International Journal of Business and Economics
Vol. 5, No. 1, 2020, pp. 22-48

http://ijbe.ielas.org/index.php/ijbe/index
ISSN (online) 2545-4137

https://doi.org/10.5281/zenodo.3780400

PREDICTION OF INBOUND & DOMESTIC TAKEOVER CANDIDATES FROM INDIAN MARKET *PRE AND POST GLOBAL CRISIS*

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Received: 2019-11-20 Accepted: 2020-04-21 Published online: 2020-05-01

Abstract

M&As are the key drivers for economic growth in developing countries, specifically with respect to India. In the view of proliferating inbound acquisitions and thereby enhancing the FDI of the country, many governmental policies are also implemented. Though a substantial literature is available towards various aspects of M&As in developed countries, only a very few works deal with respect to developing countries and further only a very minimal research is done with special attention to India. Again, there has been very limited amount of work in the context of predicting inbound target determinants, separately from that of the domestic target determinants. Further, models built and inferences drawn for developed countries vary with that of India, thereby adding more emphasis on studying M&A with specific attention to India. Moreover, the global financial crisis has had a great impact on all the nations with India being no exception. The global crisis has taught many financial lessons to firms of all sectors. Hence, there is a necessity to analyse if there is any change in the determinants of targets pre- and post-crisis.

This work focuses on predicting the inbound takeover targets in India through logistic regression models on 527 Indian target firms over the period of 2005-2015. The time frame chosen for the groundwork also comprises Global Financial Crisis, which is one of the most significant financial events in the history of world economics. Thus, this work also provides an analysis of impact of this event considering an emerging market like India.

The outcomes reveal that firms dealing with feasible products, excellent networking and distribution, huge assets with low cash in hand have the high probability of being predicted as inbound targets. On the contrary, firms with high public shareholdings and that involve in the production of superior products when compared to that of their peers yet find it difficult to make profit are preferred as targets by the domestic acquirers. It has been interesting to note that the financial crisis did not have any significant impact with respect to the determinants of the inbound and domestic targets in Indian context. The outcomes provide significant insights to various stakeholders such as acquirers, the targets themselves, investment bankers and the policy makers involved in M&A.

Keywords: Logistic Regression, Inbound Acquisition, Domestic Acquisition, Target firms, M&A in India, Non-Target firms.

International Journal of Business and Economics
Vol. 5, No. 1, 2020, pp. 22-48
http://ijbe.ielas.org/index.php/ijbe/index
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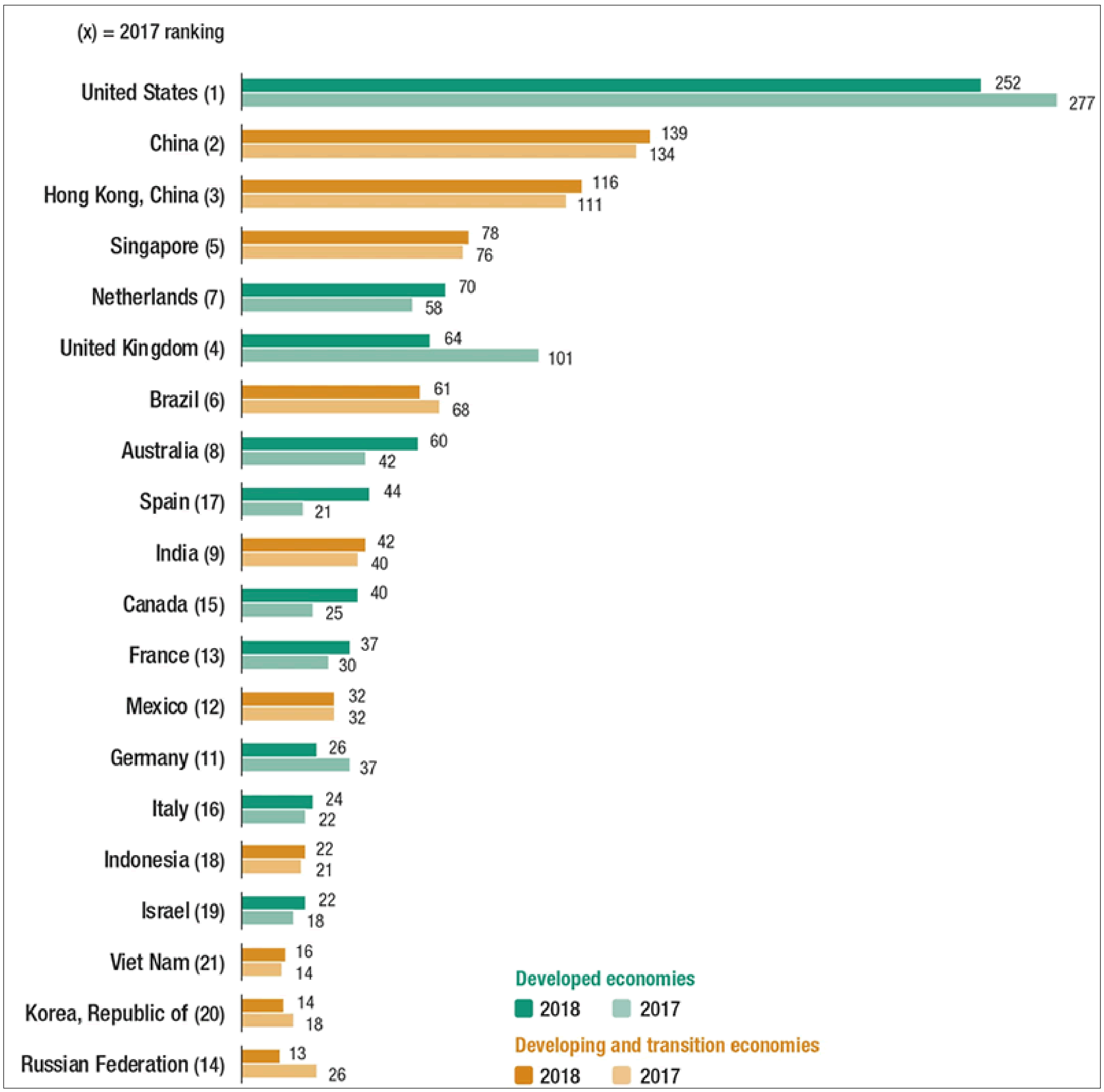
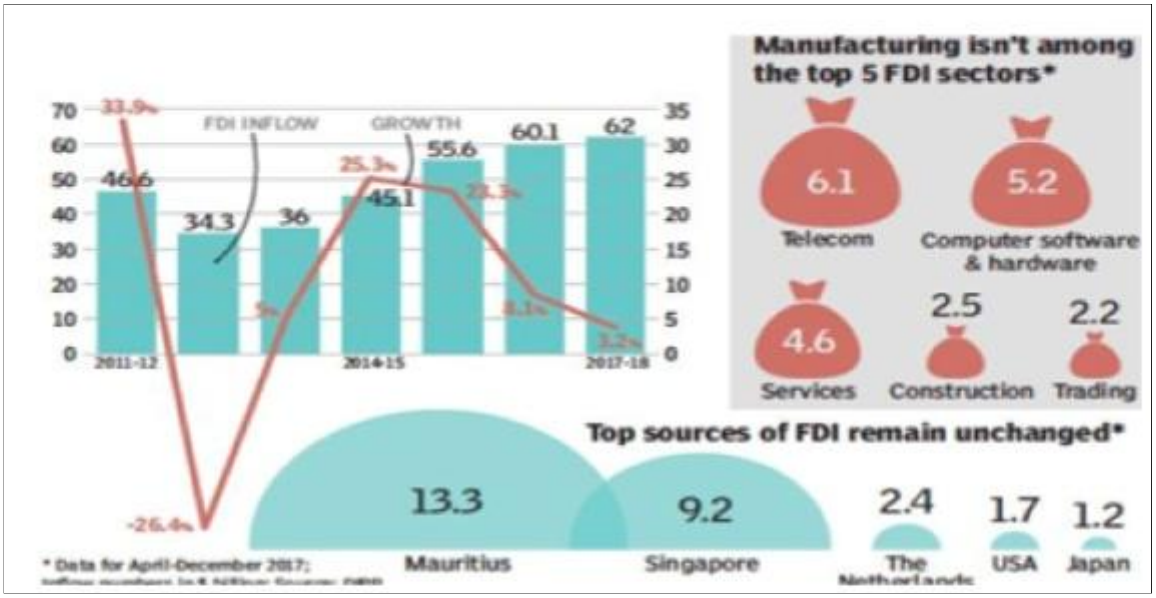
1. Introduction

Merger and Acquisition occupies a paramount position in positively influencing the economy of a nation. Developed countries such as United Kingdom, United States and so on characterize developed economies, wherein the market is established. On the other hand, developing countries such as India, China, Malaysia and so on that forefront M&A exhibit emerging economies and have opened up to the global market. The graph below shows top 20 countries with the most FDI inflows in 2017 and 2018.



Out of the emerging economies that spearheads the activity of M&A, India is one of the rapidly growing economies and has been robust with respect to domestic and cross-border (inbound) acquisitions of Indian targets. The graph below shows the foreign direct investment in India (2011-18), the major countries contributing to FDI inflows and the five main sectors that attract FDI in India. (Source: Times of India, June 9 2018)



The global economic crisis during 2008 had led to the withdrawal of foreign investments in India in order to stock up cash abroad thereby resulting in downfall of the Indian economic growth. The reforms in the view to promote the growth have permitted creeping of financial instability in the form of banking stress and inflation thereby creating Indian economic crisis in 2013. The policy makers thereafter have initiated policies to encourage foreign investments in the form of M&As.

Amendments in Governmental policies in the view of favoring M&A in and out of India oil the wheels of domestic and inbound M&A deals of the nation considerably, making it one among the top 100 according to the rankings of ease of doing business 2018 (Mathew, 2017). India has also improved its ranking (to fourth position) with respect to protecting minority investors through greater transparency requirements, higher shareholder protection via actions on authorities and claims for damages, increase in strength of minority investor protection, improving the extent of conflict of interest regulations, and streamlining the extent of shareholder governance, thereby encouraging the foreign buyers to invest in India.

A number of initiatives such as relaxed regulations pertaining to self-certification mechanisms, tax exemptions, high speed examination and approval of the patents, digitising clearance and permission portals, digital India, make in India and smart city

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ISSN (online) 2545-4137

development have been put into practice (Gaurav and Sheeba, 2018). Further, FDI restrictions pertaining to sectors of defence, pharmaceuticals and civil aviation have been relaxed. In addition to this, Insolvency and Bankruptcy Board of India has been established under the insolvency and bankruptcy code 2016 towards implementation of the code that regulates the laws related to restructuring and insolvency resolution of corporates, partnership firms and individuals in a time bound fashion for maximization of their asset values, to encourage entrepreneurship, availability of credit and balancing the interests of all the stakeholders. This board thus aims at building confidence in cross-border investors regarding easier turnarounds and exits. Further, Demonetization and implementation of Goods and Services Act are expected to lead to higher transparency, surged tax collection and enhanced investor confidence. In short, 87 FDI rules across 21 sectors have been made lenient from 2015 to 2017 to boost the inbound investments in order to foster the country's economic development and diminishing unemployment. The afore-mentioned points related to Governmental policy changes in India during 2016-2018 are justified by the proliferated inbound deal value from 8 billion USD to 55.8 billion USD (Foreign direct investment (FDI) in India, 2017).The table below shows the statement of top 10 country-wise FDI equity inflows from April 2000 to March 2019 (Source: Government of India)

S.no.	Name of the country	Amount of Foreign Direct Investment Inflows(In US$ million)	%age with Inflows
1.	Mauritius	134,469.19	32.01
2.	Singapore	82,998.40	19.76
3.	Japan	30,273.50	7.21
4.	Netherlands	27,352.32	6.51
5.	United Kingdom	26,789.09	6.38
6.	U. S. A.	25,555.99	6.08
7.	Germany	11,707.82	2.79
8.	Cyprus	9,868.99	2.35
9.	UAE	6,652.03	1.58
10.	France	6,643.09	1.58

The E-commerce market at India favors inbound M&As. India, being densely populated and hosting a deluge of middle class people spending on online markets, attracts E-commerce acquirers from other countries. A recent deal that can be quoted to exemplify this is the inbound deal between Walmart of United States (acquirer) and Flipkart of India (target). Walmart has been keen on investing in India for its huge growing market. Though the initial governmental policies have not allowed Walmart to gain access, the amended rules pave way for it to access Indian online retail market. The factors such as large customer base, large logistics network, deep foundation for the business and huge market control boosts the interest for Flipkart over its peers in Walmart. Further, Amazon and Flipkart already occupy 70% of the Indian commerce market. Alibaba from China is planning to enter Indian Markets by investing in Paytm malls to make it a competitor to the leading commerce markets.

As M&A appears to be the most preferred means in the perspective of foreign direct investment in India, in-depth knowledge and thorough analysis of the factors involved in this strategy is essential. The study of M&A from various dimensions is gaining impetus among researchers. A few of the popular dimensions of study pertaining to M&A include the analysis of the determinants of targets, deal characteristics, post-acquisition impact, differences and similarities between inbound and domestic deals, comparing and contrasting developed economies and the emerging economy and so on. An extensive literature can be found pertaining to the afore-mentioned dimensions of M&A but the downside is that the works are not specific to Indian M&A. As the market environment in India is different from that of the other nations, specifically developed nations, studies focusing on India and its M&A activities are highly essential.

Since every dimension characterizes its own significance and requires much investigation, this work places emphasis on prediction of pre-acquisition determinants of targets in India that are favored by the companies abroad. Also, the work attempts to predict the features of targets that are attractive to the acquirer firms from within India (domestic). Pre-acquisition determinants refer to the features of the firms that contribute to the decision of whether it can participate in the M&A activity. Both acquirers and takeover targets are examined on the basis of its features from various aspects. Evidently, features of acquirers and the targets demonstrate high contrasts. Furthermore, determinants of inbound targets and domestic targets exhibit vast differences, but surprisingly not many have worked in this context. In this work, the features pertaining to takeover targets are analyzed. It is observed that the attractive inbound targets exhibit significant differences when compared to that of the domestic target firms, revealing the generic motives behind these deals.

Motivation behind prediction and gaining insight on the determinants of takeover targets that favor inbound and domestic deals is duplex. One is to validate the findings suggested by various earlier studies (pertaining to developed and developing nations or matured and emerging economies) on which characteristics render the firms preferable to the acquirers and thereby open to takeovers. The other is to aid the stakeholders in beating the market by proving them insight on which targets firms will be presumably acquired. This is justifiable based on the fact that share prices of the target firms surge prior to the announcement of the takeover and investing at these times most likely results in abnormal returns.

Majority of the inferences related to pre-acquisition determinants have been derived from studies based on developed economies. Only a very few works deal with developing economies, that too with India. This study emphasizes country-specific analysis of M&A activities and attempts to expose the fact that findings from developed economies are not relevant with respect to emerging economies. Also, the study bridges the gap in research by analyzing the determinants of inbound and domestic targets in India individually.

The time frame of this research covers the period between 2005 and 2015, which has also witnessed one of the major financial events of the world economics after the Great Depression, that is, the Global Financial Crisis which started in 2007-2008. It started with a crisis in the sub-prime mortgage market in the United States, and developed into a full-blown international banking crisis with the collapse of the investment bank Lehman Brothers on September 15, 2008. Even though most of the Asian countries came out relatively unscathed, India had to witness the negative impact of this event. This has been because of increase in India's two-way trade, as a proportion of GDP, grew from 21.2% in 1997-98, the year of the Asian crisis, to 34.7% in 2007-08. Consolidation through M&A has been considered to be an effective method to prevent the market from such shocks. There has been very minimal work that explains whether the viewpoint of acquirers have changed post crisis. The research work includes analyzing the M&A scenario in India during the Global Financial Crisis and also evaluates whether this event has any impact on the thinking of the acquirer or not.

The remaining of the study is structured as follows: Section 2 presents the literature survey briefing the findings derived from other economies and highlighting the observations thrown up from the studies related to Indian M&A activities. Section 3 highlights the objectives of the work. Section 4 provides details on the samples considered for research. Section 5 explains the proposed prediction model developed for predicting takeover targets. Section 6discusses the results and inferences obtained from the study. Section 7 concludes the paper and provides directions towards future investigations.

2. Literature Review

Various works pertaining to prediction of takeover targets have been carried out from various perspectives. This section concisely presents the works under two categories: (i) works related to other economies and (ii) works related to Indian economy.

2.1 Review on Prediction Models and Determinants favoring Targets: Perspectives from countries other than India

This section briefs on the various works performed to identify the unique features of the firms that render it to be targets.

Several factors related to predicting financial distress associated with firms are analyzed (Dietrich, 1984). In the context of prediction model, the first motive has been to formulate an efficient model that could predict with high efficiency. With regard to testing of hypothesis through prediction models and empirical analysis, selection of appropriate variables, estimation of bias and statistical significance gain relative importance. Furthermore, sample selection is also found to have high impact in efficiency of these predictive models. Comparison of performance between linear discriminant analysis and logit models has been made and it has been conjectured that logit model is more appropriate for the data that is multivariate normal (Barnes, 2000).

During initial attempts on predicting takeover targets using statistical techniques, it has been declared that publicly available information such as accounting data and anticipatory share price changes alone cannot formulate a predictive model with high efficiency with respect to UK firms (Barnes, 1998). Subsequently, the same author has again attempted to predict UK targets using logit model after application of multicollinearity and has identified profitability, sales growth, shareholders' equity, dividend growth and leverage as the major impacting variables to determine the targets (Barnes, 2000). Then, analysis on companies involved in mergers after the liberalization has been compared and contrasted with that of the companies involved in mergers before l990s (Sorenson, 2000). Significant differences have been observed such that liquidity, profitability and leverage, which were found to be highly expressive in predicting targets have become irrelevant with the exception that profitability alone accounts for differentiating between the targets and acquirers.

Then, multinomial models are advocated to be efficient when compared to that of binomial models as they can handle hostile and friendly acquisition targets separately, owing to their difference in motives: disciplinary for hostile and synergic in the case of friendly takeovers, thereby avoiding bias in estimating likelihood (Powell, 1997; Powell, 2015). It has been identified that the determinants vary depending upon the time period of the study and that both the industry specific and firm specific features namely ROCE, size in terms of total assets, tangible assets, market to book ratio, operating cash flow, average change in total assets, liquidity and leverage are essential for predicting takeover targets (Powell, 1997). Another attempt by the same author on UK companies differentiates and exposes the differences in determinants of friendly and hostile takeovers. The findings indicate that friendly takeover targets exhibit smaller size, lower liquidity and higher leverage while hostile takeover targets characterise larger size (Powell, 2015).

An analysis of 56978 private firms that have been involved in inbound acquisitions between 1990 and 2007 outside US have been performed to find that geographical aspects, transparency in accounting disclosure and bilateral trade stimulate the probability of merger between countries (Erel, Liao and Weisbach, 2012). It is also observed that weakly performing economies become targets while firms belonging to countries with high valuation particulars tend to be investors. Another work has focused on analyzing the effect of quality of accounting on gaining bids to a target firm through a large set of firms during 1990-2010 (McNichols and Stubben, 2015). The study also affirms that higher the transparency and quality in the disclosure of the accounts, highly accurate can the acquirers bid based on the targets' value and thereby higher is the likelihood of getting involved in the acquisition. Yet another analysis on 2628 takeover targets during the period 1991-2016 proclaims that transparency, as an additional variable in logit model, increases its predictability significantly (Gu and Hackbarth, 2018).

Further, it has been argued that large institutional shareholdings depict the performance of the firm positively and thereby bidders intending for market for corporate control show less interest in acquiring these companies (McConnell and Servaes, 1990). Thus, institutional investor shareholding, a non-financial variable estimated as the percentage of institutional investors' shareholding in the target company two quarters prior to the announcement of acquisition is inversely related to the takeover likelihood (Elyasiani and Jia, 2010). Furthermore, it is also asserted that completely dispersed shareholdings do not bring about any gain to the acquirers and hence firms of such kind do not attract the investors (Grossman and Hart, 1980).

Free cash flow, another important variable is found to have profound impact on prediction of the targets. It has been advocated that in case if the managerial authorities escalate the financial flexibility of the firm through cash retainment, then the agency price of the cash decreases the value of the firms, thereby increasing the takeover likelihood (Jensen, 1987). Powell (1997) has then suggested that this variable should be computed for a three year period prior to the announcement of acquisition.

Tangible assets also form an important determinant in predicting the targets as they act as a security during debt financing and thereby reducing the direct cost of acquisition activity. Analysis on financial, asset and ownership related variables reveal the positive correlation between proportions of tangible assets to the total assets to the acquisition probability (Ambrose and Megginson, 1992).

Furthermore, a few empirical studies in predicting targets have advanced a few important variables. An analysis on firms from various sectors and countries in the view of predicting acquirers and targets have been made. The findings assert that the firms associated with the acquirers are larger, more profitable, more valued and less leveraged when compared to that of the counterpart target firms, whereas the target firms have imbalanced financial resources, unpredictable trends in growth, high cash flow and lower asset growth when compared to that of the acquirers (Gutsche, 2013). Prediction of determinants that favour inbound acquisition in Greece has been attempted through statistical analysis on 229 target companies during the period 1989-1998 (Georgopoulos, Argyros and Boura, 2008). The inferences expose that market structure indicators such as the market share of targets and control variables such as firm size and liquidity of target firms are statistically significant in differentiating the

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http://ijbe.ielas.org/index.php/ijbe/index
ISSN (online) 2545-4137

cross-border targets, consistent with the motive of cross-border acquisitions being market seeking rather than efficiency seeking. Further, in undeveloped markets such as Serbia and Montenegro, prediction of takeover targets has been efficient through application of Artificial Neural Networks on size, valuation, leverage, profitability, liquidity, sales growth rate, EPS growth rate, price earnings ratio, dividend policy, activity, Tobin Q ratio and interest cover, rather than the conventional statistical techniques (Dencic-Mihajtov and Radovic, 2006).

Another dimension of analysis is to analyze the determinants of targets based on the acquirers. Acquirer firms that have takeover many firms have different expectations than that of the acquirer firms that have captured only one firm till then (Ooghe, De-Langhe and Camerlyrick, 2006). Experiments have been conducted on Belgian firms during 1992-1994 and findings report that multi-acquirer firms prefer targets with high sales generating potential as their own sales generating trend is on the negative side.

Firm specific studies have been performed widely to identify the determinants of targets specific to the sectors. Prediction of targets has been attempted with specific emphasis on banking industry (Lertwachara and Booncho, 2015). The methodology justifies that the application of rank transformation to the financial data variables improves the predictability of logistic regression and multiple discriminant analysis in the view of predicting the merger target bank firms. Then, bid patterns are analysed in Spain with regard to real estate industries. A two stage methodology involving identification of principal components followed by application of decision tree classification is incorporated on 20 variables pertaining to financial and economic aspects on 354 targets and acquirers that participated during 2000-2012 (Gonzalez-Arias, Arguedas-Sanz and Martin-Gracia, 2017). The findings of the study reveal liquidity, solvency and borrowing capacity, size, economic performance, operating capacity and financial performance as the principal components.

Having presented the variables involved in prediction of targets and the variables that have been significant for prediction of takeover firms in developed countries, the following section highlights the works performed in the context of India.

2.2 Studies related to Indian Market

This section presents the various works carried out in the context of Indian M&A activity, with specific emphasis on prediction of target characteristics.

In 2004, 37 samples of targets and matching control firms during 1997-98 and 2000-01 have been considered to empirically investigate the probability of predicting a potential target (Sood and Kaur, 2004). The investigation indicates that companies exhibiting lower profit margin, return on capital employed along with lower liquidity and growth but characterize high valuation ratios tend to become targets for takeovers.

In 2007, empirical analysis on determinants that differentiated acquirers and targets is performed on 227 acquirers and 215 targets that took part in merging during 1993 – 2004 (Kumar and Rajib, 2007). Mann Whitney U test and Kolgomorov Smirnov test have been done to examine the difference with regard to financial and product market characteristics. Then, logit regression has been applied on the sample targets along with 490 other firms to predict the likelihood that the firm may undergo an acquisition attempt. The inferences show that larger firms with high cash flow, private equity ratios, book value, liquid assets but lower debt to total assets ratio tend to be acquirers than targets, higher leverage and small size favour the firms to become targets, the probability of being target increases with the decrease in liquidity, and the size and inefficient management hypotheses hold true according to the prediction model.

Further, a study has been conducted to discriminate between the acquirers and the targets, among all the firms that have been involved in M&A activity in India during 2002 to 2005 (Basu, Dastidar and Chawla, 2008). Discriminant analysis and logit regression have been applied on variables namely leverage, size, liquidity, profitability, growth, operating efficiency, retention, return on equity and risk. Out of them, liquidity, profitability, size, risk and growth have demonstrated high distinguishability in delineating acquirers and targets with respect to India. Both the model reveal similar performance indicating that targets characterize lower risk, profitability, leverage and operating efficiency along with higher liquidity, growth and size.

According to the logit analysis with cut-off probabilities determined through maximization of returns on raw financial data and industry weighted data, represented through variables such as inefficient management, institutional monitoring, free cash flow, size of the firm, growth, leverage, liquidity growth-res imbalance, real property, firm undervaluation, and promoter’s holding, it has been identified that the firms which are likely to be targets characterize high growth potential, high cash flow besides high leverage (Barai and Mohanty, 2012). In other words, strong company with high value but inefficient management is preferred as targets in context of Indian M&A analysis. Further, it has been observed that size shows no significant distinguishability for prediction of firms as targets.

Yet another study to examine the firm level determinants that favour an Indian company to become a target is conducted (Agnihotri, 2013). The research findings reveal that earning volatility and business group affiliation form significant variables in deciding whether to bid for the target or not.

Firm specific studies have been carried out to identify if the particular sector has any unique determinants with respect to acquisition likelihood. Analysis has been done with 2189 Indian manufacturing firms during 1998-2007 using random effect logistic regression on various factors such as age, size, research and development, advertising intensity productivity, leverage, profitability, intangible assets and financial constraints (Irfan, Saha and Singh, 2016). The findings disclose that increase in age, size, R&D and advertising intensity elevate the probability of becoming successful targets whereas surge in productivity as well as leverage curtail the probability of being acquired.

Another dimension of study has been performed to analyze the returns gained by the shareholders of the Indian target firms upon the firm being acquired by domestic or cross-border raiders (Jit and Kohil, 2011). It has been exposed that though both domestic and cross-border deals create wealth to the shareholders, higher gains are enjoyed by the shareholders of the domestically acquired targets owing to bid specific particulars.

A few researches have been made specific to pre- and post-global crisis. It is shown that the emerging economies use to good advantage the appealing asset prices in developed economies and surged their inbound acquisitions (Reddy, Nangia and Agarwal, 2014). It has also been observed that economies other than that in the triad namely Japan, US and Europe have also started opening up and have become hosts of attractive inbound targets (Kathleen, Demos and Burhan, 2012). Another study that investigated the characteristics of attractive targets observes that the financial crisis period affected the cardinality of acquisition but there has been no statistical difference with respect to target characteristics (M&A Research Centre and Cass Business School, 2016).

From the extensive review of literature, it can be noticed that only a very minimal work has been performed in the context of identifying the determinants of inbound and domestic targets, individually. In majority of the works, these are handled together. As the motives of inbound and domestic targets differ significantly (inbound – market entry and domestic – corporate control), the expectations from the targets also will differ noticeably. This work attempts to bridge this gap by predicting inbound targets and domestic targets separately. The methodology in this context is presented in the following section.

3. Objective

The groundwork of this research aims to identify the various determinants that effect inbound and domestic deals that have taken place in India between 2005 and 2015.This encompasses the global financial crisis period too. Thus, the study also attempts to find out if the crisis had any impact on the target determinants. It also aims at assessing the differences between the target firms and the control firms. In a nutshell, the major objectives are:

- To identify the drivers/determinants of inbound acquisitions before and after the period of global crisis.

- To identify the drivers/determinants ofdomestic acquisitions before and after the period of global crisis.
- To identify the differences in characteristics of the acquired target firms and non-targets firms in the pre-global crisis period as well as post-global crisis period.

Having formulated the above-stated objectives, the following section provides a detail account on the data utilised for the study and the methodology adopted to achieve the objectives and derive various inferences.

4. Data & Methodology

Sample evidence is considered with Indian Economy as the frame of reference. Secondary data has been used for analysis. Majority of the data under this study has been collected from Bloomberg, Capital IQ & Capital-line database. The research has been conducted over a span of ten years period extending from January 2005 to December2015. It is to be highlighted that this period includes the Global Financial Crisis period as well.

4.1 Descriptive statistics

The raw sample comprises of 527 completed acquisitions. On the basis of country of origin of the acquirer company and the target firm, the acquisition sample has been divided into inbound acquisitions and domestic takeovers. This has resulted in 370 domestic takeovers and 157 inbound acquisitions of publicly listed Indian target companies during the period of **2005 to 2015**.

In order to further scrutinize the deals during the CY 2005-2015, following constraints have been investigated.

The deals in which the initial stake of the acquirer has been less than 15% (according to the SEBI takeover code trigger point) has only been taken for the further study. The threshold of 15% is chosen in accordance to the provisions of the **Old Takeover Regulations of SEBI.** According to the new Takeover code in SAST (Substantial Acquisition of Shares and Takeovers) regulations 2011 that defines the term 'takeover', the initial threshold limit provided for Open Offer obligations has been increased from 15% to 25% of the voting rights of the Target Company. SAST 1997 has been replaced by the SAST 2011 regulations. As the sample comprises of deals from 2005, the old threshold of 15% is maintained.
The acquisition wherein the acquiring firm acquires more than **15% share** has only been considered. Nevertheless, Bartley and Boardman (1990) have considered only those firms as targets wherein investors have acquired 5%. Owing to the difference in shareholding patterns between the Indian and other developed economies, this research work considers only those acquisitions in which the acquirer's share has been **more than 15%**.

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http://ijbe.ielas.org/index.php/ijbe/index
ISSN (online) 2545-4137

Having scrutinized the sample based on the above-stated constraints, the resulting sample is further singled out based on a few other conditions stated subsequently.

- The initial acquisition date has only been taken into consideration for cases in which a target firm is partially acquired by the same firm or different firms at different points of time.
- The acquisition samples that lack the data necessary for calculation of their performance measures, industry median benchmarks or their matched control firms based on industry, size and pre-acquisition performance have been excluded.
- Acquisitions that involve financial firms have been factored out as they vary from the service and manufacturing sector.
- Friendly acquisitions and any other acquisitions whose objective was restructuring have been precluded from the data sample owing to the inference derived by Powell (1997). He has segregated hostile and friendly takeovers and has found characteristics of hostile and friendly targets differ significantly and that these differences also vary depending on the time period under investigation.
- Shell companies that characterize nil or limited assets have not been included as the motive of these acquisitions have been primarily to reap the benefit of being listed (Vijay Gurav, 2012).

Having incorporated all the afore-stated conditions to the raw sample, a reduced sample comprising of 288 acquisitions has been derived. In the reduced sample, 186 acquisitions are domestic deals while 102are inbound takeovers. The following sub-section details on selection of control firms for this study.

4.2 Selection of Control Firms/ Benchmark Construction

Control firms form the negative sample of the analysis data. For domestic and inbound target companies, the counter-part (that is the companies that have not become targets) firms belonging to the same industrial classification have been selected on the basis of latest fiscal year before acquisition. In order to identify the firms from the same industrial classification, NIC 2008 Industry classification at four digit level is adopted. Capitalline & Capital IQ database is used to collect the required samples in order to construct industry median benchmarks. The control firm samples have been chosen based on firm’s total assets or sales. If the sales or assets are less than 300 crores, then the control firms are chosen within a deviation range of 500%, else the standard deviation s set within a range of 300%. This process has yielded a total of 593 control samples, out of which 336 form control samples for domestic acquisitions and 257 observations form non-target samples for inbound acquisitions. Chen & Su (1997) have selected companies that match the assets, or sales of target firms.

4.3 Sample Description

The data sample consists of 918 completed acquisitions (544 domestic and 374 inbound) of publicly listed Indian Target companies during the period 2005 to 2015. The preliminary data revealing the number of deals has been collected from the online version of Bloomberg & CMIE Prowess for the period 2005 to 2015

The description of the sample used in this research is showcased in Table A. Firstly, it highlights the salient features of the sample and breaks it down into two parts according to whether the deal is a inbound or domestic acquisition with respect to target firms belonging to Indian origin. Secondly, it shows the distribution of inbound, domestic and total transactions over time. The increase and decrease in the cardinality of M&A deals over the years can be explained by the existence of the merger waves as M&As usually occur in cyclical waves (Goergen and Renneboog, 2004).

Table A: Distribution of Analysed SampleAcquisitions Year-Wise						
	Inbound Acquisition		**Domestic Acquisition**		**Total**	
	Cardinality	**%**	**Cardinality**	**%**	**Cardinality**	**%**
By Year of Acquisition						
2005	33	21.15%	39	10.51%	72	13.66%
2006	16	10.26%	43	11.59%	59	11.20%
2007	16	10.26%	42	11.32%	58	11.01%
2008	14	8.97%	33	8.89%	47	8.92%
2009	6	3.85%	46	12.40%	52	9.87%
2010	17	10.90%	40	10.78%	57	10.82%
2011	11	7.05%	33	8.89%	44	8.35%
2012	17	10.90%	27	7.28%	44	8.35%
2013	16	10.26%	24	6.47%	40	7.59%
2014	5	3.21%	21	5.66%	26	4.93%
2015	5	3.21%	23	6.20%	28	5.31%

Having explained the dataset used in detail, the subsequent section explains the methodology adopted to derive inferences.

5. Methodology

5.1 Wilcoxon Sign Rank test

Unlike previous studies which have used the t-test method to analyze the pre-acquisition performance of target firms, the research conducted in this paper employs Wilcoxon Sign Rank test. This method has been used to find the variation in pre-acquisition performances of inbound targets, targets involved in domestic deals and those that belong to the control group. This technique has been adopted because most of the distributions are symmetric characterizing high kurtosis. Empirical research conducted by Peng Cheng, Vijay and Isaac (2010) has also used Wilcoxon SignRank test instead of the t-test.

5.2 Multinomial Logistic Regression Analysis

For a better mathematical analysis of Indian target firms that serve as a suitable candidate for inbound takeovers, the multinomial logistic regression method has been used in this research. Financial researchers viz., Powell (2004), Kyoji Fukao et al. (2008) and Peng Cheng, Vijay and Isaac (2010) have used this technique for their empirical groundwork. This method has been used to compare the performance of Indian target firms involved in domestic deals and inbound acquisitions. This technique has also been used to assess the performance of non-acquired control firms. The multinomial regression analysis examines all the three samples at the same time by controlling the effects of other firm characteristics such as assets, debt-to-equity ratio, assets turnover, cash ratio, book-to-market ratio and shareholding

In this work, inbound acquisition target firms have been used as the benchmark sample. The firms have been coded such that (i) Domestic target firms are assigned one (ii) Inbound target firms are coded the value of 2 and (iii) Control firms are marked as 3.

5.3 Binary Logistic Regression Analysis

In the view to perform binary comparisons (comparison between two groups), binary logistic regression model has been adopted in this study. Initially, targets are compared with the control firms. In this context, the targets are coded as 1 while all the control firms are assigned the code 0. Then, inbound targets are contrasted with the domestic target firms. In this case, targets of inbound acquisition are coded as 1 while the targets of domestic deals are coded as 0. Other researchers namely Powell (2001) and Peng Cheng, Vijay and Isaac (2010) have as well employed binary logistic regression to differentiate targets vs. non-acquired firms and inbound vs. domestic targets.

5.3 Selection of Independent Variable

The independent variables are the factors that characterise the firms to be targets or non-acquired firms. These variables are chosen on the basis of the empirical models and theoretical hypothesis developed in the earlier established studies. Table B lists these independent variables and the corresponding method adopted to estimate these variables.

Table B. List of Variables included in the Study

Variable	Method used
Size of the Firm	Book Value of Assets
Financial Leverage	Debt Equity Ratio
Shareholders' return	Return on Equity
Liquid Cash	Total Cash Investment/Total Assets
Firm Valuation	Tobin Q
Management characteristics	Shareholding
Profit Margin	Net profit Margin
Cash Flow	Operating Cash Flow/ Total assets
Assets utilizations	Assets turnover Ratio
Expansion	CapEx

Each variable is described in detail subsequently.

Size of the Firm

International research contemplates that firms that are larger in size will be highly priced. Also, they would possess the potential to strive against acquisitions. This makes them less appealing in the view of becoming targets. Pawaskar (2001) has also emphasized this fact in his research and has shown that both acquiring and acquired firms tend to be smaller than the industry averages in Indian context. However, studies performed by Panigrahi (2004) and Kumar & Rajib (2007) reveal that there has been no significant relationship between size of a firm and the takeover probability.

In India, majority of the company's shares have only been episodically traded. Therefore, market capitalization has not been utilized to assess the target firms' size. As asset is regarded to be a more stable facet than the sales, book value of assets has been employed to assess the size of target firms. Here, book value is gauged on the basis of the asset value in the financial year just before the occurrence of the acquisition. Researchers viz., Palepu (1986) and Barai and Mohanty (2012) have also adopted book value of assets in order to calculate the size of the target firm.

Financial Leverage

Financial leverage, yet another independent variable in the perspective of predicting targets, can be defined as the debt to equity ratio. It plays a valuable role in gauging the financial position of a firm. Generally, a highly leveraged company is not considered to be a suitable target from the view of an acquirer firm. Studies by researchers viz., Stulz (1988) and Jandik & Makija (2005) also conclude this hypothesis. The most important issue surrounding a highly leveraged company is that it tends to have an exhausting effect on the acquirer firms' borrowing capacity. Moreover, the acquisition of such highly leveraged target firms generally incurs more time. The impact worsens in the case of debts being dispersed and risky. Thus, there is a negative correlation between leverage and takeover probability (Barai and Mohanty, 2012).

Shareholders Return

The management efficiency of a firm is assessed by returns gained by the shareholders. Return on Equity denotes the percentage of net income on shareholders' equity. It is an important independent variable to assess the profitability and competitiveness of a firm. When the return on equity of a firm is higher, it motivates the CFO's to take greater risks. Return on Equity has always been an important metric to gauge the competeness of the targets. Analysis performed by Pasiouras et al. (2011) advocates that there is a positive relationship between ROE and the probability of being acquired in domestic or inbound deals.

Liquid Cash

Free cash flow (FCF) or liquid cash refers to the resources retained by managers of the firm but should have been paid to shareholders (Barai and Mohanty 2012). According to Jensen (1987), the value of a firm declines when the managers surge the financial flexibility of their firms by retaining liquid cash thereby rendering greater probability for the firm to be a candidate for acquisition. The FCF has also been incorporated in their research by Powell (1997) and (Barai and Mohanty 2012).

Firm Valuation

The value of the firm plays a significant role in making it as a target. It is intuitive that firms that characterize low market capitalization when compared to that of the book value of their assets are undervalued and hence, have high probability of being a target. The acquirers tend to choose such firms as it is much inexpensive for them to takeover them than to build a new firm from scratch (Barai and Mohanty 2012). In this work, Tobin-Q computed as the ratio of market cap to the book value of assets is adopted to gauge the valuation of a firm. The valuation of the firm is performed at financial year-end just prior to the acquisition. Researchers like Palepu

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(1986), Ambrose & Megginson (1992), Chen & Su (1997) and Powell (1997; 2001; 2004) have also used this method.

Promoter holding

In financial literature, promoter and institutional shareholding in a firm has proved to show a positive effect on the management of a firm (Bushee, Carter & Gerakos, 2009; Mizuno & Tabner 2009; Elyasiani & Jia, 2010; Cornett et al., 2005; McConnell and Servaes, 1990). Ownership and control provide stability and longer term sustainability. However, control affords personal enrichment at the cost of absentee shareholders.

In this work, shareholding is regarded as a non-financial variable that gauges the performance of a firm. As the presence of these agents would lower the bidder's interest for acquisition, promoter holding is considered to have negative correlation with the probability of acquisition.

Profit Margin

Profit margin reveals the potential of a firm in handling its expenses when compared to that of its peers. Thus, it is an indicator of the operational efficiency of the firm. It is measured as the ratio of net income to the revenue.

Fixed Assets utilizations

This ratio assesses how efficiently a firm produces sales with its assets like machines and equipments. This ratio is highly significant for the companies in the manufacturing sector. The fixed asset turnover ratio is computed as the ratio of net sales to the difference between the value of fixed assets and the accumulated depreciation. Higher value of the ratio indicates that the firm is performing better as it has the greater potential to generate more revenue from its assets.

Cash Flow

Cash flow of a firm is indicated by the ratio of operating cash flow to total assets. This ratio indicates the capability of a company to generate cash from its sales. It brings out to light if the firm characterizes inefficient or ineffective management of trade receivables & cost management.

Asset utilization

Assets utilization ratios gauge the capacity of a firm to utilize its assets to gain revenue and profit. A higher asset utilization ratio value denotes a better performing firm as it possesses the potential to produce more revenue from its assets.

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Expansion

Capital expenditure (CapEx) is funds used by the firm to acquire, upgrade, and maintain physical assets. In this research work, capital expenditure is used to gauge the expansion activities in a firm.

Having explained the independent variables used in this research, the subsequent section describes the analysis and reports the associated findings.

6. Results and Discussion

The data sample considered in this research is analyzed in the view to derive interesting findings pertaining to determinants of domestic and inbound targets; targets and non-targets; and variations in determinants pre- and post- global crisis.

In this regard, the pre-acquisition performance and determinants have been studied by using variables and metrics namely book value of assets, debt-equity ratio, liquid cash, shareholding, Tobin-Q, return on equity, profit margin, operating cash flow, asset turnover ratio, and CapEx. These are tabulated in Table C. Each domestic target firm and inbound target firm has been matched with that of its non-acquired firm characterizing similar total assets (as per the latest fiscal year end prior to acquisition) and belonging to same industry (as per NIC code). All the values are estimated according to the financial statements of the firms at the end of the latest fiscal year preceding the acquisition. As the domestic and inbound deals are handled separately in this work, Panel 'A' reports the features of targets involved in domestic deals and Panel 'B' indicates the inbound target attributes. Firstly, Wilcoxon sign rank test is performed. The test has been performed for the entire time period, pre-global crisis period and post-global crisis period. As there has been no significant difference in the outcomes, the values pertaining to the entire time period is showcased here.

TABLE C : PRE-ACQUISITION CHARACTERISTICS AND PERFORMANCE								
A. Domestic partial acquisitions								
		Target firm sample			Control sample			Target vs. control
	N	Mean	Max.	Std. Dev	Mean	Max.	Std. Dev	Wilcoxon Z
Size of the firm	117	652	37119	3578	3140	290754	26887	**-2.90**
Liquid cash	112	.73	66.57	6.27	.1747	1.87	.2698	1.31
Cash flow	111	25.32	1582.1	178.48	410	36918	3509	**-3.71**
Expansion	110	52.48	013	311	343	30726	2935	**-3.39**
Leverage	114	1.14	6.67	1.34	1.52	19.51	2.72	-0.389
Return	113	6.69	41.72	11.79	14.26	137.06	16.26	**-4.57**
Profit Margin	113	-17.47	49.12	105.32	1.452	89.86	19.72	**-2.15**

Valuation	114	1.46	9.37	2.09	1.52	15.43	2.27	-.450
Shareholding	103	44.65	96.38	19.01	52.84	87.48	12.97	**-3.55**
Asset Utilization	110	448.95	44354	4239	5.391	408.46	38.99	**1.76**
B. Inbound partial acquisitions								
		Target firm sample			**Control sample**			**Target vs. control**
	N	**Mean**	**Max.**	**Std. Dev**	**Mean**	**Max.**	**Std. Dev**	**Wilcoxon Z**
Size of the firm	97	1155	24627	3248	1055	19106	2615	.041
Liquid cash	96	.2077	5.19	.55	.1933	1.00	.22	**-2.47**
Cash flow	96	155	4592	652	78.92	838	166	**1.71**
Expansion	98	127	5973	607	138	3745	435	-.106
Leverage	99	1.17	11.52	1.66	1.86	20.09	3.63	-.713
Return	99	10.29	82.15	21.84	16.18	96.57	14.85	**-2.42**
Profit Margin	99	-4.28	29.49	27.14	5.51	30.87	10.62	**-2.54**
Valuation	99	1.78	18.50	3.15	1.65	15.27	2.43	.138
Shareholding	89	49.43	81.35	17.19	53.16	87.86	13.42	**-1.41**
Asset Utilization	96	1.511	28.46	3.04	1.29	5.38	1.13	.675

The values that show statistical significance appear in bold face. The results pertaining to the Wilcoxon sign rank test and the obtained inferences are described subsequently.

Domestic vs. Control Sample

The outcome of the Wilcoxon sign rank test reveals that the variables namely size of the firm, cash flow, expansion, return, profit margin, shareholding and asset utilization are statistically significant with respect to domestic acquisitions. It is thus inferred that the domestic acquirers target at firms that characterize lower return on equity, low promoter shareholding, low profit margin, negative operational cash flow and lesser capex (expansion plan) but higher assets turnover ratio than their peers in the market. In addition to this, it has also been observed that domestic acquirers target smaller size firm in terms of assets. This signifies that the domestic acquirers are interested in weak operating firms running in liquidly crisis with low promoter shareholding however featuring high asset utilization ratio in comparison to other operating firms in the same industry. In contrast to the earlier published studies, this work does not provide significance to leverage and valuation with respect to targets for domestic takeovers.

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ISSN (online) 2545-4137

Inbound vs. Control Sample

Analysis with respect to inbound acquisitions reports variables namely liquid cash, cash flow, return, profit margin, and shareholding as statically significant. The outcomes of Panel 'B' show similar pattern as that of Panel 'A' with respect to cash flow, return, profit margin and shareholding. However, it is noticeable that size of the firm, asset utilization and expansion lose their significance in the view of inbound acquisitions. In the view of foreign acquirer firms, safety has been the primary concern. Hence, they prefer larger firms and do not concentrate on the assets. Therefore, the outcome of the Wilcoxon sign rank test does not show significance for assets. Also, the foreign acquirers give importance to the liquid cash possessed by the firms and prefer those firms that have low liquid cash.

According to majority of the works in the literature pertaining to determination of targets, firms featuring low liquidity are favorable for takeovers. This work also supports this hypothesis. However, the analysis presented in this work does not associate significance to valuation and leverage with respect to targets of inbound takeovers too.

Further, the analysis proceeds with the multinomial logistic regression test. This test has been performed on 189 domestic firms, 102 inbound acquisitions and 593 control samples. The outcomes of the test are presented in Table D. Values that are statistically significant appear in bold face in Table D.

TABLE D: MULTINOMIAL LOGISTIC REGRESSION						
	A. Inboundvs Domestic			**B. Inboundvs. Control Sample**		
	B	**S.E**	**Wald**	**B**	**S.E**	**Wald**
Size of the firm	.000	.000	**2.64**	-000	.000	**2.33**
Liquid cash	-.478	.299	**2.55**	-.677	.322	**4.70**
Cash flow	-.001	.001	**2.75**	-.001	.000	1.55
Expansion	.001	.001	.749	.000	.000	.735
Leverage	-.083	.069	1.47	.028	.040	.488
Return	-.008	.009	.847	.022	.008	**8.08**
Profit Margin	-.001	.002	.265	-.001	.002	.131
Valuation	.009	.013	.462	.010	.006	**2.2**
Shareholding	-.012	.007	**3.49**	.008	.006	**1.69**
Asset Utilization	.025	.016	**2.57**	.019	.016	1.463
Sample Size						
Domestic(1)	189					
Inbound (2)	102					
Control (3)	593					
Total	884					

International Journal of Business and Economics
Vol. 5, No. 1, 2020, pp. 22-48
http://ijbe.ielas.org/index.php/ijbe/index
ISSN (online) 2545-4137

In this test, inbound acquisition samples have been considered as the benchmark. Hence, the findings are reported for inbound vs domestic acquisitions and inbound vs control samples. According to the results of multinomial regression reported in Table D, the variables namely size, cash flow, liquid cash, shareholding and asset utilization are significant with respect to inbound deals. The logic behind this result is that foreign acquirer companies perform the due-diligence of various indicators and prefer large asset sized Indian firms featuring low promoter holding and cash but characterizing high asset turnover ratio when compared to that of the other firms in the same industry. Thus, it is evident that the poor performing firms become easy takeover targets to the inbound acquirers. The results match with that of the outcomes revealed by Wilcoxon sign rank test with respect to cash flow, liquid case and shareholding.

Binary Logistic Regression

The research further proceeds to binary logistic regression. Table E reports the results of binary regression for domestic vs. inbound targets and targets vs. non-targets. The values in bold face are those that are statistically significant.

TABLE E: BINARY LOGISTIC REGRESSIONS

	Domestic targets (0) vs. Inbound targets (1)			**Non- targets (0)vs.Targets (1)**		
	B	**SE**	**Wald**	**B**	**S.E**	**Wald**
Size of the firm	.000	.000	1.400	.000	.000	.742
Liquid cash	-.790	.348	**5.15**	.367	.260	**1.98**
Cash flow	.004	.002	**4.24**	.000	.000	.91
Expansion	.001	.002	.543	.000	.000	1.281
Leverage	-.153	.090	**2.86**	-.074	.046	**2.57**
Return	-.006	.008	.591	-.028	.006	**22.63**
Profit Margin	-.001	.001	.331	.000	.000	.203
Valuation	.005	.007	.568	-.007	.006	1.377
Shareholding	-.009	.007	**1.98**	-.015	.004	**13.85**
Asset Utilization	.043	.021	4.22	.004	.003	**1.739**
Inbound		102		**Target Firm**		288
Domestic		186		**Non Target**		593

Inbound vs. Domestic (Predicting Inbound takeover candidates)

Multinomial and Binary Regression compares Inbound & Domestic acquisitions. The outcome exposes that the variables viz., cash and bank balance, operating cash flow, debt equity, shareholding & asset utilization are significant. This outcome confirms the current research finding that the domestic target firms feature low liquid cash, high cash flow, low leverage, low promoter shareholding and high asset turnover ratio when compared to that of the target firms that are preferred for inbound acquisitions.

Target vs. Non-Targets (Predicting takeover candidates)

The comparison of features of targets with that of non-targets in Indian economy through binary logistic regression suggests that firms having less cash, high leverage, lower Return on Equity and lower promoter shareholding become takeover candidates.

Thus, the current research has identified the determinants of targets with respect to inbound deals and domestic deals separately. Also, it is seen that the variables that influence the M&As in developed nations vary with that impact the Indian economy. Furthermore, the global crisis has not had impacted the influence of the inbound target determinants in Indian context as India owns a developing economy.

7. Conclusion

This research work analyses data from 2005 to 2015 in the view to examine the determinants of domestic and inbound targets in Indian context. In order to identify if the Global Recession had any impact on the pre-acquisition determinants of the targets, the work distributes the samples into pre-crisis (2005-08) and post-crisis (2008-15) samples.

The target firms that are performing better attract inbound acquirers. Hence, pre-operating performance has gained high significance in the analysis with respect to developed economies. However, as per the results of this study, performance indicating variables like Debt Equity Ratio, Profit Margin and Tobin-Q show insignificant impact on influencing the choices for picking target firms by acquirers. This contradiction in outcome can be associated to singling out those acquisitions with objectives such as restructuring or Reverse Merger& Acquisitions for analysis.

This was done by eliminating those target firms that feature nil or limited assets. Moreover, shell companies that are acquired to gain the benefit of being listed, are factored out from the study (for both inbound and domestic acquisitions) as these may provide added significance to firm valuation and leverage and suggest that low valuation firms and highly leveraged ones are attractive as targets. This could primarily owe to the differences in the findings of the current research with that of the earlier established studies that exhibit significance for variables such as leverage and valuation.

India hosts many firms that possess large assets and market shares but insufficient liquid cash. Firms with these attributes win over as targets with respect to inbound deals and hence, India continues to be one of the most attractive economies for M&As. Thus, acquirers from abroad opt for those companies that feature a viable product line, good network, and large asset size but incapable of marketing their goods owing to insufficient cash possession or surged financial pressure owing to additional capacity expansion.

Meanwhile, in the perspective of domestic acquisitions, cash flow, expansion, return, profit margin, shareholding, and asset utilization have been found to be highly significant. Acquirers within the same country have a better outlook on their local companies and hence pick those firms that own high assets turnover ratio but low cash flow, low profit margin, low returns, low promoter shareholding and lesser in size in terms of assets. Hence, they opt for those companies that feature high quality products yet find it difficult to generate return from it. Moreover, companies with huge asset utilization but low return on equity will be offered at mark downed rates and hence, become still more appealing for domestic acquirers.

With regard to the differences between the targets and not-acquired firms, it has been noticed that the target firms exhibit low public shareholding, highly leverage, generating less return and having less cash when compared to that of the peer not-acquired firms.

References

Agnihotri, A. (2013). 'Determinants of acquisitions: an Indian perspective', Management Research Review, vol. 36, no. 9, pp. 882-898.

Ambrose, B.W. and Megginson, W.L. (1992). 'The role of asset structure, ownership structure, and takeover defenses in determining acquisition likelihood', Journal of Financial and Quantitative Analysis, vol. 29, no. 4, December, pp. 575-584.

Barai, P. and Mohanty, P. (2012). 'Predicting Acquisitions in India', Vikalpa, vol. 37, no. 3, pp. 29-50.

Barnes, P. (1998). 'Can takeover targets be identified by statistical techniques?: Some UK evidence', Journal of the Royal Statistical Society: Series D (The Statistician), vol. 47, no. 4, pp. 573-591.

Barnes, P. (2000). 'The identification of UK takeover targets using published historical cost accounting data Some empirical evidence comparing logit with linear discriminant analysis and raw financial ratios with industry-relative ratios', International Review of Financial Analysis9, vol. 9, no. 2, June, pp. 147-162.

Bartley, J.W., and Boardman, C.M. (1990). 'The Relevance of Inflation Adjusted Accounting Data to the Prediction of Corporate Takeovers', Journal of Business Finance and Accounting, vol. 17, no. 1, pp. 53-72.

Basu, D., Dastidar, S. and Chawla, D. (2008). 'Corporate mergers and acquisitions in India: Discriminating between bidders and targets', Global Business Review, vol. 9, no. 2, pp. 207-218.

Bushee, B. J., Carter, M. E., and Gerakos, J. (2009). Institutional investor preferences for corporate governance mechanisms. Available from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1070168&download=yes

Chen, C. and Su, R. (1997). Do cross-border acquisitions of U.S. targets differ from U.S. domestic takeover targets? Global Finance Journal, 8(1), 71-82.

Cornett, M.M., Marcus, A.J., Saunders, A., and Tehranian, H. (2005). The impact of institutional ownership on corporate operating performance. Downloaded from http:// www2.bc.edu/~tehranih/TehranianInstOwner10-06- 05.pdf

Dencic-Mihajtov, K., and Radovic, O. (2006). 'Problems in Predicting Target Firms at the Undeveloped Capital Markets', Facta Ubniversitatis, vol. 3, no. 1, pp. 59-68.

Dietrich, J.R. (1984). 'Discussion of methodological issues related to the estimation of financial distress prediction models', Journal of Accounting Research, January, pp. 83-86.

Elyasiani, E., and Jia, J. (2010). 'Distribution of institutional ownership and corporate firm performance', Journal of banking & finance, vol. 34, no. 3, pp. 606-620.

Erel, I., Liao, E., and Weisbach, M. (2012). 'Determinants of Cross-Border Mergers and Acquisitions', The journal of Finance, vol. 67, no. 3, pp. 1045-1082.

Gaurav, B., and Sheeba, K. (2018). 'Pre-Acquisition Performance of Indian Target Firms', IUP Journal of Applied Economics, vol. 17, no. 1, pp. 17–39.

Georgopoulos, A., Argyros, G. and Boura, G. (2008). 'Which targets stimulate cross-border acquisitions? An empirical investigation of industrial organization and trade factors within a competition framework of international and domestic acquisition targets', Journal of Industry, Competition and Trade, vol. 8, no. 1, pp. 55-71.

Gonzalez-Arias, J., Arguedas-Sanz, R. and Martin-Gracia, R. (2017). 'Real estate industry takeover bid patterns: Spain, a case study', Revista de Contabilidad, vol. 20, no. 2, July-December, pp. 225-232.\

Grossman, S. and Hart, O. (1980). 'Takeover bids, the free-rider problem, and the theory of the corporation'. Bell Journal of Economics, vol. 11, no. 1, pp. 42-64.

Gu, L., and Hackbarth, D. (2018). Does Transparency Increase Takeover Vulnerability?.

Gutsche, R. (2013). Determinants of M&A Activity and Control Concept—Firm Characteristics as Economic Indicators for Control in Business Combinations.

Irfan, M., Saha, S. and Singh. (2016). 'Determinants of being acquired in Indian manufacturing sector: a panel data analysis', Journal of Indian Business Research, vol. 8, no. 4, pp. 246-263.

Jandik, T., and Makija, A.K. (2005). Leverage and the complexity of takeovers. The Financial Review, 40(1), 95-112.

Jensen, M.C. (1987). The free cash flow theory of takeovers: A financial perspective on mergers and acquisitions and the economy.

Jit, B. and Kohil, R. (2011). 'Target Shareholders' Wealth Creation in Domestic and Cross-border Acquisitions in India', International Journal of Commerce and Management, vol. 21, no. 1, pp. 63-81.

Kathleen, G., Demos, V., & Bruhan, Y. (2012). The Global Financial Crisis and M&A. International Journal of Business Management, 7(11), 56 -66.

Kumar, B., and Rajib, P. (2007). 'Characteristics of merging firms in India: An empirical examination', Vikalpa, vol. 32, no. 1, pp. 27-44.

Kyoji, F., Keiko, I., HyeogUg, K., Miho, T. (2008). Cross-Border Acquisitions and Target Firms' Performance: Evidence from Japanese Firm-Level Data. The University of Chicago Press.

Lertwachara, K. and Booncho, P. (2015). An application of rank transformation: merger target predictions.

Mathew, J.C. (2017). BT: Ease of Doing Business, 1 November, [Online], Available: https://www.businesstoday.in/current/economy-politics/ease-of-doing-business-ranking-2018-india-rank-world-bank/story/263003.html [8 August 2018].

McConnell, J.J. and Servaes, H. (1990). 'Additional evidence on equity ownership and corporate value', Journal of Financial economics, vol. 27, no. 2, pp. 595-612.

McNichols, M. and Stubben, S. (2015). 'The effect of target-firm accounting quality on valuation in acquisitions', Review of Accounting Studies, vol. 20, no. 1, March, pp. 110-140.

Mizuno, M., and Tabner, I.T. (2009). Corporate governance in Japan and the UK: Codes, theory and practice. Pacific Economic Review, 14(5) 622-638.

Ooghe, H., De-Langhe, T. and Camerlyrick, J. (2006). 'Profile of multiple versus single acquirers and their targets: a research note', Applied Economics, vol. 38, no. 7, April, pp. 725-733.

Palepu, K.G. (1986). Predicting takeover targets: a methodological and empirical analysis. Journal of Accounting & Economics, 8(1), 3-35.

Panigrahi, P.K. (2004). An alternative predicting model for corporate mergers and acquisitions. Vilakshan – XIMB Journal of Management, 1(1), 12-21

Pasiouras, F., Tanna, S., & Gaganis, C. (2011). What drives acquisitions in the EU industry? The role of bank regulation and supervision framework, bank specific and market specific factors. Financial Market, Institutions and Instruments. 20(29), 77

Pawaskar, V. (2001). Effect of mergers on corporate Performance in India. Vikalpa, 26(1), 19-32.

PengCheng Zhu, Vijay Jog, Isaac Otchere (2010). Partial acquisitions in emerging markets: A test of the strategic market entry and corporate control hypotheses, Journal of Corporate Finance 17 (2011) 288–305

Powell, R. (1997). 'Modeling takeover likelihood', Modeling takeover likelihood, vol. 24, no. 7-8, September, pp. 1009-1030.

Powell, R. (2001). 'Takeover Prediction and Portfolio Performance: A Note', Journal of Business Finance and Accounting, vol. 28, no. 7-8, pp. 993-1011.

Powell, R. (2004). 'Takeover Prediction Models and Portfolio Strategies: A Multinomial Approach', Multinational Finance Journal, vol. 8, no. 1/2, pp. 993-1011.

Powell, R. (2015). 'Takeover Prediction Models and Portfolio Strategies: A Multinomial Approach', Multinational Finance Journal, vol. 8, no. 1/2, June, pp. 35-72.

Reddy, K. S., Nangia, V. K., & Agrawal, R. (2014). The 2007-2008 global financial crisis, and cross-border mergers and acquisitions: A 26-nation exploratory study. Global Journal of Emerging Market Economies, 6(3), 257-281. Sage Publications.

Sood, G. and Kaur, S. (2004). 'Predicting Corporate Takeovers in India: An Empirical Analysis', Vision, vol. 8, no. 2, pp. 57-67.

Sorenson, D. (2000). 'Characteristics of merging firms', Journal of economics and business, vol. 512, no. 5, pp. 423-433.

Stulz, R.M. (1988). Managerial control of voting rights: Financing policies and the market for corporate control. Journal of Financial Economics, 20(1/2), 25–54.

Vijay Gurav (2012). 'Wealthy Investors Buy Shell Companies to Gain from their Listed Status', Economic Times, April 24.

Attractive M&A Targets Part 1 – What do Buyers look for? – An Analysis of the financial characteristics of Acquisition Targets, M&A Research Centre at Cass Business School, City University London, and Intralinks, 2016.