Differential Information and Acquirers' Performance in the UK

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Abstract

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Abstract

At bid announcements information quality and quantity are limited for private targets compared to listed targets, raising a question: are private target acquisitions value enhancing or are observed announcement period gains a manifestation of the "no news is good news" adage? If they create value, acquirers should achieve short run gains and at least break even during the post-event period. Results show private target acquirers have short run gains, but suffer long run losses, suggesting announcement period gains of private target bidders result from investors' over-reliance on the "no news is good news" viewpoint when faced with differential information.

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1. Introduction

Extensive research of more than two decades suggests that announcements of takeover bids yield either no substantial effects or small losses to acquirers around bid announcements.[1] Such evidence questions the wisdom and integrity of bidder managers. However, this conclusion is based only on the experience of bidders of listed targets that cover less than 20% of takeover deals. Therefore, the conclusion that takeovers, perhaps the most important event in the corporate sector, do not add value to acquirers could be misleading. Challenging this long established finding, a number of recent studies show that unlike the bidders of listed targets, the acquirers of unlisted targets achieve significant gains around bid announcements.[2]

There are some valid theoretical reasons to suggest that target status might affect the gains/losses from takeovers. In particular, differential information, the liquidity of targets, managerial interests and agency considerations might be expected to influence announcement period returns and to differ between public and private targets. In addition, several studies relate acquirers' gains/losses to the mode of payment.[3] Again, due to corporate monitoring and information asymmetry reasons, the impact of the mode of payment on bidders' gains is also target status dependent. Moreover, Officer, Poulsen and Stagemoller (2005) emphasize the role of information suggesting that the short-term gains from private target acquisitions are positively associated with information asymmetry between the managers of targets and bidders. In spite of a range of possible explanations for the differences in the market's response, as correctly noted by Faccio, McConnell and Stolin (2006, p. 197), "[t]he fundamental factors that give rise to this listing effect, …, remain elusive" and hence warrant further investigation.

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[1] See, for example, Jensen and Ruback (1983), Travlos (1987), Loughran and Vijh (1997), Draper and Paudyal (1999).

[2] See, for example, Chang (1998), Ang and Kohers (2001) and Fuller, Netter and Stagemoller (2002) for the US, Conn, Cosh, Guest and Hughes (2005) and Draper and Paudyal (2006) for the UK, and Faccio, McConnell and Stolin (2006) for 17 European countries. In related work, Officer (2006) documents acquisition discounts of unlisted targets of 15-30% relative to those for comparable listed targets.

[3] See, for example, Travlos (1987), Loughran and Vijh (1997), Fuller, Netter and Stagemoller (2002), Draper and Paudyal (2006).

The importance of information in valuing risky assets is well recognized in financial markets. The change in the price of acquirers reflects the estimated value added by the deal, which, in turn, depends on the quality, quantity and interpretation of the set of information available at the time of a bid announcement. However, the quality of information available in the public domain is likely to vary substantially across firms due to regulatory provisions. As is evident from the behavioral finance literature, investors' overreaction and optimism are common in financial markets. Such investor behavior is likely to be most prominent in the presence of limited information. Therefore, the primary objective of this paper is to examine whether the observed difference in the gains of the acquirers of listed and unlisted targets is due to differential information at the time of a bid announcement. [4]

Officer (2006) correctly notes "While information asymmetry is endemic to all mergers or acquisitions, this problem is likely to be most severe … [for unlisted targets], in which standards for information disclosure are not as high as for publicly traded firms and information about subsidiaries may be obscured by the parent's financial reporting choices." (p. 4). Several regulatory provisions are responsible for the differences in the quantity and quality of information available in the public domain. Specifically, the regulations that set out information disclosure requirements are much more stringent for listed firms than for unlisted firms, (for instance, stock exchanges' provisions on regulatory news services and the need to comply with a particular format of reporting of annual accounts). Such requirements, together with factors such as analysts' motivation to follow large listed firms ensure that up to date (almost!) information about listed firms is available in the public domain. On the other hand, unlisted firms are not subject to such disclosure needs. In addition, the UK Company Act 1985 exempts small and medium sized firms from many disclosure needs. For instance, some of them are exempt from having their accounts audited, are permitted to lodge abbreviated accounts, and are not required to report cash-flows. This reduces the reliability of information content in their financial statements. Such concessions are not available for listed firms. These differences in regulatory and legal provisions on information disclosure combined with managerial reluctance to release bad news causes bad news to travel more slowly for unlisted firms with implications for stock prices (see, for instance, Hong, Lim and Stein, 2000). Hence, the overall quality and quantity of

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[4] We define 'differential information' as the difference in the quality and quantity of information available in the public domain between listed and unlisted targets.

information available to investors at the time of bid announcements are likely to be lower for unlisted targets than for listed targets.

Such differential information is likely to affect the relative accuracy of the estimates of synergy gains and the reduction in agency costs, causing a difference in announcement period gains to the acquirers by the status of their target. More specifically, the estimates are likely to be less accurate in unlisted target deals, particularly owing to a lack of information. The absence of information may lead to a "no news is good news" phenomenon making investors overly optimistic. This, in turn, causes the share price of the acquirer to increase significantly above the equilibrium price around bid announcement. This raises a question: are private acquisitions indeed value enhancing deals or are the observed announcement period gains simply a manifestation of the market's over-reliance on the "no news is good news" maxim? As the acquirer is listed, however, complete information should, in the long run, be revealed to the market and its shares revalued to their equilibrium level – leading to a drop in share price. On the other hand, this should not be the case in listed target deals as more and better quality information is available at the time of bid announcements – the changes in share price should reflect the equilibrium value of the deals. This issue can be resolved from a thorough (and comparative) analysis of both announcement period gains and the long-term performance of acquirers. Although extensive literature on the long-term performance of the acquirers of listed targets shows evidence of mixed performance,[5] until now we know very little, if anything at all, about the long-term performance of private target acquirers. We bridge this gap in the literature by examining the experience of a large number of UK acquirers in the context of various possible explanations of differences in bidders' gains. In addition to gaining a deeper understanding of the gains/losses from takeovers, the paper also provides important insights into the fundamental factors responsible for the differential gains to bidders.

The rest of the paper is organized as follows: the next section sets out the arguments in relation to the potential impact of target status, deal features and information differential on the shareholder wealth effects of takeovers. Based on these arguments a number of testable hypotheses are developed. Section 3 discusses the data used in the empirical analysis, the choice of sample and the methodology adopted for determining abnormal returns. In section

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[5] For example, Loughran and Vijh (1997) and Gregory (1997) show that acquiring firms suffer a significant wealth loss in the long run, Higson and Elliott (1998) show that acquirers break-even and Powell and Stark (2005) show some evidence of improvement in post-takeover operating performance.

4, we present the results of the empirical investigation, while section 5 provides a summary and conclusion.

2. Does differential information matter?

Due to incomplete information around the bid announcement, it is likely that the market will inaccurately assess the merits of acquisitions of unlisted firms with either an upward or a downward bias. The "no news is good news" adage, however, implies that individuals are generally optimistic and, hence, the market's assessment is likely to be biased upwards.

2.1 Differential information and managerialism

It has been argued that acquisitions of unlisted targets result from value maximizing behavior of acquirer managers, and listed target acquisitions emanate from managers' personal objectives such as empire building (Draper and Paudyal, 2006). Being listed on a stock exchange, relatively large and prestigious, listed targets are likely to offer acquirer managers greater private benefits and personal utility than unlisted targets would. Managers pursuing their own personal objectives will, therefore, be prepared to pay an excess premium for listed targets. On the other hand, managers committed to enhancing shareholders' wealth are likely to be indifferent to a target's size and prestige. These managers will be prepared to acquire smaller and less well-known private firms as long as they expect the acquisition to be value enhancing. As such, the market may view the acquisition of a privately held target more favorably than (or at least as favorably as) the acquisition of a publicly listed target. This leads to the expectation of the market reaction to the announcement of bids for private targets being positive and more favorable than (or at least as favorable as) the market reaction to bids for publicly listed targets. In this case, to the extent that there is no differential information, then it would be expected that there would be no differences in the long-term performance of the acquirers of listed and unlisted targets. Indeed, if there is sufficient information available in the public domain at the bid announcement, the abnormal return experienced by acquirers (irrespective of targets' status) should be negligible during the post-acquisition period.

However, the more relaxed disclosure requirements of private firms allow self-interested managers to avoid much of the capital market discipline, and exaggerate acquisition profitability while concealing their true acquisition motive. For instance, private target

acquisitions may well be a symptom of Jensen's (1986) free cash flow problem.[6] To this extent, the assumption of sufficient information at the bid announcement would lead one to expect to observe a negative market reaction to announcements of bids for private targets. Given a lack of sufficient information at the announcement of bids for private targets, however, the "no news is good news" view implies that the market may not react negatively, and can even react favorably to the bid announcement.[7] To the extent that the information about managerialism inherent in a private target acquisition gradually surfaces in the public domain over time following the bid completion, the market will rationally reassess the acquirer's true value downwards causing a long-term negative drift in its share price.

2.2 Differential information and the information content of payment methods

For cost-related reasons, large (rather than atomistic) shareholders have incentives to monitor managerial behavior (Shleifer and Vishny, 1986). The typically closely held (or concentrated) pre-takeover ownership of private targets suggests that the prior owners of the target will have sizeable stakes in the combined firm if paid in shares. The creation of such block ownership leads to the expectation of the monitoring of managerial activities in the combined firm to be performed by the private target owner(s) (Chang, 1998). The monitoring will reduce acquirers' future agency costs. On the other hand, the emergence of block-holders is unlikely when targets are publicly listed due to the typically fragmented nature of share ownership of listed firms. The market will therefore react positively to the announcement of share payment for privately held targets, and more favorably than share payment for publicly listed targets. Assuming no differential information then it would again be expected that there would be no significant difference in the long-term performance of the acquirers of public and private targets. Similarly, if there is sufficient information available in the public domain at the bid announcement, the long-term abnormal return experienced by acquirers (irrespective of targets' status) should be insignificantly different from zero regardless of payment methods.

However, as evident from Faccio, McConnell and Stolin (2006), share deals do not always create block holders. Similarly, private target owners may sell (either some or all of) their

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[6] The majority of acquisitions of private targets are financed with cash.

[7] It is also possible that, due to short-sale constraints, pessimistic investors cannot enter into the market and only the optimistic investors drive the prices up.

shares in the acquirer during the post-acquisition period.[8] The misvaluation model of Shleifer and Vishny (2003) raises the possibility that private target owners may be more interested in selling the shares in the combined firm following the bid completion. In such cases, the monitoring by owners of private targets and the reduction in agency costs borne by the acquirer may not materialize. If the market has sufficient information to evaluate the likelihood of these potential outcomes of share payment and expects them, it will value the gains from private target bids accordingly. As discussed earlier, there is likely to be less public information about private targets than listed targets – this would allow acquirer managers to exaggerate the contribution by owners of private targets to the combined operations.[9] Again, given the "no news is good news" phenomenon, it is likely that the market will react positively to the announcement of bids for private targets that are financed with acquirers' shares. If the monitoring and its benefits do not materialize following the bid completion as had been anticipated at the time of bid announcement, the market will reassess downwards the value (net of agency costs) of share acquirers of private targets.[10]

In addition, negative market reaction to the announcement of share payment for listed targets has been extensively documented and primarily attributed to the Myers and Majluf (1984) asymmetric information argument (see, for example, Travlos, 1987; Draper and Paudyal, 1999). Due to asymmetric information, equity issuance signals to the market that the issuer's equity is overvalued, causing a negative market reaction in the short run. To the extent that there is no differential information and that there is sufficient information, it can be expected that the abnormal performance of acquirers paying for their target with shares is insignificantly different from zero during the post-acquisition period – irrespective of target status

2.3 Differential information and managerial overconfidence
Wealth losses to bidder shareholders have often also been attributed to Roll's (1986) managerial hubris argument (see, for example, Rau and Vermaelen, 1998). For example,

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[8] It is also possible, in principle, that the prior owners of the private target will increase their holding in the combined firm, further increasing their incentive to monitor.

[9] Casual observation shows that bidders earnestly advertised in their annual reports the skills possessed by the owners of private targets they have just acquired.

[10] One channel through which information about ex post non-materialisation of expected monitoring is revealed to the market is acquirers' financial reports (both annual and interim).

hubris-infected managers overpay for their targets as they overestimate (or are overconfident about) their ability to manage them. If the market perceives bids as reflective of acquirers' overconfidence it will react negatively to the announcement. Although the market may not have information to distinguish between overconfidence and justified confidence, a partial acquisition may signal a cautious move by acquirers – indicating that acquirer managers are careful in assessing the quality of their target and/or likelihood of expected synergy. As such, the market is likely to react positively to the announcement of a partial acquisition of either a listed or unlisted target. There is no apparent reason to expect a signal of a cautious move by acquirers from choosing partial acquisition to differ between target status.

However, the same is not necessarily true for full takeovers. In the case of listed targets, the market will have full information, including on the pre-bid value of the firm, and will be able to distinguish between overconfident managers (with an associated negative return) and justifiably confident managers (where deals should break even). Hence, in aggregate acquirers of listed targets are likely to suffer a loss. In contrast, for unlisted targets information may be of poor quality or even lacking completely. A lack of market valuation for (let alone the relatively relaxed disclosure requirements applicable to) unlisted firms makes it extremely difficult for the market to infer whether or not unlisted target acquirers are overconfident or justifiably confident. In such circumstances and consistent with the 'no news is good news' maxim, the market may assume that an acquisition of an unlisted target reflects the acquirers' confidence and commitment and, thus, is value enhancing (or at least is not value destroying). In this case we would expect to see differences between the announcement period returns to private and public targets, with the former being positive (or insignificantly different from zero) and the latter negative. To the extent that the market misidentifies the acquirers as a confident (rather than overconfident) type, it will reassess the acquirers' value downwards as information about the true type of acquirers gradually reaches the public domain over a long horizon following the bid completion. Thus, for acquirers of private targets the long-run performance may be negative, whereas acquirers of listed targets should break-even. In summary, while the long-run performance of partial acquirers is not likely to be target status dependent, there are expected to be differences between the long run returns to listed and unlisted acquirers when a full takeover is undertaken.

3. The sample and method

3.1 Sample

We obtained bid announcement dates, identity of bidders and targets, payment methods and transactions specific information etc. from the Thomson Financial (SDC Platinum) database. The SDC records 36,952 cases of takeover bids announced by British companies between 01/01/1991 and 31/12/2003. Of these 15,716 bids were made by companies listed in a UK stock market (LSE, AIM, USM or London Tech). In order to undertake the analysis it is necessary that share price data and the market value of the bidders were available on Datastream. We also limited the sample to cases where both the value of the deal and the market value of the bidder 10 days prior to the bid were at least £1 million, and the bid was successful. We exclude uncompleted and/or unsuccessful deals as their long-term post-acquisition abnormal return cannot be analyzed. 4963 acquisitions made by 1471 firms survive these criteria. Of these, 637 (12.83%) bids were to acquire publicly listed targets and 4326 (87.17%) were to acquire private targets.

For each target status group (public or private), the deals are classified according to the method of payment – namely cash, equity and mixed offers. Cash or equity offers are defined to include deals that are financed purely with cash or equity, respectively. Mixed offers include deals financed with a combination of cash, equity, and/or other means of payment. Of the 4248 privately held target deals for which information on mode of payment is available, 2311 (54.40%) are cash, 200 (4.71%) are equity and 1737 (40.89%) are mixed mode offers. When targets are listed (data on mode of payment is available for 498 such deals), 239 (47.99%) are cash financed, 126 (25.30%) are equity financed and 133 (26.71%) are financed with a mixed payment.

INSERT TABLE 1 ABOUT HERE

Table 1 records some major characteristics of the deals included in the sample. The average number of deals per year stands at 382. However, it varies substantially over the years - the highest number of deals (578) being in 1998 and the lowest (242) being in 1992 (panel A). The average proportion of equity of targets acquired by bidders in a deal is just over 90%. This ratio if much higher (94.2%) in private target acquisitions than in listed target acquisitions (61.5%) indicating that a partial acquisition is more common in the case of listed targets (panel B). This is possibly the result of potential acquirers of listed targets quietly building a stake in potential targets before they announce a formal bid. The bidders are 13 times larger (measured by market value) than their targets. Among the acquirers, the bidders

of listed targets (£868.6 million) are much larger than the bidders of private targets (£356.9 million). A similar pattern exists in deal sizes. However, the deal size to bidder's market value ratio is over 4 times larger in listed target deals (1:6) than in private target deals (1:25). The 3 day excess returns gained by the bidders are positive in all sample years. On average, bidders gain 0.91% return in excess of the risk-free rate in the 3 days around the bid announcement (panel A). However, this excess return is dependent on target status. Bidders of public targets suffer a 0.25% loss, while the private target acquirers gain 1.08% (panel B). Overall, there are some noticeable differences in public and private target deals and their outcomes, confirming our prior belief that the differences in target status are worthy of detailed investigation.

3.2 Abnormal return estimation

Several studies employ the Brown and Warner (1985) approach to analyze abnormal returns following an event. However, such an approach requires data for a long estimation period free from the implications of the event under scrutiny. In our sample, there are many instances of multiple bids within a year and in 87% of the cases, bidders made a further deal within five years of the previous deal. This eliminates the possibility of getting an estimation period that is free from the event under analysis. To overcome this problem, we estimate buy-and-hold abnormal returns (BHAR) in both the announcement-period and the long-term to a bidder portfolio in the framework of Jensen's alpha.[11] This approach employs a cross-section of data for estimating the value of 'alpha' and does not require a prior estimation period. It has been adopted recently by Barber, Lehavy, McNichols and Trueman (2001) and Draper and Paudyal (2006). We estimate the cross-sectional Jensen alpha incorporating the two additional explanatory variables identified by Fama and French (1996), as in equation (1):

$$(1) \qquad R_{it} - R_{ft} = \alpha_t + \beta_t\left(R_{mt} - R_{ft}\right) + s_t SMB_t + h_t HML_t + \varepsilon_{it},$$

where R_{it} is the buy and hold return to bidder i during a t-day holding period relative to the announcement date; R_{ft} and R_{mt} are the risk-free return and the market return, respectively. SMB_t and HML_t are return differentials between small firms and large firms, and between high-BM firms and low-BM firms, respectively; and ε_{it} is the error term. The market return

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[11] A common alternative to buy-and-hold return is cumulative abnormal return (CAR). CAR involves a high transaction cost strategy. Therefore, we opted for the low transactions cost BHAR.

(R_{mt}) is measured by the first difference of the log of the FT-All Share Index (value weighted) and SMB and HML are calculated using the method employed in Fama and French (1996). The risk free rate (R_{ft}) is measured by the 3-month Treasury bill rate. The intercept (α_t) thus provides average buy-and-hold abnormal returns to bidders for the holding period. The significance of α_t is then tested using the heterosedasticity-adjusted standard error. For the announcement-period analysis, we employ four windows (days relative to the announcement day (0)), namely pre-event period (-20, -2), event period (-1, +1), post event period (+2, +20), and the whole announcement period (-20, +20).

For the long-term analysis, we estimate bidder abnormal returns in both event time and calendar time. While estimating abnormal return as buy-and-hold abnormal returns in event time reflects investors' experience (see, for example, Barber and Lyon, 1997), the calendar-time return calculation is free of the effects of cross-sectional correlations among abnormal returns (see Lyon, Barber and Tsai, 1999). In the interests of tests of robustness of the results, we adopt both approaches. In the event time framework of equation (1), $R_{i\tau}$ is the buy-and-hold return to bidder i ($i = 1$ to N) during a τ-month ($\tau = 12, 24, 36, 48$ and 60) holding period following the bid announcement. Other variables are computed in a fashion similar to $R_{i\tau}$. Thus, α_τ measures average abnormal return accrued to N bidders during a τ-month post-acquisition period.

Calendar-time post-acquisition abnormal returns to a bidder portfolio are also estimated in the Jensen alpha framework after controlling for the same three risk factors. In each calendar month T, returns are calculated for a portfolio of bidders that made an acquisition within the previous τ months. The portfolio is rebalanced monthly to drop all bidders that reach the end of their period of τ months and to add all bidders that have just made a takeover. Bidders that are delisted before the end of the window are dropped out of the portfolio at the beginning of the month of delisting. Monthly abnormal returns to a bidder portfolio are then estimated using equation (2):

$$(2) \quad R_{pT} - R_{fT} = \alpha_p + \beta_p \left(R_{mT} - R_{fT} \right) + s_p SMB_T + h_p HML_T + \varepsilon_{pT},$$

where R_{pT} is the return on a bidder portfolio in month T. Other variables are computed in a fashion similar to R_{pT}. α_p in equation (2) provides a measure of monthly abnormal returns during the post-acquisition period. In analyzing the long-term performance of the bidders, we employ five different windows, namely 12-, 24-, 36-, 48- and 60-month windows.

We calculate $R_{i\tau}$ and R_{pT} for both equally weighted (EW) and value-weighted (VW) portfolios. Fama (1998) notes that the significant long-term abnormal returns on an EW portfolio of event firms which are found in many studies, shrink a lot and often disappear when the portfolios are value-weighted.[12] Since the OLS estimator is not robust against extreme observations, we also employ the minimum absolute deviation (MAD) estimator (i.e. robust regression) in computing and testing the significance of the Jensen's alpha in equations (1) and (2).[13]

3.3 Estimation of abnormal return differential

A common approach in testing the difference in Jensen's alpha among m bidder portfolios is to pool the observations in all portfolios together and add $m-1$ zero-one dummy variables to the model, (for example, equation (1)). The coefficient of the $(j-1)^{th}$ dummy (for $j = 2, 3, …, m$) then measures the abnormal return difference between the jth bidder portfolio and the base-category (i.e., $j = 1$) bidder portfolio. This approach assumes that the coefficients of all risk factors in equation (1) are the same for all bidder portfolios. However, if this assumption is not valid, the dummy coefficient is likely to carry little practical significance.[14] Moreover, this approach does not allow the abnormal return difference between portfolio j and portfolio $j+1$ (for $j = 2, 3, …, m$) to be readily tested. To overcome these shortfalls, we test abnormal return difference(s), e.g., in our announcement-period analysis, by estimating equation (3):

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[12] In the interest of space, we present results for value weighted calendar time portfolios and only comment on event time and equally weighted portfolios if the results are qualitatively different.

[13] In the interest of space, the MAD-estimates are reported where appropriate.

[14] When this assumption is violated, the dummy coefficient reflects not only the difference in the intercept (or the Jensen's alpha), but also in the slope coefficients in the model (i.e., the magnitude as well as significance of the dummy coefficient will be affected by the differences in the slope coefficients).

$$(3) \quad R_{it} - R_{ft} = \sum_{j=1}^{m} \left[d_{t,j} \cdot D_{it,j} \right] + \beta_t EXRM_t + s_t SMB_t + h_t HML_t +$$

$$\sum_{j=2}^{m} \left[\beta_{t,j} \left(D_{it,j} \cdot EXRM_t \right) + s_{t,j} \left(D_{it,j} \cdot SMB_t \right) + h_{t,j} \left(D_{it,j} \cdot HML_t \right) \right] + \varepsilon_{it},$$

where $EXRM_t = \left(R_{mt} - R_{ft} \right)$. R_{it}, R_{ft}, R_{mt}, SMB_t and HML_t are defined as in equation (1). $D_{it,j}$ is a dummy variable taking the value of 1 if the bidder belongs to the jth portfolio, and 0 otherwise, m is the number of bidder portfolios. $d_{t,j}$ thus provides a measure of the BHAR during a t-day period to bidder portfolio j included in the regression model.[15] The difference in BHAR between any pair of bidder portfolios (i.e., $d_{t,j}$ compared to $d_{t,j+1}$) can then be tested using the Wald test of restrictions on a linear combination of $d_{t,j}$s. Equation (3) is also employed in our long-term analysis. As with equations (1) and (2), we also estimate equation (3) using the robust regression procedure.

4. The results

4.1 Short-term and long-term gains of acquirers

Table 2 presents estimates of short-term (announcement period) and long-term gains for the entire sample. The estimates show that during the announcement period (41-days) the wealth of all acquiring firms' shareholders increases significantly (1.62%). A large proportion of this gain (0.95%) occurs during the event period (3-days surrounding the bid announcement). In addition, bidders earn a significant abnormal return during the pre-announcement window, possibly due to rumor or information leakage. The average announcement period gain of 1.62% is equivalent to £6.83 million net present value gain (an abnormal return of 22.4%) from an investment of £30.48 million (average deal value). These estimates show that shareholders of acquiring firms gain and takeovers create value at least in the short run.[16] This conclusion is consistent with the findings of recent studies that include bidders of listed as well as unlisted targets.

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[15] Note that $d_{t,j}$ is numerically equivalent (and of course, empirically identical in the OLS estimation) to the Jensen's alpha for a bidder portfolio individually computed in equation (1). This numerical equivalence is also the case for the market, size and BM factors, and applies to equations (2) and (3).

[16] The estimates based on robust regression are qualitatively similar confirming that the findings are robust to outliers.

If the gain is based on the equilibrium value of synergy gains and reductions in agency costs then it should be sustained in the long run. The long-term performance of acquiring firms, however, shows that they suffer a significant wealth loss (0.42% per month) in 5 years.[17] The results further show that the long term loss continues throughout the five year period. This evidence questions whether the apparent initial gains represent the true value of synergy gains and agency cost reductions. A comparison of announcement period gains against post-event long-term losses indicates that the announcement period gains considerably overstate the total returns from takeovers. Takeovers are value-destroying transactions as the long-term losses (0.42% per month or 25.32% cumulated over 5 years[18]) exceed the short-term gain (1.62%)[19].

INSERT TABLE 2 ABOUT HERE

4.2 Methods of payment and acquirers' gains

Bidders can pay the owners of targets via a variety of means: cash, shares or a mixed payment deal. There are substantially more cash only deals (2,550) than share only deals (326) in the sample. Mixed payment deals (1,870) include combinations of cash, shares, loan notes etc. Occasionally, bidders offer a choice to target owners. Table 2 also presents the estimates of gains by method of payment. The estimates show that in the short run (announcement period) bidders earn positive abnormal returns irrespective of the method of payment. They earn the most (2.41%) in shares deals and the least (1.17%) in mixed mode deals. Overall, these results indicate that bidders' announcement period gains appear to be payment-method dependent – share deals being the most profitable.

Contrary to the short-term effects, results reveal that the bidders of all payment categories suffer significant losses in the long run. The cash bidders (-0.43% per month) and mixed

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[17] Robust regression estimates that control for the effects of outliers also confirm similar losses. Similarly, the under performance is evident in both value weighted and equally weighted portfolios.

[18] The long term losses reported in this paper closely resemble the findings of Loughran and Vijh (1997) for US bidders and Gregory and McCorriston (2005) for UK bidders.

[19] Some studies (for example, Denis, Denis and Yost, 2002) suggest that industry diversification destroys wealth. To test whether our results are driven by industry effects we split all bidders into two groups viz. (a) both bidders and targets operate in the same industry group and (b) bidders and targets operate in different industries using the 2-digit SIC code. The results show that during the announcement period acquirers of both groups gain and in the long-run both suffer a small loss. Their performances are not significantly different, suggesting that our results are not driven by industry diversification or lack of it.

mode bidders (-0.44% per month) suffer almost equal losses in 5 years. The share bidders lose the most (-0.73% per month) in 5 years. Taken together, these findings confirm that the announcement period gains are more than offset by the long-term losses leaving acquirer shareholders with an ultimate value loss under all payment methods.

4.3 Target status and acquirers' gains

The arguments discussed in section 2 and evidence recorded in earlier studies suggests that gains to shareholders in acquiring firms depend on target status. The results (table 3, panel A) show that the bidders of private targets gain significant positive returns (1.91%) during the announcement period (41-days). They gain the most (1.12%) during the event period (3-days). On the other hand, bidders of listed targets break-even in the short run (panel B). The results further show that the short-term gains to private target bidders are significantly higher (by 2.04%) than the gains of listed target bidders (panel C).[20] These findings are consistent with evidence in the literature and provide further motivation to search for the possible reasons behind the difference.

INSERT TABLE 3 ABOUT HERE

In the long run, the acquirers of listed targets break-even (table 3, panel B), while the bidders of unlisted targets suffer a significant loss (0.47% per month) in five years (panel A)..[21] The evidence that the acquirers of private targets suffer losses while the listed target acquirers break-even supports the prediction of the differential information hypothesis and the arguments relating to managerial motives discussed in section 2.1.[22] Further support for the hypothesis comes from the time required by the market to correct for the initial over-optimism. The post-acquisition losses in the value of unlisted target acquirers remain statistically significant for five years. However, listed target acquirers never experience

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[20] These findings are qualitatively similar to those of Faccio, McConnell and Stolin (2006) who find a difference in the 5-day percentage CAR of acquirers of listed and unlisted targets of 1.86% for all 17 countries examined and 2.4% for UK acquirers.

[21] The equally weighted post-event long-term performance of private target bidders is similar. However, the listed target bidders suffer a significant loss until 2 years after takeovers and recover thereafter to finish with an insignificant loss in 5 years.

[22] The estimates based on event-time show that in the 5 years after the acquisition, acquirers of private targets suffer significantly higher losses than the acquirers of listed targets.

significant losses. Overall, the evidence shows that the patterns of post-event long-term performance of unlisted target acquirers and listed target acquirers differ.[23] The differences are likely to be caused by the differences in the quality and quantity of information available in the public domain at the time of bid announcement.

4.4 Target status, methods of payment and acquirers' gains
The estimates confirm that target status interacts with the mode of payment in determining bidders' gain. In the short run, bidders of unlisted targets (table 3, panel A) gain highest abnormal return when paid in equity (3.60%), followed by cash financed bids (1.83%) and mixed mode financed bids (1.58%). When paid in cash and mixed mode, the largest gains occur during the event window (3 days). The evidence of relatively higher gains in equity financed private target takeovers is consistent with the prediction of the corporate monitoring hypothesis that among the acquirers of private targets, bidders paying with shares benefit more than the bidders paying with cash. Similarly, the positive gains to share bidders of private targets support the implication of the information asymmetry hypothesis that the acceptance of shares by private target owners, who should have in-depth information before a deal is struck, signals good news.

In the long run (5 years), among the bidders of unlisted targets, cash bidders and mixed mode bidders suffer significant losses, while share bidders breakeven (panel A).[24] This trend provides evidence of the market's initial over-optimism and gradual correction to the announcement of takeover bids. It further shows that the market overestimates the gain to the acquirers paying in cash on bid announcement and it takes a longer time to assess its true value. This is possibly due to agency considerations related to the free cash flow of the acquirers engaged in cash bids and the limited information available on private targets. On the other hand, share bidders of unlisted targets do not experience any significant abnormal return in the long run. Sustained gain from

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[23] Owing to regulatory requirements of stock exchanges, it is possible that firms listed in different markets have different levels of information asymmetry. Therefore, we examine for such effects. However, long-term gains accrued to bidders listed on the Main LSE market and other LSE markets are not statistically different. Therefore, issues related to listing requirements are not responsible for the observed pattern.

[24] The evidence from equally weighted portfolios tells a different story – cash bidders breakeven and share bidders suffer a loss. The long-term loss suffered by the share bidders of private targets suggests that the market overestimates the value of expected reduction in agency costs in the merged firm and it takes several years to correct.

share deals and reversal in the fortune of cash bidders support the prediction of the differential information hypothesis. In share deals, private target owners have sufficient incentive to investigate the bidder and acceptance of shares in the bidding firm by them signals a quality merger. It is also possible that the target owners' research brings more information to the market and, hence, information asymmetry is reduced. The finding of insignificant long-term returns to acquirers of private targets paying with shares is consistent with the private target owners monitoring the merged firm. However, target owners in cash deals do not carry out such research and information asymmetry prevails in the short run.

The results show that the announcement period gains to listed target bidders are also dependent on the method of payment (table 3, panel B). In the short run, only the mixed mode bidders suffer a significant loss (-2.52%), while the bidders paying with shares and with cash break-even. The results further reveal that the share bidders of listed targets gain (2.39%) during the pre-event window, but suffer a loss (-2.53%) during the event window. This lends some support to a prediction of the information asymmetry hypothesis that the willingness of bidder managers to pay in shares signals an overvaluation of their stocks. The findings in relation to announcement period returns for acquirers of private targets (3.6% gain) and listed targets (insignificantly different from zero) is consistent with expectations (see section 2.2).[25] In mixed mode bids, the bidder usually offers a choice to the target firm shareholders. Such an option may signal bidders' desperation for acquisition, which in turn, enhances the bargaining strength of target shareholders/managers. Consequently, the bid premium is likely to be more than the value of any synergy causing a loss in the wealth of bidder shareholders.

In the long run (5 years), the cash and mixed mode bidders do not experience any significant abnormal returns, but the share bidders suffer a loss.[26] This supports the prediction of the asymmetric information hypothesis that issuing equity to the public conveys bad news. The continuation of announcement period losses in the long run suffered by the share bidders of listed targets implies that the market under-reacts to bad news (shares are overvalued).

Overall, the results show that unlisted target bidders gain more than listed target bidders irrespective of the method of payment in the short run. However, in the long run the case is

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[25] It should be noted that the difference between the two is a statistically insignificant (but economically meaningful) 3.08%.

[26] The estimates based on equally weighted portfolios are qualitatively similar.

reversed, except in share deals.[27] This supports the prediction of the differential information hypothesis. The evidence from share deals reflects that in the face of information asymmetry (private target owners are better informed than the shareholders of the acquiring firm) and paucity of information on unlisted targets, the willingness of target owners to continue to invest in a merged firm (as opposed to cash and run) provides an early signal of a quality merger. Therefore, the gains from synergy and agency considerations perceived at the time of bid announcement are sustainable in the long run. In summary, the evidence that bidders of unlisted targets gain in the short run, but suffer a loss in the long run, while the bidders of listed targets break-even at both horizons supports the view that owing to the paucity of information about private targets on bid announcements, investors work on the 'no news is good news' principle. Hence, most of the differences in the gains of the bidders of unlisted and listed targets is due to differential information leading to over-optimism, possibly fuelled by reliance on overconfident managers. The possible implications of managerial confidence are examined in the next part of this section.

4.5 Managerial confidence and bidders' gains

In the presence of information asymmetry between investors and managers, investors attempt to extract signals from the actions of managers. Overconfident managers are likely to succeed in fuelling the optimism of investors when only limited information is available. If managers are confident about the value of corporate control and synergy gains from a particular takeover they are likely to bid for full control (50% or more equity of the target). Among the bidders of new targets[28], over 93% of acquirers acquired full control and the rest made only partial acquisitions. Table 4 (panel A) shows that in the short run full acquirers enjoy significant positive returns (1.90%) while the partial acquirers breakeven. Among the bidders making a full acquisition, unlisted target acquirers gain (1.17% in the event window and 2.08% in the announcement period), but the listed target acquirers suffer a loss (-1.53% in the event window and a statistically insignificant -0.7% during the announcement period). The differences are statistically significant for both the event window and the announcement period. These findings support the predictions of the managerial confidence hypothesis.

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[27] Although the level of significance of differences varies with holding period window, the differences are economically meaningful.

[28] For deals in which the bidder has an existing stake in the target at the bid announcement, acquisition of less than 50% can be a transaction to obtain control as with a new bid for more than a 50% stake in the target. To avoid this bias, only new bids are analysed in this section.

In partial acquisitions, both private target bidders and public target bidders achieve significant positive abnormal returns during the event period (3 days), again consistent with the managerial confidence hypothesis (see section 2.3).[29] The bidders of listed targets enjoy significantly higher gains from partial acquisitions than from full acquisitions. Upon the announcement of cash deals for an unlisted target, bidders making a full acquisition enjoy significant positive gains. However, cash bidders of listed targets breakeven in both full and partial acquisitions.[30]

INSERT TABLE 4 ABOUT HERE

The support for the hypothesis that managerial confidence leads to excess optimism in the short run comes from their long-term under performance. In the long run (5 years), bidders making a full acquisition suffer a significant loss, primarily due to the losses suffered by the acquirers of private targets (panel B). Further analysis shows that only the bidders that make full acquisitions of private targets in cash suffer significant losses. This evidence also suggests that managers of firms with excess cash may acquire targets that are sub-optimal. Neither the unlisted target bidders nor the listed target bidders suffer any significant loss from partial acquisitions made by cautious managers.[31] Once again, these results confirm that the observed significant short-term gain accrued in the acquisitions of private targets is due to over-optimism and investors relying on the over-confidence of managers in the presence of differential information.

Overall, the preceding analysis demonstrates that the extent to which bidders make gains from acquisitions is related to target status, the method of payment, and the information signaled by the proportion of equity acquired in the face of differential information.

4.6 Factors affecting acquirers' long-term performance: A multivariate framework

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[29] During the entire announcement period (41 days), however, neither group of acquirers yield abnormal return.

[30] Due to the notably small number of equity offers and mixed offers for private targets as well as for public targets in a partial acquisition, reasonable inferences can be made only for the cash offers. Therefore, we refrain from comparing the gains/losses of other groups of bidders.

[31] These findings provide some support for the managerial hubris hypothesis; however, extensive tests of this hypothesis are beyond the scope of this paper.

Discussion in the preceding paragraphs reveals that the apparent positive returns enjoyed by the owners of unlisted target bidders are not sustainable in the long run. The gains and their long-term sustainability are found to depend on various deal features that have implications for information asymmetry, differential information and agency cost considerations. To allow for interaction between various determinants of bidders' gains we model the long-term (up to 5 years) returns to acquirers (all acquirers, listed target acquirers, and private target acquirers) in a multivariate framework as in equation (5).

$$(5) \qquad R_i - R_f = \gamma_0 + \sum_{j=1}^{k} \gamma_j x_{ij} + \varepsilon_i.$$

In equation (5), the value of γ_0 measures the monthly excess return after controlling for the effects of explanatory factors. R_i is the holding period return and R_f is the risk free rate. The choice of explanatory variables (x_{ij}, $j = 1$ to k) is motivated by the findings of the univariate analysis and further evidence documented in the literature. In the model, the three risk factors (market premium, SMB, and HML) control for risk differences. Some studies (for example, Sudarsanam and Mahate, 2003) show that the performance of bidders also depends upon their expected growth opportunities. To control for such possibilities we include a variable (market to book value ratio) representing the growth opportunity of the bidder prior to bid announcement. To control for the implications of payment methods we introduce two dummy variables representing cash only and share only deals. There is a substantial difference in the deal value and the market value of the bidders in our sample and Draper and Paudyal (2006) show that the relative size of the deal affects the bidder's gain significantly. To control for this effect we include the log of relative size of the bidder (market value of the bidder divided by the size of the deal) in the model. We also include the log of deal value to allow for the possible effect of transaction size. Denis, Denis and Yost (2002) show that industry diversification destroys value while Doukas and Travlos (1988) suggest the opposite. To control for such effects we introduce a dummy variable that indicates whether the deal is focused or diversified. Our findings in the previous section, as well as a growing body of literature, show that the gains to the bidders are target status dependent. Therefore, a dummy variable to represent listed target is included in the full sample (all bidders) model. Moreover, the earlier discussion reveals an interaction between the mode of payment and target status. Therefore, an interaction term representing a product of the share deals and target status dummy variables is also included in the equation of all bidders. Similarly, we include a dummy variable indicating if the target is fully acquired. Distribution of

M&A activities reveals that there are material variations in the M&A activities over the period. Therefore, two dummy variables representing the active M&A periods are added in the model. Evidence discussed in previous paragraphs also show reversal in the fortune of unlisted target bidders. Therefore, we also control for the effects of short-term (3-day) returns in the model.

The estimates, corrected for heteroscedasticity, are reported in table 5. Although F-statistics confirm the overall significance of the model, the adjusted R-squareds are moderate. Therefore, the results should be viewed with caution.

<div align="center">INSERT TABLE 5 ABOUT HERE</div>

The negative intercepts of the long-term return equation (1 year as well as 5 Years[32]) reconfirm that on average bidders suffer losses in the long run. The long-run returns (intercepts) are target status dependent – bidders of private targets suffer a significant loss while listed target bidders break-even (statistically). The estimates, in general, reconfirm the importance of risk adjustment, target status, and the methods of payment to bidders' gains. The interaction variable representing share-payment and target status exerts significant impact on bidder's returns for the first two years only. The implication of relative size of deals is significant in the cases of private target deals only – this ratio is substantially higher in these deals (table 1). The role of industry diversification on bidder's gain remains insignificant for both groups of bidders. The results also show that long-term gains of bidders are inversely related to their growth opportunities, suggesting that the bidders with high growth opportunities suffer the most. The estimates show that 1-year holding period returns to the acquirers of both unlisted and listed targets are positively affected by short-term gains. However, its importance declines/disappears with the increase in holding period. The rate of decline in its role is much slower in the cases of unlisted target acquirers than in the cases of listed target acquirers. This is consistent with a prediction of the differential information hypothesis that complete information is not readily available in the cases of private targets, the market remains optimistic until the facts become available, and it takes longer time for reliable information about private targets to be revealed to the market. Overall, these results reconfirm the conclusions drawn from the univariate analysis that the apparent announcement period profitability of unlisted target acquisitions is not sustainable in the long run. This indicates that the observed difference in the returns of listed and unlisted target

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[32] We also estimate the model for 2, 3 and 4 years holding periods. The results are similar to those reported here.

acquirers is possibly due to over-optimism in the face of differential information and agency considerations fuelled by managerial over-confidence.

5. Conclusions

This paper examines whether the short-term gains of private target bidders are sustained in the long run and how their performance compares with the performance of listed target acquirers in the face of differential information, agency cost considerations and managerial overconfidence. Several conclusions emerge. First, in the short run average takeover deals generate 22% risk adjusted return on deal value to bidding firms. This impressive rate of return is driven by the apparent gains from private target acquisitions. Bidders of listed targets break-even. Second, in the long run the average acquirer suffers a loss. However, the outcome is target status dependent – acquirers of listed targets breakeven, but bidders for unlisted targets suffer significant losses. This reversal in fortune is large enough to cause the ultimate wealth loss to shareholders in acquirers of unlisted targets. This is possibly due to differential information, managerial overconfidence and agency considerations. Third, short-term gains to acquirers depend on the interaction between target status and mode of payment. Bidders of private targets gain under all methods, but they gain the most in share deals supporting a prediction of the corporate monitoring hypothesis. However, in share deals the acquirers of listed targets suffer significant losses offering some support to the information asymmetry hypothesis (Myers and Majluf (1984)). These findings are consistent with the evidence reported by earlier studies. Fourth, irrespective of the mode of payment all acquires suffer a loss in the long run, share bidders losing the most. Once again, the outcome is target status dependent. Among the bidders of privately held targets, cash and mixed mode bidders suffer significant losses, while the share bidders breakeven. This supports the view that prior owners of unlisted targets accepting shares in bidding firms analyze the deals more accurately and the market interprets the signal correctly. Bidders acquiring listed targets breakeven in cash and mixed deals but suffer a loss in share deals. Finally, acquirers of private targets gain more from full acquisitions than from partial acquisitions in the short run, indicating the market's perception of managerial confidence. However, full acquisition results in a significant loss in the long run, confirming the view that in the face of information asymmetry the market over-reacts to managerial confidence in the short run, but corrects for the mistake in the long run.

Overall, the paper shows that the extent to which bidders make gains from acquisitions is related to deal features that have implications for information flow, agency considerations and

managerial confidence. As such, it provides insights into the reasons why there are differences in returns between acquisitions of listed and unlisted targets. A comparative analysis of the short-term and long-term performance indicates that the positive short-term abnormal return to acquirers of private targets is possibly due to investors' over-reliance on the "no news is good news" adage in the face of differential information and managerial overconfidence that is corrected in the long run.

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Table 1
Characteristics of sample firms

Event period gross return in percent $(R_i - R_f)$ is calculated as equally weighted buy-and-hold return. The market value (MV) of bidders is observed one calendar month before the announcement date. Value of Deal and MV of Bidders are standardized using the price level of the value-weighted FT All Share Index observed at each point in time. The base date for standardization is January 1, 1991.

Panel A: Annual Averages (all targets)

Year	No of cases	% of Shares acquired	Value of Deal (£Mill)	MV of Bidder (£Mill)	Event period gross return in percent $(R_i - R_f)$	
					(-20, +20days)	(-1, +1days)
1991	244	84.37	38.41	552.09	2.834	0.377
1992	242	87.69	16.53	354.50	1.841	0.110
1993	279	90.60	17.37	329.80	5.715	1.658
1994	376	86.58	20.55	356.12	-0.854	0.308
1995	356	89.89	46.97	379.84	2.311	0.821
1996	375	87.95	26.38	377.76	3.538	1.423
1997	532	90.89	23.77	333.44	2.901	1.088
1998	578	93.61	15.38	326.26	0.257	0.954
1999	497	92.42	51.35	462.21	7.118	1.601
2000	561	89.27	53.24	488.95	-3.459	0.466
2001	381	92.08	21.23	480.57	-3.334	0.472
2002	292	92.62	27.41	599.85	-5.786	0.504
2003	250	91.36	22.86	583.02	7.493	1.837
Average 1991-2003	382	90.30	30.48	422.58	1.363	0.906

Panel B: Summary Statistics (public vs. private targets)

	Public targets (N = 637)			Private Targets (N = 4326)		
	Mean	Median	Stdev.	Mean	Median	Stdev.
% acquired	61.50	88.21	41.68	94.19	100	18.65
MV of Bidders (£ Million)	868.63	124.51	2541.65	356.91	58.82	1488.94
Value of the Deal (£ Million)	140.68	13.49	797.40	14.26	2.72	87.32
Announcement period gross returns (-20, 20days) in %	0.364	-0.256	16.118	1.510	1.441	18.977
Event period gross returns (-1, 1days) in %	-0.247	-0.053	7.104	1.076	-0.034	6.293

Table 2
Short-term and long-term gains to all bidders

Short-term and long-term gains of bidders by mode of payment (cash, shares and mixed) are reported. Short-term (surrounding the announcement day) buy-and-hold risk adjusted excess returns of bidders by target status (listed and private) are estimated in the Jensen's alpha (α_t) framework using equation (1). The difference in the short-term gains between a pair of bidder portfolios is estimated using equation (3). Four short-term windows (days relative to the announcement day, 0) we employ are pre-event period (-20, -2), event period (-1, +1), post event period (+2, +20), and the announcement period (-20, +20)).

Long-term performance (value weighted, monthly returns) of a bidder portfolio is estimated in calendar time using equation (2) for 12-, 24-, 36-, 48- and 60-month holding period. The difference in the gains between a pair of bidder portfolios is estimated based on equation (3). Of 4,963 deals in the full sample, information on payment method is available for 4,746 deals only for announcement period analysis. Further, bidders' returns are not available in 143 deals (delisted/suspended) at least in the first calendar month following the bid announcement and are hence omitted from the long-term gain analysis in this table. Sample size reduction is reflected in both private-target and listed-target sub-samples. ** and * denote significance at the 5% and 10% levels respectively.

Holding Period	All Targets	Methods of payment			Cash vs. Equity	Cash vs. Mixed	Equity vs. Mixed
		Cash	Equity	Mixed			
Pre-event	0.504**	0.570**	1.548**	0.365	-0.978	0.205	1.183
Event	0.950**	0.769**	-0.303	1.275**	1.072**	-0.505**	-1.577**
Post-event	0.180	0.352*	0.503	-0.367	-0.152	0.718**	0.870
Announcement	1.617**	1.629**	2.414**	1.167**	-0.784	0.462	1.246
Sample size	4963	2550	326	1870			

Average monthly holding period returns:

Holding Period	All Targets	Cash	Equity	Mixed	Cash vs. Equity	Cash vs. Mixed	Equity vs. Mixed
12 Months	-0.393**	-0.424**	-0.369	-0.455**	-0.056	0.031	0.086
24 Months	-0.415**	-0.441**	-0.725**	-0.368**	0.284	-0.073	-0.357
36 Months	-0.357**	-0.391**	-0.640*	-0.301*	0.249	-0.090	-0.340
48 Months	-0.384**	-0.385**	-0.692**	-0.426**	0.307	0.041	-0.266
60 Months	-0.422**	-0.434**	-0.729**	-0.438**	0.295	0.003	-0.291
Sample size	4814	2465	311	1827			

Table 3
Short-term and long-term gains to bidders by target status

Short-term and long-term gains of bidders by target status and mode of payment are reported. Short-term buy-and-hold risk adjusted excess returns of bidders by target status are estimated in the Jensen's alpha ($α_t$) framework using equation (1). The difference in the short-term gains between a pair of bidder portfolios is estimated using equation (3). Four short-term windows (days relative to the announcement day, 0) we employ are pre-event period (-20, -2), event period (-1, +1), post event period (+2, +20), and the announcement period (-20, +20)).

Long-term performance (value weighted, monthly returns) of a bidder portfolio (target status and mode of payment) is estimated in calendar time based on equation (2) for 12-, 24-, 36-, 48- and 60-month holding period. The difference in the gains between a pair of bidder portfolios is estimated using equation (3). Of 4,963 deals in the full sample, information on payment method is available for 4,746 deals only for announcement period analysis. Further, bidders' returns are not available in 143 deals (delisted/suspended) at least in the first calendar month following the bid announcement and are hence omitted from the long-term gain analysis in this table. Sample size reduction is reflected in both private-target and listed-target sub-samples. The difference in gains to the bidders between a pair of payment methods and target status is also reported. ** and * denote significance at the 5% and 10% levels respectively.

Panel A: Private target bidders

| Holding Period | All Targets | Methods of payment | | | Cash vs. Equity | Cash vs. Mixed | Equity vs. Mixed |
		Cash	Equity	Mixed			
Pre-event	0.642**	0.728**	1.144	0.475	-0.415	0.253	0.669
Event	1.115**	0.822**	1.018	1.518**	-0.196	-0.696**	-0.501
Post-event	0.166	0.390**	0.557	-0.334	-0.166	0.724**	0.891
Announcement	1.905**	1.832**	3.603*	1.585**	-1.770	0.247	2.017
Sample size	4963	2311	200	1737			

Average monthly holding period returns:

12 Months	-0.486**	-0.449**	0.281	-0.794**	-0.729	0.345	1.075
24 Months	-0.507**	-0.502**	-0.408	-0.582**	-0.094	0.080	0.175
36 Months	-0.435**	-0.459**	-0.312	-0.504**	-0.147	0.044	0.192
48 Months	-0.444**	-0.446**	-0.421	-0.545**	-0.025	0.099	0.124
60 Months	-0.470**	-0.473**	-0.459	-0.548*	-0.014	0.075	0.089
Sample size	4814	2236	191	1700			

Panel B: Listed target bidders

| Holding Period | All Targets | Methods of payment | | | Cash vs. Equity | Cash vs. Mixed | Equity vs. Mixed |
		Cash	Equity	Mixed			
Pre-event	-0.377	-0.974*	2.387**	-0.847	-3.361**	-0.127	3.234**
Event	-0.214	0.242	-2.531**	-2.110**	2.773**	2.352**	-0.421
Post-event	0.359	-0.061	0.182	0.328	-0.242	-0.388	-0.146
Announcement	-0.133	-0.404	0.523	-2.518*	-0.927	2.114	3.041
Sample size	637	239	126	133			

Average monthly holding period returns:

12 Months	-0.230	-0.450	-1.060	0.087	0.610	-0.537	-1.147
24 Months	-0.156	-0.247	-1.313**	0.101	1.066*	-0.347	-1.414**
36 Months	-0.172	-0.167	-1.277**	0.147	1.110*	-0.314	-1.424**
48 Months	-0.248	-0.167	-1.198*	-0.248	1.031*	0.080	-0.951
60 Months	-0.308	-0.295	-1.162*	-0.263	0.867	-0.032	-0.899
Sample size	612	229	120	127			

Table 3 continued …

Table 3 continued …

Panel C: Private vs. listed target bidders

Holding Period	All Targets	Methods of payment		
		Cash	Equity	Mixed
Pre-event	1.019**	1.702**	-1.243	1.322
Event	1.329**	0.580	3.549**	3.628**
Post-event	-0.193	0.451	0.375	-0.662
Announcement	2.038**	2.236**	3.079	4.104**

Differences in average monthly holding period returns:

12 Months	-0.257	0.001	1.341	-0.881**
24 Months	-0.351**	-0.255	0.905	-0.683**
36 Months	-0.263	-0.292	0.965	-0.651**
48 Months	-0.196	-0.278	0.777	-0.297
60 Months	-0.163	-0.178	0.703	-0.285

Table 4
Full vs. Partial Acquisitions

Bidders make a full (partial) acquisition if they acquire 50% or more (less than 50%) stakes in their target. Only the sample bidders that make a new bid are included. Bidders are divided into bidders making a full acquisition and bidders making a partial acquisition, and the difference in gains between these two bidder groups is also reported. For each acquisition type, the sample bidders are divided into private target bidders and listed target bidders, and the difference between the two bidder groups is also reported. Panels A and B report short-term and long-term (value weighted) gains, respectively. Of 4,656 new bids in the full sample, valid information on the proportion of stakes acquired is available for 4,510 (4,047 private targets and 463 listed targets) deals. Of these 4,510 deals, bidders in 4,374 (3,930 private targets and 444 listed targets) deals have valid return at least in the first calendar month following the bid announcement. For the estimation details, see notes to table 3. ** and * denote significance at the 5% and 10% levels, respectively.

Panel A: Announcement period gains

Holding period	All targets			Full acquisition			Partial acquisition		
	Full	Partial	Difference	Private	Listed	Difference	Private	Listed	Difference
Sample Size	4204	306		3927	277		120	186	
Pre-event	0.647**	-0.130	0.777	0.680**	0.250	0.430	1.307	-1.135*	2.442*
Event	0.998**	1.328**	-0.331	1.167**	-1.529**	2.696**	1.265**	1.363**	-0.098
Post-event	0.261	-0.180	0.441	0.247**	0.572	-0.325	-2.141*	1.108	-3.249**
Announcement	1.897**	0.767	1.129	2.084**	-0.696	2.780**	0.321	1.083	-0.762

Panel B: Long-term performance (average monthly holding period returns)

Holding period	All targets			Full acquisition			Partial acquisition		
	Full	Partial	Difference	Private	Listed	Difference	Private	Listed	Difference
Sample Size	4081	293		3817	264		113	180	
12 Months	-0.489**	-0.525	0.036	-0.532**	-0.172	-0.360	-0.362	-0.245	-0.116
24 Months	-0.470**	-0.122	-0.348	-0.505**	-0.180	-0.324	-0.434	0.283	-0.717
36 Months	-0.363**	-0.118	-0.245	-0.395**	-0.166	-0.229	-0.368	0.126	-0.494
48 Months	-0.390**	-0.115	-0.275	-0.413**	-0.245	-0.169	-0.206	0.032	-0.238
60 Months	-0.454**	-0.111	-0.343*	-0.464**	-0.350	-0.114	0.009	-0.059	0.068

Table 5
Factors affecting Long-term gains of bidders

The long-term (1 and 5 years) buy-and-hold monthly excess returns $(R_i - R_f)$ (in percent) of all bidders and bidders by target status are regressed against a set of explanatory as in equation (5):

$$R_i - R_f = \gamma_0 + \sum_{j=1}^{k} \gamma_j x_{ij} + \varepsilon_i . \tag{5}$$

The value of γ_0 measures the average monthly excess return after controlling for the effects of explanatory factors. The k explanatory variables (x_{ij}) include three risk factors (market premium, SMB, and HML); growth opportunity (market to book value ratio) of bidders; two dummy variables representing cash only and share only deals; the log of relative size of the deal (market value of the bidder divided by the size of the deal); and the log of deal value. Similarly, a dummy variable indicating focused or diversified deal; a dummy variable indicating the target status (in the equation of 'all bidders'); an interaction term representing a product of the share deals and target status dummy (in the equation of all bidders) are also included. A dummy variable indicating if the control of target is acquired; further two dummy variables representing the active M&A periods (1995-1999 and 2000-2003) also are included in the set of explanatory variables. In addition, the equation controls for the effects of short-term (3-days) returns. The standard errors are corrected for heteroscedasticity using the White adjustment. ** and * denote significance at the 5% and 10% respectively.

Explanatory variables/holding period	All Bidders		Private target bidders		Listed target bidders	
	1 Year	5 Years	1 Year	5 Years	1 Year	5 Years
Constant	-0.161**	-0.567**	-0.131**	-0.555**	-0.209	-0.268
Announcement period gains (3-day)	0.921**	0.584	0.884**	0.565	1.381**	1.046
Growth opportunity	-0.057**	-0.174**	-0.059**	-0.172**	-0.038	-0.175**
Market premium $(R_m - R_f)$	1.279**	1.007**	1.280**	1.013**	0.958**	0.985**
SMB	0.622**	0.957**	0.627**	0.942**	0.681**	0.920**
HML	-0.381**	-0.265**	-0.473**	-0.316**	0.456	0.252
Target status (listed = 1)	-0.015	0.036				
M&A activity period (1995-1999)	-0.066**	-0.030	-0.067**	-0.052	-0.044	0.144
M&A activity period (2000-2003)	-0.066**	-0.187**	-0.069**	-0.193**	-0.067	-0.126
Control (full control = 1)	0.069*	0.149*	0.051	0.123	0.052	0.002
Ln (Value of deal)	0.013**	0.064**	0.010	0.068**	0.024*	0.038
Cash only deals (dummy = 1)	0.077**	0.337**	0.081**	0.349**	-0.019	0.129
Share only deals (dummy = 1)	-0.124**	-0.025	-0.121**	-0.018	-0.005	0.016
Interaction (share deals × target status)	0.179**	0.239				
Ln (relative size)	0.012*	0.046**	0.012*	0.053**	0.007	-0.016
Diversification deal (different ind. = 1)	0.028*	-0.063*	0.025	-0.056	0.057	-0.132
F-Statistic	69.01**	58.31**	76.43**	56.08**	4.66**	3.68**
Adjusted R^2 (%)	19.59	15.29	20.50	15.85	11.03	8.31
Number of observations	4188	4188	3803	3803	385	385