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## Market Response to Corporate Restructuring Strategies: Evidence from Indian Cross-Border Acquisitions

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### Abstract

*Corporate restructuring now constitutes an important component of modern business enterprises to create new synergies to face the competitive environment and changed market conditions. This paper aims at examining the short-run performance of Indian acquiring firms involved in cross-border acquisitions (one of the common forms of corporate restructuring) over a period of 2013-2015. Event study methodology has been employed to assess the magnitude of value creation or destruction of the acquiring companies. The results indicate that Indian firms experience statistically significant positive abnormal returns on the day of acquisition announcement. Moreover, cumulative average abnormal return (CAAR) comes out to be positive and significant in all multi-day event windows observed. This work is a modest attempt to add to the existing literature on cross-border acquisitions by examining the short-run performance of acquiring firms from emerging economy.*

**Keywords:** Corporate restructuring, Cross-border acquisitions, Emerging economy, Event study, Stock market response.

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### 1. Introduction

Corporate restructuring constitutes an important strategic component of modern business enterprises. Competition and free trade have become the buzzwords since the liberalization of national capital markets. This requires steady restructuring and reorganization of businesses to generate positive synergies to cope up with the competitive and changing economic conditions.

Restructuring can be executed internally by means of capital budgeting decisions, divestment, demerger etc. and externally through mergers and acquisitions (M&A), joint venture, strategic alliances. The focus of this paper is to examine cross-border acquisitions (CBA), one of the most common forms of corporate restructuring.

CBA has become an indispensable aspect of corporate strategy for international expansion. Steep increase in volume and value of foreign investments can partly be attributed to economic liberalization, favorable government policies and tax incentives as well as partly to unprecedented technological advancement and globalization. Fierce competition, highly volatile financial markets and informed investors have increased the efforts of the companies to deliver superior performance and value creation for their shareholders. Thus, corporate restructuring (through

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CBA) has enabled organizations to be proactive in identifying and responding to various opportunities and challenges, thereby dispensing competitive advantage in the global market.

CBA is an essential business strategy that empowers companies to expand their existing operations to new economies, advance their current skills, and venture into similar markets (Wang and Xie, 2009; Bhagat et al., 2011; Rani et al., 2015). Corporate restructuring through unconventional means of international expansion (i.e., CBA) has the associated benefits of risk diversification (Larsson and Finkelstein, 1999; Shimizu et al., 2004), improved scientific prowess, synergy and integrating benefits of internalization (Shimizu et al., 2004).

In the last two decades, CBA has become the most preferred mode of entry for developing economies to enter foreign markets (Aulakh, 2007; Bhagat et al., 2011). India witnessed an increased share in the global outward FDI since the Indian government took unprecedented steps to liberalize the economy in the early 1990s. Removal of different bureaucratic hurdles and socialist stigma of self-reliance have allowed Indian firms to acquire foreign firms to fulfill their international aspirations (Ahluwalia, 2002). This gave a big boost to the Indian corporate sector to pursue overseas acquisitions in order to become globally competitive.

According to UNCTAD (2011), amongst all emerging economies, India has been vigorously involved in foreign direct investments (FDI). In the decade of 2000, India reported the maximum number of CBA. Moreover, CBA constituted the larger part of overseas investments. These developments have given an impetus to the present research which aims to analyze the impact of CBA announcement on the equity price of the acquiring firm and to assess if CBA would be wealth creating or destroying proposition in the short-run.

CBA by Indian companies is primarily stimulated by the desire to seek key strategic resources including proprietary information, intangible know-how and distribution channels etc., which are non-tradable by their very nature; these may not be available in the home country to enhance their competitiveness relative to their domestic counterparts (Gubbi et al., 2010). In CBA, a concoction of these strategic resources with different regulatory and operational environment of the target nation offers various opportunities and threats; leading to wealth creation for acquirers (Mittal & Jain, 2012).

Owing to limited bargaining power, multinational firms from emerging countries, such as India, face greater hurdles not only at the point of entry but also in the post-integration of operations (Gubbi, 2015). Such acquirers, most likely, always end-up paying higher premiums in overseas acquisition transactions, thereby causing a dent in the wealth of the shareholders (Narayan and Thenmozhi, 2014).

For unequivocal understanding, remaining paper is delineated in the following manner. Section 2 presents the review of existing literature and hypothesis of the study. Section 3 describes the data, sample and methods employed in the study. Section 4 comprised of the results and discussions followed by Section 5, containing the conclusion derived from the study.

## 2. Literature Review

The extant literature has analyzed the valuation effect of CBA announcement on the bidding firms. But findings of these studies have largely remained inconclusive, thereby leaving a gap in the literature which needs to be bridged through further research.

Gubbi *et al.* (2010); Rani *et al.* (2015) have observed statistically significant positive abnormal returns (AR) for the Indian acquirers. Rani *et al.* (2014); Duppati and Rao (2015) have provided empirical evidence of positive stock market reaction post CBA announcement by Indian companies. In multiple-country context, Bhagat *et al.* (2011) have observed significant positive

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AR of 1.09% on the day of CBA announcement by the bidding firms in developing economies while, Aybar and Ficici (2009) and Narayan and Thenmozhi (2014) have cited noticeable deterioration in terms of shareholders' wealth of the acquiring companies. Few studies (Corhay and Rad, 2000; Uddin and Boateng, 2009; Cakici *et al.*, 1996) have examined value implications of overseas acquisitions for the bidding firms from developed capital markets and reported statistically significant negative returns. Some of the authors (Aw and Chatterjee, 2004; Conn *et al.*, 2005; Kohli and Mann, 2012; Rani *et al.*, 2014) have indicated mixed results while assessing and comparing the wealth effects for the acquirers from both domestic and international acquisitions.

Even though substantial studies exist on CBA, these have not been able to satisfy the curiosity of various stakeholders viz., researchers, practitioners, academicians, policy-makers and corporate managers with regard to the short-run performance of this restructuring strategy. Results, in terms of the value of acquiring firms, have largely been inconsistent. Hence, the present study is likely to contribute to the extant literature, as most of the studies are based on samples drawn from developed countries.

**Methodology**

Event study methodology has been applied to measure the valuation impact of CBA announcement on the acquiring firms. As per Mackinlay (1997), the impact of any unexpected corporate event on the valuation of the firm can be quantified by observing changes in its equity price over a relatively short period of time. In this study, CBA announcement is the event of interest.

The expected/normal returns have been computed using an estimation period of 90 (-120,-31) days prior to the acquisition event (Bhagat *et al.*, 2011). The abnormal return ( $AR_{it}$ ) for stock 'i' on day 't' is obtained by deducting the normal return ( $E(R_{it})$ ) from the actual return ( $R_{it}$ ) earned during the event window.

$$AR_{it} = R_{it} - E(R_{it}) \tag{1}$$

For computing normal returns, market model as suggested by Fama (1976) and employed by Brown and Warner (1985) and Kashiramka and Rao (2014) has been used. It explains how return on stock 'i' varies with the return on market index where the stock is listed as follows:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \epsilon_{it}, \text{ where } t = -120 \dots -31 \tag{2}$$

In the above equation,  $\alpha_i$  &  $\beta_i$  are the market model parameters indicating the constant term and market beta of the 'i<sup>th</sup>' stock respectively.  $R_{mt}$  is the return on market index where the securities are listed (Nifty 500) and  $\epsilon_{it}$  is an error term.

The parameters are estimated by regressing security return on the market return using time-series data of the estimation period that excludes and precedes the event window. The estimated parameters are then used in the calculation of abnormal returns during the event window.

$$AR_{it} = R_{it} - (\hat{\alpha}_i + \hat{\beta}_i R_{mt}), \text{ where } t = -8 \dots +8 \tag{3}$$

The average abnormal return ( $AAR_t$ ) for each day 't' in the event window is calculated as follows:

$$AAR_t = \frac{1}{N} \sum_{i=1}^N AR_{it} \text{ where } N \text{ is the number of acquisition events} \tag{4}$$

The cumulative abnormal return (CAR) for each stock 'i' is computed as follows:

$$CAR_i = \sum_{t=t_1}^{t_2} AR_{it} \quad (5)$$

The cumulative average abnormal return (CAAR) is calculated as:

$$CAAR_{t_1,t_2} = \sum_{t_1}^{t_2} AAR_t \quad (6)$$

Two null hypotheses to be tested are that there are no AAR as well as no CAAR on the announcement of CBA. Further, this work uses one parametric (t-test) and one non-parametric (generalized sign test) to test the statistical significance of abnormal returns.

### Cross-Sectional t-test (t)

Brown and Warner (1985) have delineated the process to test the statistical significance of an overall price impact of CBA. According to them, the test statistic is the ratio of abnormal return on day 't' to its estimated standard deviation. The test statistics for AAR on day 't' during the event window and CAAR for the event window ( $t_1, t_2$ ) are computed using the following equations respectively:

$$t_{AAR} = \frac{AAR_t}{\tilde{S}(AAR_t)} \quad (7)$$

$$t_{CAAR} = \frac{CAAR_t}{\sqrt{t_2 - t_1 + 1} \tilde{S}(AAR_t)} \quad (8)$$

$$\text{where } \tilde{S}(AAR_t) = \sqrt{\frac{\sum_{t=-31}^{-120} (AAR_t - \overline{AAR_t})^2}{N-2}} \quad (9)$$

### Generalized Sign Test ( $Z_G$ )

The measure suggested by Cowan (1992) relies on the ratio of positive CAR to negative CAR during the event window. The null hypothesis to be tested is that there is no difference in the proportion of positive returns both in the event window and during the estimation period. It is recommended not to accept the null hypothesis when the count of positive CAR in the event window surpasses the count expected in the estimation period. The ratio ( $\hat{p}$ ) of positive CAR in the estimation period (90 days) is estimated as:

$$\hat{p} = \frac{1}{n} \sum_{i=1}^n \frac{1}{90} \sum_{t=1}^{90} S_{it} \quad (10)$$

Where  $S_{it} = \{1 \text{ if } AR_{it} > 0 \text{ or } 0 \text{ if } AR_{it} \leq 0\}$

The following statistic has an approximate unit normal distribution with parameter  $\hat{p}$  :

$$Z_G = \frac{w - n\hat{p}}{\sqrt{n\hat{p}(1-\hat{p})}} \quad (11)$$

Where w = number of securities having positive CAR in the event window

### 3. Data and Sample Size

The study is based on CBA announcements made by Indian enterprises during 2013-2015. CNX Nifty 500 constituents have been taken as the subject for the study. Initial data on CBA deals have been collected from Bloomberg database. Announcement dates have been manually

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verified from the archives of corporate announcements on the BSE. Stock return data have also been collected from Bloomberg database. Firms, with event windows clean of any confounding effect or contamination of information as defined by McWilliams & Siegel (1997), have been the subject of study.

*Data description:* Sample data points out that most of the CBA deals have been executed in the Services Sector constituting around 64% of total acquisitions; followed by 35% in the Manufacturing sector. Out of total sample of 58 CBA, 19 deals were announced in 2013 that increased to 23 and 26 in 2014 and 2015 respectively. Overall, Indian companies are making rigorous efforts to make their presence felt in the global business world.

#### 4. Empirical Results

Table 1&2 contain data related to returns to the shareholder of the acquiring companies which are earned over and above the expected return from CBA over multi-days event windows. While Table 1 indicates results of AAR, CAAR is presented in Table 2. Findings of parametric and non-parametric tests performed to gauge the statistical significance of returns have also been reported. Further, it also provides the ratio of positive and negative CAR observed during different event windows.

**Table 1: Average Abnormal Returns (AAR) During 17 (-8, +8) Days Event Window**

Event Window	AAR Value (%)	Positive: Negative AAR	t-test	Z <sub>G</sub>
-8	0.01	23:35	0.0247	-1.0964
-7	0.20	25:33	0.5481	-0.5701
-6	0.19	29:29	0.7758	0.4824
-5	0.00	24:34	-	-0.8333
-4	0.50	30:28	1.9533***	0.7456
-3	-0.21	24:34	-0.9885	-0.8333
-2	-0.03	23:35	-0.1467	-1.0964
-1	0.41	31:27	1.4457	1.0087
0	0.61	33:25	1.7649***	1.535
1	0.8	33:25	1.7986***	1.535
2	0.13	25:33	0.4282	-0.5701
3	-0.13	23:35	-0.473	-1.0964
4	0.22	30:28	0.5242	0.7456
5	0.05	32:26	0.2066	1.2718
6	-0.03	27:31	-0.0863	-0.0439
7	0.08	26:32	0.2733	-0.307
8	-0.04	26:32	-0.1541	-0.307

\*, \*\* and \*\*\* indicate significance at 1%, 5% and 10% respectively

From Table 1, it is evident that on the day of CBA announcement shareholders earn positive AAR of 0.61% and the proportion of stocks with positive returns to negative returns is 33:25; in other words, the majority (57%) of companies experienced positive abnormal returns.

**Table 2: Cumulative Average Abnormal Returns (CAAR) Over Multi-Days Event Windows**

Event Window	CAAR Value (%)	Positive:Negative CAR	t-test	Z <sub>G</sub>
(-1, 1)	1.82	39:19	2.454**	3.1138*
(-2, 2)	1.92	37:21	2.368**	2.5875*
(-5, 5)	2.36	37:21	1.9998**	2.5875*
(-7, 7)	2.80	36:22	1.9214***	2.3244**
(-8, 8)	2.77	35:23	1.634	2.0613**

\*, \*\* and \*\*\* indicate significance at 1%, 5% and 10% respectively

Moreover, results reported in Table 2 indicate significant and positive CAAR of 1.82% and 1.92% during event windows of 3 days (-1, +1) and 5 days (-2, +2) respectively. Highest CAAR value of 2.80% has been obtained during the event window of 15 days (-7, +7). Further, CBA results in wealth creation for the acquirers during all event windows, although the rate of abnormal returns begins to decline during post-event window of 15 days (-7, +7). In the event window of 17 days (-8, +8), CAAR is positive but not statistically significant.

The findings support the proposition that CBA significantly improves the wealth of the acquiring company's shareholders. The results of the paper are consistent with Bhagat *et al.* (2011) and Kohli and Mann (2012).

## 5. Concluding Observations

Providing empirical support to the theoretical framework, this research work measures how the capital markets respond to the announcement of CBA. Short-run stock price performance of 58 CBA deals from 2013-2015 have been examined using event study methodology. Empirical results have indicated significant positive abnormal returns to the acquirers. These results seem to complement theoretical understanding about various motives of CBA. Such acquisitions create positive sentiments in the stock market as such resources are not easy to replicate and may take years to develop indigenously.

The paper holds enormous significance for the managers of acquiring companies in emerging markets in general and India in particular. They may look at the positive market response in the event window as a signal of shareholders' support to their strategic decision of expanding operations abroad. Strategic and intangible assets obtained through CBA possess various competitive benefits that may enhance the global competitiveness of domestic companies. Thus, acquirers from emerging markets can proceed with the objective of acquiring strategic assets through CBA to enhance their all-inclusive competitiveness. Further, the conclusion drawn from work has the rationale to guide the policymakers in their effort to formulate investor friendly policies with regard to overseas investments and relevant tax measures.

To get the holistic view of the impact of CBA announcement, the present study can be extended to include other emerging countries which would further strengthen the results; thereby providing more insight to managers and executives in their quest to become a global player along with creating wealth for their shareholders.

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