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## PRE-ACQUISITION CHARACTERISTICS OF THE ACQUIRERS

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### ABSTRACT

Existing empirical literature has extensively analyzed post-acquisition performance of the acquirers to evaluate success of the takeover. The academic literature tends to agree that target shareholders benefit from takeovers; however takeovers benefits for acquiring firm's shareholders have been questioned. A majority of empirical literature indicate acquisition announcements are associated with a decrease in acquiring shareholder's wealth. While pre-acquisition characteristics of takeover targets have been extensively analyzed, empirical literature has not directly and comprehensively analyzed pre-acquisition financial and operating characteristics of the acquiring firms. In this paper, I examine pre-acquisition operating performance and governance characteristics of acquirers. Results suggest that bidders are large firms compared to their industry peers. I also find that bidders are characterized by low insider ownership, high institutional holding and high leverage, indicating higher outside monitoring of the managers. Bidders in general report superior operating performance as indicated by higher return on equity and lower operating expenses. Consistent with existing research, I found that the takeover announcement period abnormal returns are negative for bidders irrespective of their operating performance and governance characteristics.

**Keywords:** *Mergers, Acquisition, Acquirers, Takeovers,*

### 1. INTRODUCTION

Existing literature has suggested a number of motives for acquisitions. Three main motives that have been identified are synergy, agency and hubris. The synergy motive is based on the belief that combined firm will be more valuable as a result of increased efficiencies. The agency motive suggests that takeover is driven by the private benefits of control for the acquiring management. The hubris hypothesis suggested by Roll (1986) states that managers tend to overestimate their own capabilities and overpay for the target firms. While synergy benefits are likely to be shared by shareholders of both acquirers and targets, in agency or hubris driven acquisitions, acquiring shareholders are likely to experience wealth destruction. A growing body of empirical literature indicates acquisition announcements are associated with a decrease in acquiring shareholder's wealth. This suggests that a majority of acquisitions are probably driven by managerial hubris or agency conflicts.

Existing empirical literature has primarily focused on post-acquisition performance of the acquirers to evaluate success of the takeover and determine what motivates takeover. While pre-acquisition characteristics of takeover targets have been extensively analyzed, empirical literature has not directly and comprehensively analyzed pre-acquisition financial and operating characteristics of the acquiring firms. In this paper, I examine pre-acquisition operating performance and governance characteristics of acquirers. The main objective of this paper is to compare and contrast pre-acquisition operating, financial and governance characteristics of the acquirers with those of their peers. In this paper I also address the issue of agency driven self-serving attempts by the acquirer management, by looking at their pre-acquisition operating performance in the presence of alternative control mechanisms and potentially high agency problems. Finally, I also analyze impact of operating performance and governance characteristics on announcement period abnormal stock returns for bidders.

### 2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The free cash flow theory of Jensen (1986) argues that managers have incentives to expand firms beyond their optimal size because that increases resources under managers control and also because managerial compensation is often tied to firm size. Therefore, managers endowed with excess free cash flow will often invest in negative NPV projects. Different internal/external control mechanisms exist to prevent such non-value maximizing behavior of the managers. These mechanisms could be equity-based

compensation for managers, high insider holdings, external monitoring by blockholders and debtholders and presence of external board members.

Williamson (1963) argues that managers do not have neutral attitude towards costs. Managers have expense preference, i.e., certain class of expenditures has a positive value associated with them. Specifically, staff expenses, expenditure for emoluments and funds available for discretionary investments have value additional to that which derives from their productivity. He implies that managers may choose to shirk and indulge in excessive consumption of perquisites. He also observes that, as with the expansion of staff, the expansion of physical plant and equipment is also subject to managerial discretion.

Existing research has looked at post-acquisition performance to evaluate benefits of takeovers. Healy, Palepu and Ruback (1992) do not find any post-acquisition change in capital expenditures and R&D expenses in a sample of 50 acquisitions. However, they observe a significant improvement in industry-adjusted asset productivity for the combined firm, which leads to higher operating cash flow returns. Moeller, Schlingemann and Stulz (2004) found that while acquisitions by large firms are associated with losses in shareholder wealth, acquisitions by small firms have significant positive abnormal returns. Hubbard and Palia (1995) observe that managers of acquiring firms overpay when their ownership stake is low (attributable to unobservable perquisite consumption) and when their ownership stake is high (reflecting their private benefits of control). This finding is consistent with Jensen (1976), Morck, Schleifer and Vishny (1988) and Stulz (1988). Datta, Iskandar-Datta and Raman (2001) document a strong positive relation between acquiring managers' equity-based compensation (EBC) and stock price performance around and following acquisition announcements. These results suggest that if managers' and shareholders' interests are not properly aligned, managers might undertake unprofitable takeovers. If these takeovers are manifestations of self-serving attempts by the acquirers, then I expect that such bidders will also have high agency costs which might result in poor operating performance. This motivates my first **hypothesis**: *bidders with high levels of cash, few investments opportunities coupled with low or very high insider holdings IH, low external monitoring by debtholders will have higher operating expenses.*

Morck, Shleifer and Vishny (1990) find that the returns to bidding shareholders are lower when the bidding firm diversifies, when it buys a rapidly growing target and when its managers performed poorly before the acquisition. Mitchell and Lehn (1990) find that firms that subsequently become takeover targets made acquisitions that significantly reduced their equity value, and firms that do not become takeover targets made acquisitions that raised their equity value. Lang, Stulz and Walkling (1991) document that for successful tender offers bidder returns are significantly negatively related to cash flow for low q bidders but not for high q bidders. Harford (1999) concludes that cash-rich firms are more likely than other firms to attempt acquisitions. He also documents that cash-rich firms with greater likelihood of agency problems as evidenced by low managerial ownership are more likely to account for acquisition activity. Looking at stock returns, he finds that acquisitions by cash-rich firms are value decreasing. He also observes that mergers in which the bidder is cash-rich are followed by abnormal declines in operating performance of the merged firms. These results are true for both high q and low q firms. This suggests that takeovers in which the bidders have greater likelihood of agency problems will be value-decreasing for the bidding shareholders.

Therefore, my **second hypothesis** is: *for takeovers where the bidders have higher pre-acquisition capital expenditures, cash levels, low investment opportunities, very low or very high insider holdings IH, low external monitoring by debtholders, and poor operating performance (high operating expenses), the announcement period abnormal returns to bidding shareholders will be lower (more negative).*

### 3. DATA AND METHODOLOGY

I identify all mergers and tender offers during the period 1993-2002 using the SDC on-line Mergers and Corporate Transactions database. SDC provides data on announcement date, completion date, total deal value, form of payment, and whether or not the deal was classified as hostile/tender offer. Firms in regulated industries (Financial, Transportation & Communication, and Public Administration) are eliminated to avoid contamination of results from regulatory changes in these industries. In order to be

included in the sample, both the target and the acquirer were required to be listed on the NYSE, NASDAQ or AMEX, and each bidder's return data had to be available on the Center for Research in Security Prices ("CRSP") tapes. Additionally, total asset and net sales data had to be available in Standard & Poor's Compustat files. Other financial data was also obtained from Compustat. The percentage of insider ownership ("IH") and institutional holdings were collected from the Compact Disclosure ("CD") database for the year before each of the announcement dates.

SDC lists 3,425 completed mergers or tender offers that were announced between January 1, 1993 and December 31, 2002. Of these deals, 1,745 involved firms in regulated industries. Of the remaining deals, 203 did not have either the bidder's or the target's return data available on CRSP tapes. Finally, 306 deals lacked total asset or net sales data in Compustat for either the bidder or the target. Of the remaining 1,171 deals (876 mergers and 295 tender offers); data on insider ownership and institutional holdings was available for 972 bidders. My analysis is focused on this final group. SDC classified 295 of these 972 deals as tender offers and 27 of them as hostile takeovers. Further, 392 of the deals were cash-only transactions and 202 were hybrid transactions (a combination of cash and stock). The remaining deals were classified as shares only or other types of transactions. Following is the breakdown of the final sample listed by year of takeover announcement:

Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Total
Final Sample	32	49	79	92	113	139	141	139	119	69	972

Following Song and Walking (1993), for each bidder in the sample I choose two control firms: one from the same two-digit SIC code representing industry peers, (hereafter referred to as "ASCF"), and one randomly chosen from the set of all control firms listed during the year in which the acquisition was announced (hereafter referred to as "ARCF"). For bidders, I used the SIC codes reported in the SDC database at the time of their acquisition announcement, and, for control firms, I used the SIC codes reported in the CD database in the year of their acquisition announcement. To construct the control sample, for each year in the sample (1993 through 2002), I started with a list of firms for which insider holding and institutional holding data were available in the CD database. From this list, I removed firms for which financial data was not available in Compustat for the previous two years. After removing target firms and bidders from this list, I matched the remaining control firms to the bidder firms based on their two-digit SIC codes, selecting a ASCF for each bidder. From the remainder, I then randomly selected one ARCF for each bidder. I followed this procedure for all sample years.

#### 4. BIDDER CHARACTERISTICS

In Table 1, I report summary statistics for all the firm categories in the sample (the bidders, the ASCFs and the ARCFs). My objective is to compare and contrast pre-acquisition operating, financial and governance characteristics of the bidders with those of their peers. I measure operating performance in terms of operating expenses (OE) which is defined as cost of goods sold plus selling general and administrative expense. This measure captures both cost inefficiency and excessive perquisite consumption by managers. I use operating expenses both as percentage of total assets (hereafter OEA) and as percentage of net sales (hereafter OES) for the analysis. I also report industry adjusted OEA (hereafter IA OEA) and industry adjusted OES (hereafter IA OES). Industry adjustment is done by subtracting industry median values of OEA and OES for each industry in each year from the respective measures for individual firms. I also analyze, size (log of equity capitalization three months before the first bid (price \* shares outstanding from CRSP)), age (firm age at the time of acquisition was computed from each firm's first CRSP listing date to the date of acquisition announcement and it is rounded to number of years), CEA (Cash and equivalents/ Total Assets), CAPEXA (Capital expenditure / Total Assets), Leverage (LEV)(Total Debt/Total Assets) and asset turnover ratio STA (Sales/Total Asset) for acquiring firms, their industry matched and randomly selected control firms. I also report industry-adjusted leverage (IALEV) and Tobin's q which is approximated by the market value of equity, plus the book value of debt, divided by the book value of assets.

I report median values for each of the above mentioned measures for the year prior to the year of takeover announcement. I use Wilcoxon sign rank test for measuring statistical significance of difference in median values for acquirers and the control firms.

**TABLE 1: SUMMARY STATISTICS FOR BIDDER AND CONTROL FIRMS**

The sample consists of 972 bidders during the period January 1, 1993, to December 31, 2002. All accounting data is collected from COMPUSTAT is from the year prior to the year of takeover announcement. Median values for each measure is reported. The p-values from Wilcoxon signed-rank test are reported in parentheses.

	Bidder	ASCF	ARCF
<b>Panel A</b>			
Market Capitalization (millions of dollars)	1600	572(0.01)	524(0.01)
Net Sales (millions of dollars)	756	454(0.01)	545(0.01)
Total Assets (millions of dollars)	914	387(0.01)	439(0.01)
Firm Age (years)	12.70	11.51(0.15)	14.23(0.01)
<b>Panel B</b>			
Cash and Cash Equivalents/Total Assets CEA	0.09	0.09(0.43)	0.06(0.01)
Capital Expenditures/ Total Assets CAPEXA	0.049	0.053(0.16)	0.057(0.01)
Return on Assets (%) ROA	5.87	5.74(0.99)	5.93(0.44)
Return on Equity (%) ROE	13.45	11.51(0.02)	12.59(0.49)
Tobin's Q	1.79	1.6(0.01)	1.39(0.01)
Operating Expenses/ Net Sales OES	0.847	0.865(0.01)	0.878(0.01)
Operating Expenses/ Total Assets OEA	0.797	0.902(0.01)	1.061(0.01)
Sales/Total Assets STA	0.97	1.07(0.01)	1.23(0.01)
Industry Adjusted OES IAOTES	-0.015	-0.002(0.01)	0.001(0.01)
Industry Adjusted OEA IAOTEA	-0.078	-0.001(0.01)	0.001(0.01)
<b>Panel C</b>			
Insider Holding IH	6	8.8(0.01)	8.8(0.01)
Institutional Holding INST	59	54(0.01)	55(0.01)
Leverage LEV	0.182	0.134(0.01)	0.194(0.16)
Industry adjusted Leverage IALEV	0.002	-0.007(0.01)	-0.001(0.09)

In the results reported, I find that bidders tend to be large firms compared to the control firms. In Panel A of Table 1, the median market capitalization for acquiring firms is \$1600 million compared to \$572 million for the SIC- based control firms (ASCF) and \$524 million for the randomly selected control firms (ARCF). Acquiring firms are also relatively large in terms of net sales and total assets. The median net sales and total assets for bidders are \$756 million and \$914 million respectively. In comparison the median net sales for ASCF (ARCF) firms was significantly lower at \$454 million (\$545 million) and total assets were \$387 million (\$439 million). The firms in sample are mature companies with an average age of about 13 years.

In Panel B of Table 1, to assess operating performance of bidders some key financial ratios are reported. The bidders have same proportion of cash and cash equivalent to total assets as firms in their industry but it is higher compared to randomly selected control firms which do not engage in acquisition. Cash and cash equivalents as a percentage of total assets is 9% for bidders and ASCF compared to 6% for ARCF firms. While return on assets (ROA) is about 6% for all the firms in sample, return on equity (ROE) for the bidders is significantly higher at 13.45% compared to ROE of 11.5% for the SIC- based control firms from same industry. Next, I report Tobin's q, which has been used in literature as a market based measure of managerial performance and future growth prospect of the firm. I find that bidders are associated with significantly higher q at 1.79 compared to a q of 1.6 for ASCF and 1.39 fro ARCF. These differences are statistically significant. The results so far indicate that bidders are in general better performing firms.

Next, I look at key measures of operating performance which are used later for in-depth analysis. I report operating expenses both as a percentage of net sales and of total assets for all firm categories. Bidders have lower median operating expenses as a percentage of sales of 84.7% as compared to 86.5% for the ASCFs and 87.8% for the ARCFs. The acquiring firms also have lower median operating expenses as a percentage of total assets of 79.7 as compared to 90% for the ASCFs and 106% for the ARCFs. However, bidders have lower asset turnover ratio (STA) compared to control firms. To complement this analysis, I have also reported industry-adjusted values for these operating expense measures (IAOEA and IAOES). Again, bidders have significantly lower industry-adjusted operating expense percentages than the control firms. These preliminary results again indicate that bidders are efficiently managed firms with superior operating performance compared to their peers.

Next, I compare the governance characteristics of bidders with control firms. Bidders are characterized by lower insider holdings when compared to control firms. The median insider holding for bidder is only 6% while it is about 9% for control firms. Bidders have higher institutional holdings of 59% compared to about 54% for control firms. These differences are statistically significant. I also found that acquiring firms on average use higher leverage (higher external monitoring by debt holders) compared to their industry peers. The median leverage for bidders is 18.2% compared to median leverage of 13.4% for the firms in same industry. Similarly industry adjusted leverage for the bidders is higher than that for control firms. These results on governance characteristics suggest that bidders have higher external monitoring from institutions and debt holders and the managers are not entrenched. The higher external monitoring possibly results in better operating performance reported earlier.

## 5. BIDDER OPERATING PERFORMANCE

In this section, I examine whether the bidders with potentially higher agency costs are associated with poor operating performance. If the interests of managers and shareholders are not properly aligned, managers might resort to unprofitable takeovers. If these takeovers are a manifestation of self-serving attempts by the acquirer managements, then such bidders are also likely to have high agency costs. Therefore, I expect bidders with few investment opportunities, excess funds coupled with lower IH (or very high IH), and external monitoring to have poor operating performance (higher OEA). I use following regression specifications:

$$OEA = a_0 + a_1 \text{LNSales} + a_2 \text{Leverage} + a_3 \text{Firm age} + a_4 \text{Cash and equivalent/total assets (CEA)} + a_5 \text{Capital expenditure/Total Assets (CAPEXA)} + a_6 \text{Low } q + a_7 \text{Year dummies} + a_8 \text{Industry dummies} + b_1 \text{Insider Holding (IH)} < 5\% + b_2 \text{IH} > 25\% + b_3 \text{LINST} + b_4 B + b_5 B * \text{IH5} + b_6 B * \text{IH25} + b_7 B * \text{LINST} + \text{error},$$

where  $B = 1$  for bidders and  $0$  for control firms.  $\text{IH} = \text{Insider holdings}$  calculated as the total number of shares held in aggregate by all officers and directors divided by the number of shares outstanding as reported in the proxy statement in the year prior to the acquisition.  $\text{IH5}$  is an indicator variable which is equal to  $1$  if the percentage of insider holdings is less than  $5\%$ , and  $\text{IH25}$  is an indicator variable which is equal to  $1$  if the percentage of insider holdings is greater than  $25\%$ .  $\text{LINST}$  is an indicator variable which is equal to  $1$  if the percentage of institutional holdings is at or below the median at the year-end prior to the bid announcement.

The focus is not on OEA in general, but on that part of the OEA which stems from agency problems. I introduced dummies  $B$ ,  $\text{IH5}$ ,  $\text{IH25}$  and  $\text{LINST}$  in the first regression. In subsequent regressions, I interacted bidder dummy  $B$  with other dummy variables representing agency variables  $\text{IH5}$ ,  $\text{IH25}$  and  $\text{LINST}$ . Therefore, the coefficients of primary interest are  $b_4$  to  $b_7$ . I hypothesize that bidder with low (indicating misalignment of managerial preferences) or very high insider holdings (indicating entrenched managers) and low external monitoring by debt holders would have higher operating expenses. Therefore, I expect a positive sign on coefficients  $b_4$  to  $b_7$ .

Entries in the second-to-last row of Table 2 indicate that these regressions explain  $22\%$  of the cross-sectional variations in operating expenses as a percentage of total assets and  $5\%$  of the variations in industry-adjusted operating expenses as a percentage of total assets, using adjusted R-squares. The last

row shows the total number of bidder firms and their controls for which data was available. Insider holding data was available for 972 bidders. For each bidder, I selected two control firms; therefore, the total number of firms in each regression was 2916 (972 × 3).

**TABLE 2: BIDDER OPERATING PERFORMANCE AND GOVERNANCE CHARACTERISTICS**

In this table, I have reported results from the regression model where the dependent variables are operating expenses scaled by total assets (OEA) and industry-adjusted operating expenses scaled by total assets (IAOEA). Industry and year dummies are included in all the regressions (not reported separately below). Significance is based on the White-adjusted standard errors. P-values are reported next to the coefficients in parentheses.

	OEA		IAOEA	
	Model 1	Model 2	Model 3	Model 4
Intercept	1.282(0.01)	1.334(0.01)	0.422(0.01)	0.492(0.01)
LNSALES	0.091(0.01)	0.068(0.01)	0.072(0.01)	0.049(0.01)
LEVERAGE	0.002(0.01)	0.002(0.01)	0.002(0.22)	0.002(0.25)
LNAGE	-0.015(0.44)	-0.009(0.63)	-0.011(0.59)	-0.008(0.66)
CEA	-0.443(0.01)	-0.465(0.01)	-0.411(0.01)	-0.437(0.01)
CAPEXA	-0.022(0.93)	0.064(0.82)	0.122(0.65)	0.201(0.45)
LOW Q	0.074(0.02)	0.083(0.01)	0.017(0.55)	0.026(0.46)
IH5	-0.175(0.01)		-0.162(0.01)	
IH25	0.006(0.89)		0.014(0.76)	
LINST	0.122(0.01)		0.111(0.01)	
B	-0.195(0.01)		-0.176(0.01)	
B*IH5		-0.31(0.01)		-0.263(0.01)
B*IH25		-0.012(0.86)		-0.039(0.58)
B*LINST		0.037(0.42)		0.038(0.44)
<i>Adjusted R2</i>	0.22	0.22	0.05	0.05
<i>N</i>	2916	2916	2916	2916

The coefficient estimates for the log of sales is positive and significant. The coefficients indicate that the higher the sales, the higher is operating expense which is expected. I notice that firms with higher leverage have higher operating expenses, although the coefficient is not significant. I also note that in general firms with higher cash levels as indicated by CEA tend to have lower operating expenses. This might indicate firms with better operating performance that are generating positive cash flows. The results suggest that in general firms with insider holdings of less than 5% have significantly lower operating expenses. Results also indicate that operating expenses are higher for firms with lower institutional holdings (and, consequently, low levels of external monitoring).

In Model 1, I tested whether bidders have higher operating expenses relative to control firms. Consistent with univariate analysis, I found that bidders, in general, are characterized by lower operating expenses. The coefficient of -0.195 on the dummy variable B in this regression (significant at the 1% level) implies that the OEA is significantly lower for the bidders than that for the control sample. In Model 2, I tested whether the bidders with very low or high insider ownership and low institutional holdings have higher operating expenses. The results indicate that contrary to our hypothesis bidders with lower levels of insider holdings (indicating agency conflict) have lower operating expenses. In Models 3 and 4, I did a similar analysis using industry-adjusted operating expenses as a dependent variable. The results are similar, again indicating bidders in general and, especially, bidders with low insider holdings have lower operating expenses. Overall, the results from Table II suggest that bidders in general irrespective of their governance characteristics have superior operating performance compared to control firms.

## 6. BIDDERS ABNORMAL RETURNS

If a takeover bid is seen as driven by hubris or agency conflict, shareholders of such bidding firms should experience negative announcement period abnormal returns. In this section, I investigate if bidders with

higher operating expenses and low or very high insider holdings (IH5 and IH25), low external monitoring by institutional shareholders and debt holders experience more negative announcement period abnormal returns. I present descriptive statistics for the announcement period cumulative abnormal returns (hereafter CAR) in Table 3, for the entire bidder sample and for several sub-samples.

**TABLE 3: UNIVARIATE ANALYSIS AND BIDDER ABNORMAL RETURNS**

The market model parameters were estimated for bidders over a 250-day period, ending 30 trading days before their initial takeover announcements. The value-weighted CRSP index was used as a proxy for the market. Abnormal returns (CAR(-5,1)) were accumulated from five days before each initial announcement until the day after each initial announcement. To test the null hypothesis that the mean announcement period CARs were equal to zero for the entire sample and all sub-samples, I used the standardized abnormal return test, called Z statistic, consistent with Patell (1976). In addition, to allow for a possible increase in volatility within the event window, I have reported the standardized cross-sectional test introduced by Boehmer, Musumeci and Poulsen (1991), denoted as SCS Z. Finally, to complement the above two parametric tests, I have also reported the generalized sign Z ("GEN SIGN Z"), which tests the hypothesis that the fraction of positive returns is the same during the event window and the estimation period. The \$, \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, 1% and 0.1% levels, respectively, using a 1-tail test.

	<b>N</b>	<b>MCAR</b>	<b>Pos/Neg</b>	<b>Z</b>	<b>SCS Z</b>	<b>GEN SIGN Z</b>
All Bidders	950	-1.53%	391:559	-5.889***	-4.79***	-3.209***
IH5	444	-1.57%	192:252	-4.875***	-4.120***	-1.891*
IH25	182	-0.48%	82:100	0.056	0.043	-0.26
Other	324	-2.07%	118:206	-4.372***	-3.579***	-3.076**
Low IAOEA	475	-2.11%	185:290	-5.382***	-4.253***	-3.677***
High IAOEA	475	-0.93%	215:262	-2.76**	-2.323*	-0.872
Low IAOES	475	-1.73%	186:289	-5.117***	-4.086***	-3.612***
High IAOES	475	-1.31%	212:263	-3.021**	-2.514**	-0.93
Low IALEV	471	-1.67%	196:275	-4.538***	-3.924***	-2.355**
High IALEV	479	-1.37%	202:277	-3.602***	-2.779**	-2.188*

The first column in Table 3 describes sub-sample characteristics, the second column gives the number of firms in each sub-sample and the third column reports mean cumulative abnormal returns CAR(-5, 1). The fourth column indicates number of firms having positive and negative CAR respectively during the period and in the last three columns I report statistics from the test of null hypothesis that the mean announcement period CARs are equal to zero. Out of 972 bidders, 22 firms do not have sufficient data during the estimation period for computing CARs. Consistent with previous research, announcement period abnormal returns are negative and significant for the entire sample and all sub-samples. The mean cumulative abnormal return for the entire sample is -1.53%, which is highly significant at the 1% level. First, I construct three sub-samples based on the level of insider holdings (IH) in the bidder firms. Consistent with my expectations, bidders with IH less than 5% experience more negative mean announcement period abnormal returns of -1.57% compared to -0.48% for firms with insider holdings between 5% and 25%. My primary focus is on operating performance. Therefore, I construct sub-samples based on industry adjusted operating expenses scaled by total assets (IAOEA) and industry adjusted operating expenses by net sales (IAOES). Firms are assigned to sub-samples depending on whether IAOEA/IAOES is above or below the median IAOEA/IAOES. Bidder firms with lower IAOEA experience more negative abnormal returns of -2.11% compared to -0.93% for bidders with higher IAOEA. The results are similar for sub-samples based on IAOES. Bidders with lower IAOES experience more negative abnormal returns of -1.73% compared to returns of -1.31% for bidders with higher IAOES. This suggest market perceive takeovers by better performing firms (lower operating expenses) as waste of resources. Finally, sub-samples based on industry adjusted leverage (IALEV) suggest that bidders with lower

industry adjusted leverage (lower outside monitoring) experience more negative announcement period abnormal returns as compared to bidders with higher industry adjusted leverage. Altogether, the results presented in Table III suggest that investors are skeptical about takeover attempts by the managers of acquiring firms, particularly by firms with lower external monitoring and good operating performance.

To control for effects of deal characteristics on announcement period abnormal returns and based on existing empirical research, I use following regression specifications to investigate if the bidder firms with higher OEA coupled with lower or higher insider holdings IH and low monitoring by debt holders experience more negative announcement period abnormal returns. The results are reported in Table 4.

$$CAR = a_0 + a_1 \text{HOSTILE} + a_2 \text{MULTIB} + a_3 \text{TENDER} + a_4 \text{ALLCASH} + a_5 \text{LNRELSIZE} + a_6 \text{Leverage} + a_7 \text{LOWTQ} + a_8 \text{HIGHAQ} + a_9 \text{Year dummies} + a_{10} \text{Industry dummies} + b_1 \text{OEA} + b_2 \text{CEA} + b_3 \text{CAPEXA} + b_4 \text{IH5} + b_5 \text{IH25} + b_6 \text{LINST} + \text{error}$$

**TABLE 4: MULTIVARIATE ANALYSIS OF BIDDER ABNORMAL RETURNS**

A regression model was used to explain the cumulative abnormal returns for bidders over the trading days (-5, 1) surrounding the date of the takeover announcements. Cumulative abnormal returns (CARs) were measured using the market model. HOSTILE, MULTIB and TENDER are dummy variables equal to 1 for takeovers identified as hostile, having multiple bidders or tender offers, respectively, by SDC. ALLCASH is a dummy variable equal to 1 for transactions where cash is the only consideration paid and is equal to zero otherwise. LNRELSIZE is natural logarithm of relative size. Relative size is the ratio of target-to-acquirer market capitalization (measured three months before the acquisition announcement). LOWTQ is a dummy variable equal to 1 if Tobin's q for the target firms was less than 1. HIGHAQ is a dummy variable equal to 1 if Tobin's q for the acquiring firms was more than 1. CEA is the cash and cash equivalents to total assets ratio. CAPEXA is the capital expenditures to total assets ratio. Industry and year dummies are included in all the regressions (not reported separately below). Significance is based on White-adjusted standard errors. P-values are reported next to the coefficients in parentheses.

	CAR	
	Model 1	Model 2
Intercept	-0.055(0.09)	-0.065(0.05)
HOSTILE	-0.003(0.87)	-0.003(0.91)
MULTIB	-0.016(0.16)	0.015(0.38)
TENDER	0.016(0.11)	0.016(0.14)
ALLCASH	0.018(0.03)	0.018(0.08)
LNRELSIZE	-0.002(0.44)	-0.002(0.46)
Leverage	0.025(0.25)	-0.026(0.19)
LOWTQ	0.008(0.26)	0.008(0.35)
HIGHAQ	-0.017(0.09)	-0.016(0.12)
OEA	0.001(0.97)	
CEA		-0.006(0.78)
CAPEXA		-0.009(0.89)
IH5		0.012(0.17)
IH25		0.015(0.18)
LINST		0.009(0.27)
<i>Adjusted R<sup>2</sup></i>	0.04	0.04
<i>N</i>	874	874

The dependent variable is the cumulative abnormal returns (CAR (-5, 1)). I expect that bidder with higher IAOEA and IAOES, low or high insider holdings (IH), and low external monitoring by debt holders and institutional shareholders would experience higher announcement period abnormal returns. Table IV presents the results of the regression analysis. Entries in the second-to-last row indicate that these regressions explain 4% of the cross-sectional variations in cumulative abnormal returns using adjusted R-squares. The last row shows the number of bidder firms for which data was available. None of the test variables are significant. As evident from the negative and statistically significant value of the intercept,

most of the acquiring firms experience negative announcement period abnormal returns, irrespective of deal specific characteristics or governance characteristics of the bidding firm.

## 7. CONCLUSION

Using a sample of mergers and tender offers made by U.S. firms during the period from 1993 to 2002, I examined the pre-acquisition operating performance and governance characteristics of the bidders. In the sample, I found that bidders in general are large firms compared to their industry peers. I also find that bidders have low insider ownership. Bidders are characterized by high institutional holding and high leverage, indicating higher outside monitoring of the managers. Bidders report superior operating performance as indicated by higher return on equity and lower operating expenses. Consistent with existing research, I found that the takeover announcement period abnormal returns are negative for bidders irrespective of their operating performance and governance characteristics.

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