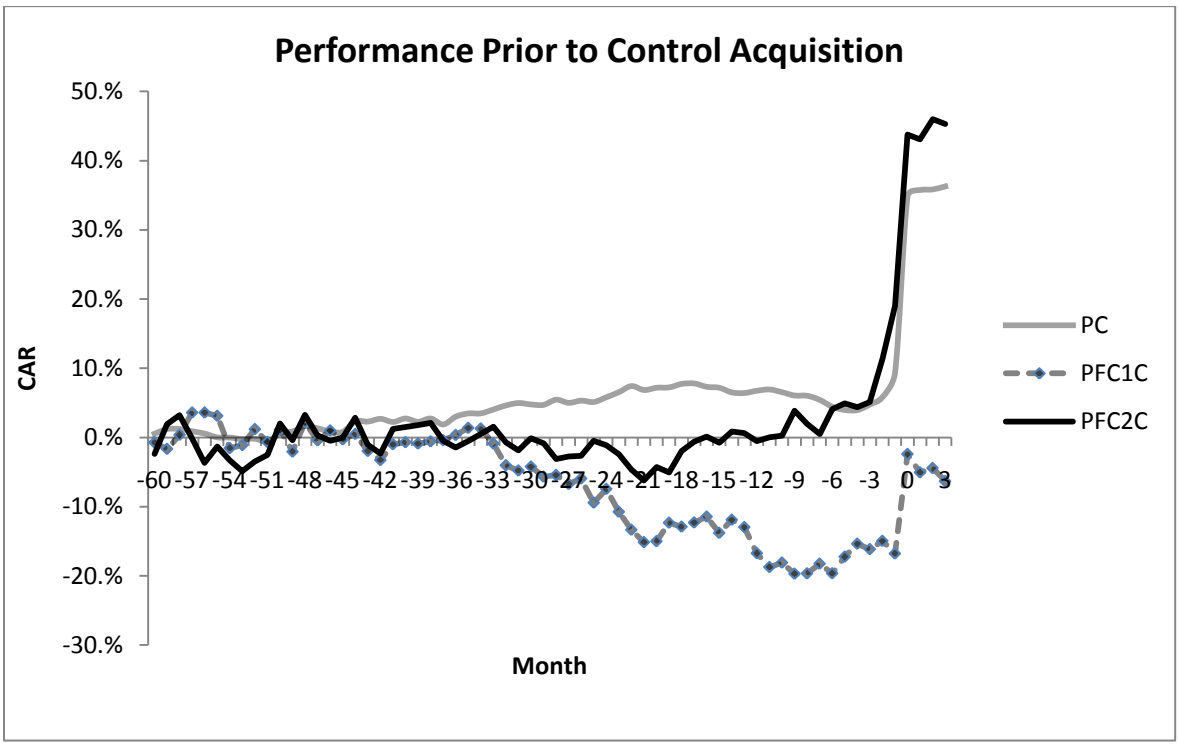

Table 1. Sample Construction

1990-2005 SDC Criterion

Selection Criteria		No of Deals
1990-2005 – US public targets		35,336
Dropped:		
SIC 6000-6999 (Financial)	10,145	
SIC 9000-9999 (Public Administration)	11	
Repurchase	9,341	
Self-Tender	678	
		15,161
Completed Deal		11,043
Exchange		
Amex	863	
NYSE	2,302	
NASDAQ	5,442	8,607
Merge with data available in CRSP		7,289
No of observation where percentage owned after transaction is greater than 50 percent		3,548
No of observation where percentage owned after transaction is lower than 50 percent		3,323
No of observation with missing ownership		418

Table 2. Sample Transaction Characteristics

PP stands for Pure Partial (i.e., no partial acquisition or control acquisition within the two years following the partial acquisition); PC stands for Pure Control (i.e., control acquisition where there was no prior partial acquisition in the target in the last two years);PFC stands for Partial followed by Control (i.e., partial acquisition followed by control acquisition within two years following the partial acquisition); PFC1 stands for Partial followed by Control within a year of the partial acquisition (i.e., partial acquisition followed by control acquisition within a year following the partial acquisition); PFC2 stands for Partial followed by Control in the second year of the partial acquisition (i.e., partial acquisition followed by control acquisition in the second year following the partial acquisition); PFC1C is the same as PFC1 but at the time of control acquisition (i.e., the control announcement is within a year after the partial announcement); PFC2C is the same as PFC2 but at the time of control acquisition (i.e., the control announcement is in the second year after the partial announcement). Offer premium is the premium based on the price seven days before the announcement (as 1 week Premium).

			At time of partial acquisition			A time of control offer	
	PP	PC	PFC	PFC1	PFC2	PFC1C	PFC2C
Full sample	1,430	2,745	236	125	111	125	111
Financial bidders	1,106	583	164	80	84	19	21
Cash acquisitions	755	945	131	67	64	34	39
Stock acquisitions	6	685	3	3	0	32	35
Mixed acquisitions	18	728	0	0	0	43	33
Sample partial is first partial of target	1,179	-	155	79	75	-	-
Percentage of same bidder at PFC and PFCC	-	-	13.98	16	11.71	16	11.71
Average percentage acquired	9.09	95.87	9.24	9.36	9.11	87.90	95.23
Average percentage owned after transaction	12.23	97.25	13.32	12.94	13.76	93.29	97.59
Average CAR (-1,+1)	4.53	22.29	7.70	10.39	4.53	14.10	16.30
Median CAR (-1,+1)	1.41	17.93	2.64	3.34	1.90	9.83	14.26
Average offer premium	17.76	37.17	7.33	9.32	5.08	24.34	34.93
Median offer premium	0	25.49	0.00	0.00	0.00	15.84	26.98
Average Deal Value ($M)	124.14	1,204.31	90.84	110.73	65.33	1,703.93	2,949.02

Table 3. Mean and Median CARs of Target Firms

The table reports mean, median and the ratio of positive to negative CARs for various event windows and various sub-samples. The market model approach with an estimation window of (-260,-21) is used to obtain CARs. PP is pure partial (i.e., no partial acquisition or control acquisition occurs within the two years following the partial acquisition). PFC is partial acquisition followed by a control one (i.e., there is a partial acquisition followed by control acquisition within two years following the partial acquisition). PFC1 is partial acquisition followed by a control one within a year of the partial acquisition. PFC2 is partial acquisition followed by a control one in the second year of the partial acquisition. PC is a pure control acquisition (i.e., control acquisition where there was no prior partial acquisition of the target within the last two years). PFC1C is the same as PFC1 but at the time of control acquisition (i.e., the control announcement is within a year after the partial announcement). PFC2C is the same as PFC2 but at the time of control acquisition (i.e., the control announcement is in the second year after the partial announcement). Median CARs are reported in parentheses. The ratio of positive to negative CARs is reported in italics. The significance of the mean differences from zero is based on Patell Z tests, while the significance of differences in means between samples is based on *t*-tests. The significance of the median is based on the sign test. The significance of differences on medians is based on nonparametric Wilcoxon signed rank tests. The significance of the ratio of positive to negative CARs is based on the Generalized Sign Z. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	(-1,0)	**(0,+1)**	**(0,0)**	**(-1,+1)**	**(-3,+3)**	**(-5,+5)**	**(-10,+10)**
PP	3.60***	3.50 ***	2.56 ***	4.53 ***	5.39 ***	6.50***	6.91***
(n=1,281)	(0.81)***	(0.94)***	(0.47)***	(1.41)***	(2.03)***	(2.97)***	(3.80)***
	*741:540****	*757:524****	*723:557****	*767:514****	*765:516****	*775:509****	*775:506****
PFC	6.49***	6.45***	5.23***	7.70***	9.16***	11.04***	12.15***
(n=214)	(1.62)***	(1.88)***	(0.74)***	(2.64)***	(3.08)***	(5.30)***	(6.04)***
	*132:82****	*141:73****	*130:84****	*138:76****	*140:74****	*146:68****	*144:70****
PFC1	8.91***	9.15 ***	7.66 ***	10.39 ***	12.55 ***	14.32 ***	16.40 ***
(n=116)	(1.78)***	(2.69)***	(1.33)***	(3.54)***	(4.26)***	(5.95)***	(9.33)***
	*74:42****	*82:34****	*75:41****	*77:39****	*81:35****	*78:38****	*77:39****
PFC2	3.63***	3.25***	2.35***	4.53***	5.15***	7.17***	7.13***
(n=98)	(1.06)*	(1.18)*	(0.48)	(1.90)**	(1.88)*	(4.63)***	(5.36)***
	*58:40****	*59:39****	*55:43****	*61:37****	*59:39****	*68:30****	*67:31****
PC	18.15***	20.37***	16.24***	22.29***	24.00***	25.20***	27.28***
(n=2,342)	(12.10)***	(15.90)***	(9.93)***	(17.93)***	(19.92)***	(21.09)***	(23.22)***
	*1898:444****	*1945:399****	*1833:507****	*2007:337****	*2015:329****	*2022:322****	*1988:356****
PFC1C	9.63***	12.72***	8.05***	14.38***	15.71***	17.49***	18.21***
(n=111)	(4.91)***	(8.96)***	(3.30)***	(11.52)***	(14.01)***	(16.21)***	(15.99)***
	*79:32****	*88:23****	*79:31****	*85:26****	*86:25****	*89:23****	*84:28****
PFC2C	14.34***	16.27***	13.19***	17.41***	21.97***	21.91***	26.08***
(n=105)	(10.57)***	(11.56)***	(6.00)***	(15.74)***	(20.23)***	(20.74)***	(21.06)***
	*73:32****	*80:25****	*76:29****	*77:28****	*81:24****	*78:27****	*84:21****
Differences							
PP less	-2.89 ***	-2.95 ***	-2.67 ***	-3.17 ***	-3.76 ***	-4.55 ***	-5.25 ***
PFC	(-1.81)*	(-2.26) **	(-2.27) **	(-1.91) *	(-1.80) *	(-2.25) **	(-2.22) **
PFC1 less	5.27 **	5.90 **	5.31 **	5.86 **	7.40 **	7.15 *	9.27 **
PFC2	(1.33)	(1.91)	(1.86)	(1.17)	(2.26) **	(0.94)	(1.36)
PC less	8.59 ***	7.63 ***	8.19 ***	7.96 ***	8.34 ***	7.75 **	9.36 ***
PFC1C	(3.56)***	(3.24) ***	(3.26) ***	(3.39) ***	(3.24) ***	(2.94) ***	(2.73) ***

Table 4. Tests the Proportion of Financial Bidders

The table reports the proportion of financial bidders around partial acquisitions, control acquisitions, PP, PFC, PC and PFCC. Partial acquisition is a sample which combined PP and PFC. Control acquisition combined PC and PFCC. PP is pure partial (i.e., no partial acquisition or control acquisition occurs within the two years following the partial acquisition). PFC is partial acquisition followed by a control one (i.e., a partial acquisition followed by control acquisition within two years following the partial acquisition). PC is a pure control acquisition (i.e., control acquisition where there was no prior partial acquisition of the target within the last two years). PFCC is the same as PFC but at the time of control acquisition (i.e., the control announcement is within two years after the partial announcement). The significance of the differences in proportion between the different samples is based on *z-statistic*. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Sample	**Proportion of Financial Bidders**
Partial Acquisition (PA)	0.76
Control Acquisition (CA)	0.21
Difference: PA-CA	0.55***
PP	0.77
PFC	0.69
Difference: PP-PFC	0.08***
PC	0.21
PFCC	0.17
Difference: PC-PFCC	0.04

Table 5. Tests of the Differences in CARs between Financial and Non-Financial Bidders

The table reports mean and median CARs for financial and non-financial bidders for various event windows and various sub-samples. The Market Model approach with an estimation window of (-260,-21) is used to obtain CARs. PP is pure partial (i.e., no partial acquisition or control acquisition occurs within the two years following the partial acquisition). PFC is partial acquisition followed by a control one (i.e., a partial acquisition followed by control acquisition within two years following the partial acquisition). PC is a pure control acquisition (i.e., control acquisition where there was no prior partial acquisition of the target within the last two years). Median CARs are reported in parentheses. The significance of the mean differences from zero is based on Patell Z tests, while the significance of differences in means between samples is based on *t*-tests. The significance of the median is based on the sign test. The significance of differences on medians is based on nonparametric Wilcoxon signed rank tests. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

		(-1,0)	**(0,0)**	**(0,1)**	**(-1,1)**	**(-3,3)**
PP	financial	2.22***	1.72***	2.50***	3.00***	3.85***
		(0.53)***	(0.38)***	(0.80)***	(0.98)***	(1.71)***
	non-financial	9.87***	7.40***	9.26***	11.73***	13.58***
		(5.04)***	(1.96)***	(4.28)***	(7.13)***	(7.57)***
difference		-7.65 ***	-5.68 ***	-6.76 ***	-8.73 ***	-9.73 ***
		(-4.51)***	(-1.58) ***	(-3.48) ***	(-6.15)***	(-3.72)***
PFC	financial	2.26***	1.86***	2.60***	3.01***	3.88***
		(0.07)	(0.57)**	(1.39)***	(1.54)**	(1.86)**
	non-financial	13.53***	10.49***	13.44***	16.48***	19.17***
		(8.43)***	(5.27)***	(7.45)***	(9.33)***	(10.61)***
difference		-11.27 ***	-10.84 ***	-8.64 ***	-13.47 ***	-15.29 ***
		(-8.36)***	(-4.70) ***	(-6.06) ***	(-7.79)***	(-8.75)***
PC	financial	13.21***	13.98***	11.68***	15.56***	16.31***
		(8.15)***	(5.18)***	(10.78)***	(12.80)***	(13.67)***
	non-financial	18.74***	21.62***	16.90***	23.46***	25.13***
		(12.16)***	(10.26)***	(16.65)***	(19.11)***	(20.58)***
difference		-5.53 ***	-7.64 ***	-5.22 ***	-7.90 ***	-8.82 ***
		(-4.01)***	(-5.08) ***	(-5.87) ***	(-6.31)***	(-6.91)***

Table 6. CARs around Partial and Control Acquisitions

The dependent variables are the CARs over the window (-1,+1) days. In the second column the CARs is at the time of partial acquisition and in the third column the CARs is at the time of control acquisition. The market model approach with an estimation window of (-260,-21) is used to obtain CARs. Financial bidder is a dummy variable which takes the value of one if the SIC code of the bidder is between 6000 and 6999 inclusively and zero otherwise. PFC is a dummy variable which takes the value of one if the partial acquisition is followed by a control one (i.e., a partial acquisition followed by control acquisition within two years following the partial acquisition) and zero otherwise. PFCC is a dummy variable which takes the value of one if the control acquisition follow a partial acquisition within two years after the partial acquisition (i.e., the control announcement is within two years after the partial announcement) and zero otherwise. Percentage acquired is the percentage of shares the bidder acquired in this transaction. Stock is a dummy variable which takes the value of one if stock was used as a medium of exchange and zero otherwise. Firm size is the natural logarithm of market capitalization of the target, which is calculated by multiplying the number of shares outstanding with the price of the stock of the firm 60 days prior to the announcement. Heteroskedasticity-adjusted (White) standard errors are used in calculation of t-statistics that are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	CARs (-1,+1) at Partial Announcement	**CARs (-1,+1) at Control Announcement**
constant	0.13	0.37
	(4.87)***	(6.60)***
Financial Bidder	-0.07	-0.09
	(-6.36)***	(-5.83)***
PFC	0.03	
	(2.06)**	
PFCC		-0.07
		(-4.13)***
Percentage acquired	0.002	0.002
	(3.67)***	(5.43)***
Stock		*-0.05*
		*(-3.72)****
Firm size	-0.004	-0.03
	(-1.84)*	(-7.09)***
Observations	1409	2224
Adjusted R-squared	0.08	0.05

Table 7. Predicting PFC

The dependent variable takes on a value of one if the partial acquisition is a PFC and zero if the partial acquisition is a PP. PP is pure partial (i.e., no partial acquisition or control acquisition occurs within the two years following the partial acquisition). PFC is partial acquisition followed by a control one (i.e., a partial acquisition followed by control acquisition within two years following the partial acquisition). The estimation is done using a logistic regression. Prior_CARs is the monthly CAR of the target firms estimated from 60 month to 1 month before the partial announcement using the market adjusted model. CARs(-1,+1) is the CAR over the window (-1,+1) days of the target firms. The market model approach with an estimation window of (-260,-21) is used to obtain CARs (-1,+1). Firm size is the natural logarithm of market capitalization of the target, which is calculated by multiplying the number of shares outstanding with the price of the stock of the firm 60 days prior to the announcement. Heteroskedasticity-adjusted (White) standard errors are used in calculation of t-statistics that are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	PFC
constant	-3.62
	(-4.53)***
Prior_CARs	-0.36
	(-2.79)***
CARs(-1,+1)	1.66
	(2.28)**
Firm size	0.13
	(1.93)*
Observations	635

Table 8. Effects of Outside-Toehold versus Toehold on Target CARs

The dependent variable is the target CARs over the window (-1,+1). The market model approach with an estimation window of (-260,-21) is used to obtain CARs. The second column shows the results when outside-toehold calculation is based on two digits SIC codes, and the third column is based on three digits SIC codes. OT2 (OT3) is a dummy variable which takes on a value of one if the target is an outside-toehold based on two-digit (three-digit) SIC codes and zero if the partial is a toehold. Percentage acquired is the percentage of shares the bidder acquired in this transaction. Firm size is the natural logarithm of market capitalization of the target, which is calculated by multiplying the number of shares outstanding with the price of the stock of the firm 60 days prior to the announcement. Heteroskedasticity-adjusted (White) standard errors are used in calculation of t-statistics that are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	CARs (-1,+1)	**CARs (-1,+1)**
constant	0.11	0.06
	(1.71)*	(0.66)
OT2	-0.08	
	(-1.72)*	
OT3		-0.07
		(-1.45)
Percentage acquired	0.001	0.002
	(1.67)*	(1.88)*
Firm size	-0.00	0.003
	(-0.05)	(1.88)*
Observations	364	182
Adjusted R-squared	0.03	0.02

Table 9. Effects of Outside-Toehold on Target CARs in Pure Partial

The dependent variable is the target CARs of PP sample over the window (-1,+1). The market model approach with an estimation window of (-260,-21) is used to obtain CARs. PP is pure partial (i.e., no partial acquisition or control acquisition occurs within the two years following the partial acquisition).The second column shows the results when outside-toehold calculation is based on two-digit SIC codes, and the third column is based on three-digit SIC codes. Outside-toehold is a dummy variable which takes on a value of one if the target is an outside-toehold and zero otherwise. Percentage acquired is the percentage of shares the bidder acquired in this transaction. Firm size is the natural logarithm of market capitalization of the target, which is calculated by multiplying the number of shares outstanding with the price of the stock of the firm 60 days prior to the announcement. Heteroskedasticity-adjusted (White) standard errors are used in calculation of t-statistics that are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	CARs (-1,+1)	**CARs (-1,+1)**
constant	0.06	0.06
	(2.40)**	(2.28)**
Outside-teohold	-0.01	0.00
	(-1.15)	(0.05)
Percentage acquired	0.002	0.003
	(4.37)***	(4.42)***
Firm size	-0.003	-0.003
	(-1.38)	(-1.34)*
Observations	1409	1409
Adjusted R-squared	0.03	0.03

Table 10. Mean and Median CARs of Bidder Firms

The table reports mean, median and the ratio of positive to negative CARs for various event windows and various sub-samples. The market model approach with an estimation window of (-260,-21) is used to obtain CARs. B_PP is bidder of pure partial (i.e., no partial acquisition or control acquisition occurs within the two years following the partial acquisition). B_PFC is bidder of partial acquisition followed by a control one (i.e., there is a partial acquisition followed by control acquisition within two years following the partial acquisition). B_PC is bidder of pure control acquisition (i.e., control acquisition where there was no prior partial acquisition of the target within the last two years). B_PFCC is bidder of partial acquisition followed by a control at the time of control acquisition. Median CARs are reported in parentheses. The ratio of positive to negative CARs is reported in italics. The significance of the mean differences from zero is based on Patell Z tests, while the significance of differences in means between samples is based on *t*-tests. The significance of the median is based on the sign test. The significance of differences on medians is based on nonparametric Wilcoxon signed rank tests. The significance of the ratio of positive to negative CARs is based on the Generalized Sign Z. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	(-1,0)	***(0,+1)***	***(0,0)***	***(-1,+1)***	***(-3,+3)***	***(-5,+5)***	***(-10,+10)***
B_PP	-0.39	-0.02	0.03	-0.44	-1.17*	-0.69	0.80
(n=128)	(-0.42)	(-0.16)	(-0.12)	-(0.26)	(-1.26)	(-0.66)	(0.41)
	57:71	*60:68*	*60:68*	*57:71*	*57:71*	*56:72*	*66:62*
B_PFC	0.15	-0.46	0.32	-0.63	-1.63	-2.35	-1.54
(n=52)	(-0.26)	(0.02)	(-0.17)	(0.06)	(-1.49)	(-1.03)	(-1.60)
	22:30	*26:26*	*25:27*	*27:25*	*21:31*	*25:27*	*24:28*
B_PC	-1.26***	-1.53***	-1.24***	-1.55***	-1.65***	-1.40***	-1.38***
(n=1303)	(-0.72)***	(-0.83)***	(-0.71)***	(-0.88)***	(-1.62)***	(-1.02)***	(-1.32)***
	*557:746****	*553:750****	*533:770****	*561:742****	*553:750****	*574:726***	*582:721**
B_PFCC	-0.94***	-1.76***	-1.20***	-1.51***	-1.50**	-1.39*	-1.78*
(n=147)	(-0.99)*	(-0.69)*	(-0.82)**	(-0.98)*	(-1.43)*	(-1.02)*	(-1.23)
	63:84	*62:85*	*58:88**	*63:84*	*63:84*	*63:84*	*69:78*
Differences							
B_PC less	-0.32	0.23	-0.04	-0.05	-0.16	-0.00	0.4
B_PFCC	(0.28)	(-0.14)	(0.09)	(0.11)	(-0.18)	(0)	(-0.08)

Table 11. Mean and Median CARs of Toehold and Outside-Toehold Bidder Firms at Control Offer

The table reports mean and median CARs for various event windows and various sub-samples at control offer. The market model approach with an estimation window of (-260,-21) is used to obtain CARs. B_Toehold is bidder with a toehold. B_Outside-toehold is bidder with an outside-toehold. B_PC_non_Outside-toehold is B_PC who do not have an outside-toehold. B_PC is bidder of pure control acquisition (i.e., control acquisition where there was no prior partial acquisition of the target within the last two years). Median CARs are reported in parentheses. The significance of the mean differences from zero and the significance of differences in means between samples is based on *t*-tests. The significance of the median is based on the sign test. The significance of differences on medians is based on nonparametric Wilcoxon signed rank tests. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	(-1,0)	**(0,+1)**	**(0,0)**	**(-1,+1)**	**(-3,+3)**	**(-5,+5)**	**(-10,+10)**
B_Toehold	0.15	-0.80	-0.49	-0.16	1.62	4.16	0.98
(n=22)	(-0.54)	(-0.75)	(-0.69)	(-0.81)	(0.48)	(1.21)	(1.08)
B_Outside-toehold	-1.54*	-6.84	-1.39**	-0.83	-0.94	0.13	-0.01
(n=34)	(-1.16)	(-0.35)	(-1.05)	(0.22)	(-1.28)	(0.36)	(-0.61)
B_PC_non-Outside-	-1.28	-1.56	-1.25	-1.58	-1.67	-1.45	-1.43
toehold(n=1260)	(-0.70)	(-0.84)	(-0.71)	(-0.87)	(-1.60)	(-1.04)	(-1.46)
Differences							
B_ Toehold less	0.62	-0.40	0.36	-1.03	1.76	0.85	1.69
B_Outside-toehold	(0.44)	(-0.34)	(0.60)	(-1.19)	(1.93)	(1.20)	(1.72)
B_Outside-toehold less	-0.27	0.88	-0.14	0.75	0.74	1.58	1.42
B_PC_non-Outside-toehold	(-0.46)	(0.49)	(-0.34)	(1.09)	(0.32)	(1.40)	(0.85)