Do Acquisitions Add Value to Acquirers in India?
A Study on the Sensitivity of the Stock Market and Acquirer Returns

*Maria Evelyn Jucunda M.
** Sharon Sophia

Abstract

"Do acquisitions create value for the acquiring firm's shareholders?" This is an unresolved question in the literature of acquisitions. This study analyzes the value creation of acquirers in India on an acquisition announcement and the sensitivity of the stock markets during an acquisition announcement. Most of the literature in the West concludes that, on an acquisition announcement, only the targets create value, and the acquirers are value destructive. This study uses a sample of 78 acquirers in the manufacturing industry who acquired targets in the calendar year 2012. The study develops four hypotheses and uses the event study methodology (market model/ ordinary least square model). The results of the study suggest that acquisitions are neither value creative to Indian acquirers and those acquirers with prior acquisition experience create more value than single acquirers. Surprisingly, the results show that acquirers using cash generate negative returns, which may be due to the presence of the hubris effect. Another important finding of the study is that the acquirers using stock as a method of payment are no longer value destructive, which is contrary to the literature which states that acquirers using cash are value creative and acquirers using stock are value destructive. This is an important contribution to the existing literature of the method of payment, and it implies that the theories in the West may not necessarily hold well in India, and they need to be reassessed before being implemented in the Indian context.

Keywords: acquisition, takeovers, acquirers, abnormal returns, value creation, event studies, method of payment

JEL Classification : G14, G17, G34

Paper Submission Date : October 22, 2013 ; Paper sent back for Revision :January 12, 2014 ; Paper Acceptance Date : March 19, 2014

*D*o acquisitions create value for the acquiring firm's shareholders?

This has been a question of debate for the past two decades. Extensive research has been done to find out the impact of acquisition on the acquiring firm's shareholders and the target firm's shareholders. The studies used the abnormal returns of the firms to test the value creation for the firms' shareholders. According to Holland and Hodkinson :

> Abnormal returns prior to a bid could result from a number of possible influences: prior disclosure of information concerning either the identity or the timing of the bid, the actions of the bidding company in purchasing shares in the target company, i.e., 'stake building' or significant trading by others using unpublished price sensitive information i.e., insider-trading. (1994, p.467)

* *Research Scholar,* VIT Business School, VIT University (Chennai Campus), Vandalur-Kelambakkam Road, Chennai - 600 127 E-mail: maria.evelyn2012@vit.ac.in
** *Professor,* VIT Business School, VIT University (Chennai Campus), Vandalur-Kelambakkam Road, Chennai: 600 127 E-mail: sharon.sophia@vit.ac.in

Research studies conducted in the West state that an acquisition generates positive returns for the target firms, but the acquirer firms experience negative abnormal returns (Padmavathy & Ashok, 2012; Wansley, Lane, & Yang, 1983). Researchers have showed that an acquisition does not create any value for both the targets and acquirers, and thus; it is not possible to generate abnormal returns (Barnes, 2000; Palepu, 1986). In spite of all the extensive research, we still do not know much about the effects of takeovers on shareholders of acquiring firms in domestic acquisitions. It appears as if researchers have concentrated more on CBAs (cross border acquisitions) when it comes to the value creation aspect of the acquiring firm (Bhagat, Malhotra, & Zhu, 2011; Chari, Ouimet, & Tesar, 2004) and have found that CBAs in general create value for the acquiring firm's shareholders. Evidence suggests that these shareholders earn about an average zero abnormal returns in the announcement of acquisitions, though there is tremendous variation in returns (Fuller, Netter, & Stegemoller, 2002). The value creation for the firms' shareholders was tested measuring for abnormal returns on and around the announcement date. On the whole, previous research studies concluded that it is generally not possible for acquisitions to create value. Even if they do create value, only the target shareholders experience positive value creation and the acquirer shareholders experience negative returns.

The purpose of this study is to analyze the sensitivity of the stock market when the acquirers declare their targets. The motivation of this paper stems from Kale (2004) and Chakarbarti (2008), who found that in an acquisition, Indian acquirers generate positive significant returns. If this is true, it means that the conclusions derived from research studies conducted in the West or in the Western context (developed economies) cannot be implied in India (an emerging economy), which leaves a lot of scope for future research in this area in India. Thus, the objectives of this paper are as follows :

➲ To study the market behavior of an acquirer during an acquisition announcement.

➲ To identify whether acquirers add value or are value neutral or destructive in the Indian scenario.

➲ To study the short-term event window analysis about the sensitivity of the acquirers when they target a company for acquisition.

This study analyzes the above objectives by identifying four hypotheses which test the stock market behavior of acquirers to the method of payment, asset undervaluation/ overvaluation, and multiple or single acquirers. These four hypotheses were derived from the existing literature and are tested in the present study.
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Theory and Hypotheses Development

➲ **Announcement Period Abnormal Returns of the Acquirers:** Research in the West shows that acquisitions do not create significant value for the acquiring firm's shareholders. Almost all the studies have concluded that acquisitions are value creative for targets and are value destructive for acquirers. Kale (2004) analyzed the Indian acquisitions for the period from 1992 -2000, testing for the differences in the value creation patterns in developed and developing markets. He pointed out that some of the factors which led to negative value creation of acquirers in the developed markets may be less relevant in India (an emerging market). According to Kale, the value destructing factors for acquirers in the developed economies such as market for control, presence of multiple bidders, and the post-integration challenges do not exist in India as it is a growing economy and acquisitions are still in its infancy stage. Kale's study revealed that both acquirers and targets in India were found to have positive abnormal returns.

Chakarbarti (2008) also studied acquisitions in India, measuring the effects of acquirer stock returns in India. The results showed that acquisitions increased value for the acquiring firm's shareholders in the short-term, but were value destructive in the long-term horizon. Therefore, motivated by the results of Kale (2004) and Chakarbarti (2008), this study hypothesizes that:

☐ **H1 : An acquisition announcement is either value creative for the acquiring firm's shareholders or has a neutral effect on the acquiring firm's shareholders, but does not create a negative value for the acquirers.**

⊃ **The Impact of Method of Payment on Acquirer Returns:** Extant literature suggests that the method of payment in an acquisition has an important effect on the acquirer returns. Fuller et al. (2002) examined the 1990 - 2000 period of U.S. acquisitions. The main focus of their study was to examine the returns to acquirers making bids for public, private, and subsidiary targets, using cash and stock, and to see how the acquirer returns varied by these characteristics. The study used a sample of 3135 takeovers. According to Fuller et al. (2002), the literature suggests that bidders make cash offers when there is high uncertainty of their firms' value, and make stock offers when there is high uncertainty of the targets' value. They also stated that empirical findings support that bidders who use cash have greater abnormal returns to the bid announcement than those using stock. This means that bidders will use cash when they are certain that their firms' stocks are undervalued; thus signaling their value to the market, whereas they will prefer using stock if they are uncertain about the target's value, as paying cash for an overvalued target may end up in overpaying (this is related to the hubris theory [1]) . Thus, considering the literature review done by Fuller et al., this study hypothesizes that:

⊃ **H2: The method of payment in acquisition does have an impact on the stock market returns of the acquirers.**

However, Chatterji and Kuenzi (2001) offer a contradictory view about the effects of the method of payment on the acquirer's announcement returns. They presented the 'classical hypothesis' and the 'new hypothesis' on the choice of method of payment. They argued that the stock transactions no longer have to be considered a bad signal by the market participants. The study put forth new explanations such as 'investment hypothesis' and 'risk sharing hypothesis' and offered empirical support to these hypotheses. They stated that there has been a shift in the market's reaction to the method of payment. They provided evidence in the rise of a number of stock transactions in the past ten years.

Thus, the present study analyzes the view of Chatterji and Kuenzi (2001) in the Indian scenario. From the literature review and evidences given by Chatterji and Kuenzi, we hypothesize that:

☐ **H3: Acquirers using stocks as a method of payment no longer lead to negative abnormal returns for the acquiring firm's shareholders.**

⊃ **Multiple / Single Acquirers and their Stock Market Behavior:** Do acquirers with prior acquisition experience create more value than single acquirers? The literature in the West states that multiple acquirers generate more value than single acquirers. Capron and Pistre (2002) explored the conditions under which acquirers earned abnormal returns. They found out that multiple bidders generated significant positive returns on an acquisition announcement when compared to single bidders. Fuller et al. (2002) and Kale (2004) found evidence about the performance of multiple acquirers over single acquirers. Acquisitions in India are now going on fire as Indian companies are very much interested in capturing new resources on both the domestic and the international level. Therefore, this study found it necessary to test the difference in value creation of multiple and single acquirers in India. Thus, from the conclusions reached by the previous researchers, this study hypothesizes that:

⊃ **H4 : Acquirers with prior acquisition experience (multiple acquirers) earn significantly positive abnormal returns than what is earned by single acquirers.**

Data, Methodology, Variables, and Justifications

⊃ **Defining Acquirers as per the Study:** The sample and data have been collected from Prowess CMIE (Center for Monitoring Indian Economy). It is a leading business information company. Prowess (CMIE) defines acquirers as:

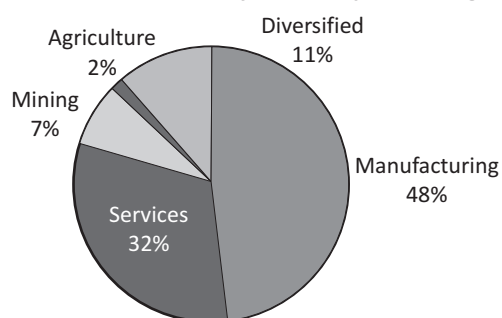**Chart 1. Proportion of each Industry that Acquired Targets in 2012**

Agriculture 2%
Mining 7%
Diversified 11%
Manufacturing 48%
Services 32%

Chart 2. Percentage of Cash to Stock Acquirers

Cash 31%
Stock 69%
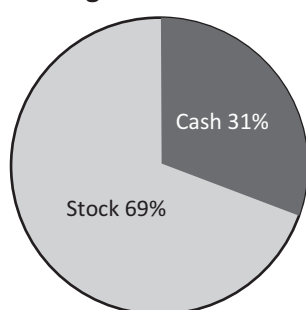
Chart 3. Percentage of Multiple to Single Acquirers

Multiple acquirers 31%
Single acquirers 69%
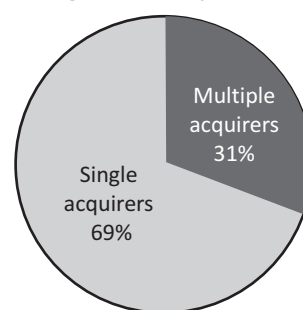
➲ Making substantial acquisition of shares of another company,
➲ Making minority acquisition of shares of another company,
➲ Acquiring assets,
➲ Merging with another company.

The study adopts the definition of Prowess, leaving alone the last classification 'merging with another company' as the study takes into consideration only takeovers and not mergers.

➲ **Sample Selection:** The sample of acquirers was selected from the Prowess CMIE database. To be included in the sample, the firm was required to satisfy the following conditions:

➲ Acquiring firms must be listed on the Bombay Stock Exchange (BSE),
➲ The firms should have targeted or acquired companies in the calendar year 2012.
➲ The firms should have the financial statements and the cash flow statement,
➲ The firms should belong to the manufacturing sector.

BSE was chosen as the number of companies listed on the BSE is more when compared to any other stock exchange in India. There are 1186 acquirers listed on the BSE, where 162 acquirers acquired companies in the calendar year 2012. When filtered for firms in the manufacturing sector and data availability criteria, a total of 78 acquirers remained fit for the study. The year 2012 was chosen so that the analyses captured the most recent and latest changes in the acquirers' value creation pattern. The properties of the sample and the justifications for selecting the same are discussed in the next section.

Table 1. Proportion of Acquirers in 2012 in each Industry under the Manufacturing Sector

Industry	Classification	Company Type	Total No. of Acquirers
Food & Beverage	Food Product	Vegetable Oil	1
	Sugar	Sugar	3
	Tea		2
	Beer & Alcohol	Industry made foreign liquor	2
Textile	Cotton & textile	Cotton & Blend yarn	1
		Synthetic fiber	1
		Textile processing	1
		Other textiles	3
Chemicals		Inorganic Chemicals	1
		Pesticides	1
		Drugs & Pharmaceuticals	8
		Organic chemicals	4
		Other chemicals	2
		Paints & Varnishes	2
	Plastic products	Plastic sheet & sheets	1
		Plastic packing goods	1
	Rubber	Rubber & rubber products	2
	Tobacco products	Cigarette	1
	Cement		4
	Ceramic Products	Ceramic tiles, pavings & flags	4
Non-Metallic minerals		Gems & Jewellery	3
		Granite	1
Metal & metal products	Ferrous metal	Steel	2
		Iron	1
		Casting & Forging	2
		Steel tubes & pipes	1
		Metal product	5
	Non-Ferrous metal	Aluminium	1
Machinery	Non-electrical machinery	General purpose machinery	1
		Machine tools	2
		Other industrial machinery	5
	Electrical machinery	Misc. electrical machinery	4
		Computers, Peripherals	0
		Storage device	0
		Other electronics	2
Transport equipment	Automobile	Automobile ancillary	3
Total			**78**

Table 2. Proportion of Acquirers in each Division According to their Mode of Acquisition and Type of Acquisition

The Category of Acquirers	The Number of Acquirers
a)Acquirers using cash as a method of payment	24
b)Acquirers using stock as a method of payment	54
Total no. of acquirers	**78**
a)Multiple Acquirers	24
b)Single Acquirers	54
Total no. of acquirers	**78**
a)Acquirers acquiring private targets	27
b)Acquirers acquiring public targets	51
Total no. of acquirers	**78**

Chart 4. Percentage of Acquirers Acquiring Public to Private Targets

Public Acquirers 35%

Private Acquirers 65%
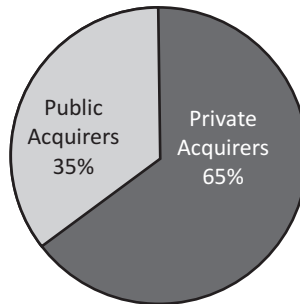
Properties of the Sample and Justifications

➲ **Justification for Selecting the Manufacturing Industry:** The sample includes firms only from the manufacturing sector as a greater number of acquisitions happened in this sector in the year considered for the present study (i.e. 2012). It can be inferred from the Chart 1 that the manufacturing sector contributed to 48% of the acquirers in 2012; thus, the manufacturing sector was selected as it contributed to the majority of the acquisitions when compared to other sectors. The Table 1 summarizes the sectored classification of acquirers in 2012 from the manufacturing industry, which is included in the sample. The Table 2 summarizes the division of the number of acquirers analyzed in each category.

The Chart 2 depicts that the percentage of cash acquisitions in the sample was 31%, and that of stock acquisitions was 69 %. This shows the increasing trend in stock acquisitions, which is surprising as the stock acquisitions are considered to be value destructive (bad signals) for acquiring firm's shareholders in the classical theories on the method of payments. The Chart 3 shows that the percentage of multiple acquirers in 2012 was 31%, and that of single acquirers was 69%. The sample shows that, in spite of the growth in acquisitions in India, the number of multiple to single acquirers is still comparatively less. The Chart 4 shows that the percentage of acquirers acquiring public targets was 35%, and that of acquirers acquiring private targets was 65%. This shows that the acquirers were more interested in private targets than in public targets.

➲ **Methodology :** This study uses a short-term event window of the estimation period -15 to +15 days around the announcement period. The CAR (cumulative abnormal returns) was observed for (-1, +1), (-2, +2), and (-5, +5) around the announcement. Brown (1985) presented various measures in an event study methodology to test for excess returns. They were: Mean adjusted returns, market adjusted returns, and ordinary least square market

model. This study adopts the market model for calculating the abnormal returns from Chatterji and Kuenzi (2001) for its popularity in the literature.

The market model of Chatterji and Kuenzi (2001) assumes that the stock returns are determined by following the ordinary least square equation:

$$NR_{jt} = \alpha_j + \beta_j R_{mt} + \varepsilon_{jt} \quad \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots \quad (1)$$

where,

NR_{jt} = normal rate of return for company j on day t,
R_{mt} = rate of return for market index m on day t,
ε_{jt} = error term for company j at time t.
The coefficients α_j and β_j are the ordinary least squares parameters of the intercept and slope respectively for company j.

The abnormal return AR_{jt} for the company j will then be calculated as:

$$AR_{jt} = R_{jt} - (\alpha_{j} + \beta_j R_{mt}) \quad \dots\dots\dots\dots\dots\dots\dots\dots\dots \quad (2)$$

where,

AR_{jt} = Abnormal return for company j on day t,
R_{jt} = Return for company j on day t,
α_j = Estimate of OLS parameter of intercept,
β_j = Estimate of OLS parameter of slope,
R_{mt} = Rate of return of market index m on day t.

The cumulative abnormal returns are calculated using:

$$CAR_{(t,\,T)} = \text{?}^{\,T}_{\,t}\, AR_t \dots\dots\dots\dots\dots\dots\dots\dots\dots \quad (3)$$

where,

AR_t = average abnormal return on day t,
t, T = Accumulation period.

Table 3. List of Variables used in this Study

Continuous variables	
CAR	Cumulative Abnormal Returns (-1, +1)
Total assets/ Total liabilities	On the latest fiscal year before the acquisition
Market Capitalization	No. of shares outstanding to purchase price (on the latest fiscal year before the acquisition)
Torbin's Q	Market to book ratio
ROCE	Return on capital employed
RONW	Return on net worth
ROTA	Return on total assets
Binary Variables	
Multiple/Single Acquirers	1 if the acquirer has acquired more than one target in the year 2012 and 0 if it is a single acquirer.
Cash/ Stock Acquirers	1 if it is a stock acquisition and 0 if it is a cash acquisition.
Related/ Unrelated Acquirers	1 if related acquisition is performed and 0 if it is an unrelated acquisition.
Private/ Public target acquirers	1 if the acquirer has acquired a private target and 0 if the acquirer has acquired a public target.
CBA/ Domestic Acquirers	1 if the acquirer has acquired a cross-border target and 0 if it is a domestic acquisition.

Examining the CAR of a set of sample securities will be used to look at whether or not the values of the average residuals, starting from the day of cumulation and up to a specific point, are systematically different from zero (Chatterji & Kuenzi, 2001).

⊃ **Justification on the Methodology Used:** The market model of event study methodology was used based on the popularity of the model in the literature. Studies like the ones conducted by Chatterji and Kuenzi (2001) and Brown (1985) compared all the three models for measuring abnormal returns and found the market model to be superior in measuring abnormal returns (as compared to the other models).

Table 4. Abnormal Returns for (-15,+15) Day Window

Day	Mean Abnormal Returns (%)	Median Abnormal Returns (%)	t - test
-15	0.2718	-0.2393	0.497
-14	0.1975	0.1579	0.588
-13	-0.2379	0.2207	-0.353
-12	0.2685	-0.2433	0.782
-11	-0.6162	-0.3209	-1.471*
-10	-0.4839	-0.2666	-1.408*
-9	-0.2161	-0.0972	-0.797
-8	0.1402	-0.0643	0.435
-7	-0.21	-0.2606	-0.735
-6	-0.2266	-0.1842	-0.878
-5	-0.2398	-0.4015	-0.975
-4	0.0202	-0.1648	0.07
-3	-0.0507	-0.2464	-0.145
-2	-0.2348	-0.1186	-1.037
-1	0.4989	0.3346	1.301**
0	0.269	0.2408	0.878
1	0.0644	-0.2048	0.158
2	-0.0602	-0.5443	-0.172
3	0.2029	-0.0699	0.512
4	-0.1325	-0.005	-0.402
5	-0.0576	0.2045	-0.201
6	-0.433	-0.197	-1.267**
7	-0.3372	-0.4436	-1.177**
8	0.509	0.0625	1.499*
9	0.245	-0.0106	0.671
10	0.0476	-0.0817	0.157
11	-0.1258	-0.234	-0.546
12	-0.4308	0.0574	-1.520*
13	-0.3085	-0.2455	-1.104**
14	0.0969	-0.1533	0.322
15	0.1377	-0.3643	0.484

*15% significance, **20% significance

Table 5. Cumulative Abnormal Returns (Market Model, *N* =78)

CAR	Mean (%)	Median(%)	*t* -test
(-1,+1)	1.3655	0.576	1.464*
(-2,+2)	1.0842	-0.434	0.874
(-5,+5)	0.3907	-0.7973	0.217

*15% significance

CAR (-1,+1): CAR during the 3 days around the acquisition announcement.

CAR (-2,+2): CAR during the 5 days around the acquisition announcement.

CAR (-5,+5): CAR during the 11 days around the acquisition announcement.

Table 6: CAR for 5 days Around the Acquisition Announcement for Multiple Bidders (*N* = 78)

CAR	Mean(%)	Median(%)	*t*
(-3,-2)	-0.579	0.01	-0.431
(-2,-1)	1.8303	0.5048	0.995*
(-1,0)	1.6209	0.6938	0.91*
(0,1)	0.0213	0.0472	0.011
(1,2)	-0.7034	-1.2373	-0.381

*30% significance

CAR is calculated for each of the 2 consecutive days for 5 days around the acquisition announcement.

Table 7. CAR for 5 days Around the Acquisition Announcement for a Single Bidder (*N* = 78)

CAR	Mean(%)	Median(%)	*t*
(-3,-2)	-0.3718	-0.5123	-0.722
(-2,-1)	0.1835	-0.0933	0.384
(-1,0)	0.7067	0.1852	1.21*
(0,1)	0.2756	-0.0208	0.481
(1,2)	-0.0833	-0.6191	-0.139

*20% significance ; CAR is calculated for each of the 2 consecutive days for 5 days around the acquisition announcement.

⮷ **Variables:** The study used the variables described in the Table 3 to test the stock market behavior of acquirers using regression analysis. These variables were selected based on their popularity in the literature and their influence on the stock market.

Analysis and Results

⮷ **Announcement Period Abnormal Returns:** The Table 4 summarizes the abnormal returns on a (-15,+15) day window and the Table 5 summarizes the CAR on a (-1,+1), (-2,+2), and (-5,+5) day around the acquisition announcement. The results are significant at the 15% level. The acquirers were selected from the BSE stock index belonging to the manufacturing industry for the calendar year 2012. The abnormal returns for (-15,+15) are the 31 days abnormal returns surrounding the announcement period including the event day '0'. The CAR (-1,+1), (-2,+2), and (-5,+5) are the cumulated abnormal returns for the 3 days, 5 days, and 11 days surrounding the announcement period. The abnormal return on the announcement day is 0.26%. The CAR for the three days

**Table 8. CAR for 5 days Around the Acquisition Announcement
for Cash Acquirers (N = 78)**

CAR	Mean (%)	Median(%)	t
(-3,-2)	-0.4429	-0.5651	-1.996*
(-2,-1)	-1.2324	-0.6871	-1.646**
(-1,0)	-1.7024	-2.3983	-1.867**
(0,1)	-0.5697	-0.8183	-0.43
(1,2)	1.0585	0.030	1.201***

*5% significance ; **10% significance ; ***20% significance

CAR is calculated for each of the 2 consecutive days for 5 days around the acquisition announcement.

Table 9. CAR (-2,+2) for Stock Acquirers

CAR	Mean(%)	Median(%)	t
(-3,-2)	-0.4408	-0.5239	-1.004*
(-2,-1)	0.0504	-0.438	0.123
(-1,0)	0.4849	0.1852	0.977*
(0,1)	0.3284	-0.1325	0.732
(1,2)	0.4283	0.4392	0.773

*30% significance

CAR is calculated for each of the 2 consecutive days for 5 days around the acquisition announcement.

(-1,+1) around the acquisition announcement is 1.36%, which is significantly positive at 15%. This proves our hypothesis H1 and thus, it is accepted. This shows that acquirers create a neutral effect on the Indian stock market.

The Table 6 and Table 7 summarize the CAR for a window of 5 days around the acquisition announcement for multiple and single bidders. The multiple bidders are those who had targeted more than one company in the calendar year 2012. The multiple and single bidders were selected from the BSE stock index belonging to the manufacturing industry. The results are summarized for each of the 2 consecutive days around the announcement for 5 days. The CAR on the announcement day is 1.6% for multiple bidders, that of single bidders is 0.6%, which is comparatively lower than that of multiple bidders. This proves our hypothesis H4.

The Tables 8 and 9 summarize the CAR for each of the 5 days around the acquisition announcement for bidders using cash and stock as a method of payment. The acquirers using cash are the acquirers who use pure cash and the stock acquirers are those using stock for substantial and minority acquisition of shares. The cash and stock acquirers were selected from the BSE stock index belonging to the manufacturing industry for the calendar year 2012. The CAR was calculated for each of the 2 consecutive days for 5 days around the acquisition announcement. The difference between the CAR between both stock and cash acquirers proves our hypothesis H2 that there is a significant difference in the value creation of acquirers using cash and acquirers using stock. The CAR for bidders using stock as a method of payment on the announcement day is 0.48%, which is not a negative return. This proves our hypothesis H3 that acquisitions using stock as a method of payment no longer leads to negative abnormal returns. This finding provides a lot of scope for future research. Also, cash acquirers were seen to have negative returns, which might be due to the hubris effect.

Discussion

The above results on the CAR of acquirers for (-1,+1), (-2,+2), and (-5,+5) respectively proves the hypothesis H1. Though our hypothesis is proved, this result may contradict the findings of the previous research studies, like the

ones conducted by Kale (2004) and Chakarbarti (2008), who found that Indian acquirers earn significant positive abnormal returns in a short term horizon. One possible explanation of our results could be the economic downturn in 2012. The previous studies summarized their results from a group of acquirers belonging to various years, whereas this study uses only the acquirers of the calendar year 2012. This could be another reason for the variation in results.

When separated for multiple and single bidders, we found that the CAR of single bidders is significantly lower than that of multiple bidders, thus proving our hypothesis H4. This shows that not only in the West, but acquirers with prior experience generate comparatively more CAR than what is generated by single acquirers. This proves the prominence of acquisition and its growth in India. This contradicts the statements of previous researchers that India is in its nascent stage in acquisitions, where competitors or too many multiple acquirers do not exist. One other important finding of our research is about the method of payment. As expected, the results showed significant differences in the CAR of cash and stock acquisitions, proving our hypothesis H2. This tells that us there is a significant difference between the acquirers using cash and those using stock. Surprisingly, acquirers using cash were found to generate negative returns ; this finding contradicts literature which states that acquirers using cash generate significant positive abnormal returns. This implies that cash acquisitions are no longer seen as good signals. This might be due to the hubris effect (put forward by Roll, 1986), where the over assumption of bidders about their targets results in negative gains for the shareholders of the acquiring company. But the important finding is that stock acquirers were not seen to have negative CAR around the acquisition announcement. This proves our hypothesis H3.

This result is contrary to the classical theory which suggests that acquirers using cash will generate positive abnormal returns and those using stock will generate negative abnormal returns. This tells us that the classical theory on the method of payment does not hold well in India. This means that acquisitions using stock are not considered as a bad signal in India. This is an important finding in the literature of method of payment in acquisitions which leaves ample scope for future researchers. This also tells us that the theories generated in the West may not necessarily be true in the Indian context . Thus, using the univariate testing of CAR, we found certain important findings in the literature of acquirer returns and method of payment. The next section focuses on the multivariate testing of our variables (summarized in the Table 3) using regression analysis.

Table 10. Regression Results

Variables	BETA	t
Constant	**0.182**	**0.041**
multiple/single	0.252	1.368**
cash/stock	0.118	0.61
related/unrelated	-0.061	-0.3
private/public	-0.028	-0.133
market capitalization	0.077	0.21
Total assets/total liabilities	0.069	0.272
Torbin's Q	0.049	0.177
RONW	-0.125	-0.316
ROCE	0.052	0.076
ROTA	-0.12	-0.232

*20% significance

The Dependent variable is CAR (-1,+1). Other variables are defined in the table.

Table 11. Bivariate Correlation of the Variables used

	1	2	3	4	5	6	7	8	9	10	11
					Correlations						
(-1,+1)	1										
Multiple/single	.221*	1									
Cash/stock	0.17	-0.049	1								
Related/unrelated	-0.131	0.088	-0.225	1							
Private/public	-0.096	0.171	-0.287	0.173	1						
Market capitalization	0.077	-0.099	0.129	-0.145	-0.217	1					
TA/TL#	0.122	-0.075	0.205	-0.092	-.376*	.651**	1				
Torbin's Q	0.04	0.016	0.12	0.057	0.039	.688**	0.297	1			
RONW	-0.138	0.032	-0.082	0.262	0.151	.381*	0.115	.490**	1		
ROCE	-0.112	-0.059	-0.006	0.252	0.108	.571**	0.264	.604**	.876**	1	
ROTA	-0.111	-0.028	-0.019	0.219	0.112	.551**	0.273	.550**	.815**	.938**	1

*correlation significant at the 0.05 level (2-tailed) ; **correlation is significant at the 0.01 level (2-tailed)

Total Assets/ Total Liabilities

Regression Results

From univariate analysis, the study now focuses on multivariate analysis. The study adopts regression analysis (Table 10) to test the effects of the valuation variables mentioned in the Table 3 on CAR (-1,+1), where the CAR is cumulated for the three days around the acquisition announcement. The variables for all the 78 acquirers from the BSE stock index were tested. The results of the regression are almost the same as that of the univariate analysis.

The results provided in the Table 10 are significant for multiple acquirer returns which are significant at the 20% level, which tells us that there is a significant effect on the acquirers' prior acquisition experience with the CAR. No other factors in the analysis are significant as that of multiple/ single acquirers. The study draws a bivariate correlation matrix using the variables listed in the Table 3 against the CAR (-1,+1), where the CAR is calculated for the 3 days around the acquisition announcement, and the results of the analysis are summarized in the Table 11. The results show the significance of the listed variables. CAR is found to be significant with multiple/ single acquirers, which again is the same as regression analysis. The significance levels of the other variables with each variable are demonstrated in the matrix (Table 11).

Research Implications

The findings of this study are new and have a significant impact in the literature of acquisitions in India. Most of the studies in the literature have shown that acquirers create negative abnormal returns on an acquisition announcement, but the present study shows that Indian acquirers have a neutral effect on an acquisition announcement. This shows that results obtained by authors in the West cannot be directly implemented in India; the results have to be tested again in the Indian context. Another major finding is that stock acquirers no longer lead to negative returns. This is another crucial finding which contradicts the literature and theories on stock acquirers. This could be due to the upcoming trend of acquisitions in India and reiterates that Western theories need to be reassessed in the Indian context.

Furthermore, the study finds that cash acquisitions do not lead to positive abnormal returns. This is also a new finding in literature as most of the studies have shown that cash acquirers gain positive abnormal returns. Two possible explanations for this finding could be the presence of the 'hubris effect' in Indian acquisitions or the economic downturn. Though the findings of this study contradict the literature, it shows the increase of acquisition

activities in India and the need for more extensive research in the area of acquisitions in India.

Conclusion

The study aimed to find out whether the acquirers add value; are value neutral / value destructive in the Indian stock market using 78 acquirers that had either targeted/ acquired targets in 2012 in the manufacturing sector. The study framed four hypotheses to test the objectives of the study and also for ascertaining the acquirer returns of multiple/ single acquirers and cash/stock acquirers. The results show that acquirers have had a neutral effect on the Indian stock market. This result contradicts the results obtained by Kale (2004) and Chakarabarti (2008), who showed that acquirers generate significant positive returns. The study also finds that multiple bidders earn significantly higher abnormal returns than single bidders (the results for the same were significant for the regression analysis). This shows the prominence and growth of acquisitions in India. One more important finding of this study is that acquirers using stock as a method of payment no longer receive negative returns. This is an important finding as it nullifies the classical theories in the method of payment literature, which suggest that acquirers using stock will receive negative returns. This also proves that all theories generated in the West or obtained from studies conducted in the Western context may not necessarily hold well in India. Furthermore, we find that cash acquirers obtained negative returns, which is again in contrast to theories generated in Western literature. This result might be due to the hubris effect as proposed by Roll (1986), which states that the over presumption of bidders about the targets will lead to overpayment for the targets leading to negative returns.

Limitations of the Study and Scope for Future Research

One limitation of the study is that it only considers the acquisitions that happened in 2012. Future researchers can study acquirers for a greater number of years; wherein few other variables may seem significant. The finding that stock acquisitions lead to non-negative returns may be studied more intensely. Researchers in the future can work towards unveiling the reasons for the sudden shift in the returns of stock acquisitions in India. Though the study uses various variables, it does not create an event window for the variables (which is another limitation of the present study). Future researchers can draw separate event windows to test the difference in abnormal returns of CBA and domestic acquisitions and private/public target acquirers.

Notes

[1] Roll (1986) put forward the hubris hypothesis of M&As. According to this theory, if there are actually no aggregate gains in takeover, the phenomenon depends on the overbearing presumptions of bidders that their valuations are correct. If there are absolutely no gains available to corporate takeovers, the hubris theory states that the average increase in the target firm's market value should then be offset by the average decrease in the value of the bidding firm. The central prediction of the hubris theory is that the total combined takeover gain to the target and bidding firms' shareholders is non-positive.

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