Euphoria in financial markets: how Indian companies generate value in their cross-border acquisitions

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Abstract

In this paper, we investigate the effect of euphoria on returns derived by Indian companies in their cross-border acquisitions. Cognitive legitimacy generated at the country level facilitated firms in deriving higher value from internationalization. In addition, overoptimism after the legitimacy-building event led to euphoria in financial markets and short-term abnormal returns. Hence we argue that the springboard effect created by legitimacy is short-lived, as euphoria fades away over time. Using cross-border and domestic acquisitions by Indian companies during 1999-2009, and controlling for fundamental factors, both financial and non-financial, we find support for our euphoria hypothesis. Because of overoptimism, Indian companies experienced short-term abnormal returns in their cross-border acquisitions in the few years following the legitimation process, but not in later years.

Keywords. Cognitive legitimacy, euphoria effect, India, cross-border acquisitions.

INTRODUCTION

The last decade has seen a rapid internationalization of emerging-market (EM) firms (UNCTAD, 2011). In the global business environment, these EM firms face several issues in the nascent internationalization stage due to their linkages with their home country (Stillman, 1974). One of the critical issues faced by multinational enterprises, often underscored in the literature, involves the establishment and maintenance of legitimacy in foreign markets (Klossek et al., 2012; Kostova and Zaheer, 1999; Liao and Yu, 2012). Legitimacy is central in the milieu of institutions that define the rules of the game in international markets (Ahlstrom et al., 2008; Davis et al., 2000), and firms need to achieve *taken-for-grantedness* in these foreign markets (Guillén and García-Canal, 2009; Luo and Tung, 2007). However, authors in international business research have struggled to explain why legitimacy created in the business environment has no discernible impact after the initial observation of the legitimacy-creating phenomenon. This paper addresses this issue by linking the observed negligible effect of legitimacy to the euphoria effect widely studied in other areas (Helwege and Liang, 2004; Mian and Sankaraguruswamy, 2008; Steib and Mohan, 1997). More specifically, we investigate this euphoria effect in the context of internationalization of Indian firms; i.e., how euphoria created in financial markets can generate abnormal returns for Indian companies in their foreign acquisitions and how this euphoria effect is short-lived.

The lack of legitimacy in the host country has been identified as one of the costs of doing business abroad, referred to as liabilities of foreignness (Kostova and Zaheer, 1999; Zaheer, 1995). Since authors have emphasized the role of location in Dunning's OLI paradigm (Asmussen et al., 2011; Dunning, 2009), liability of foreignness is considered to be both a country-level and firm-level construct (Beugelsdijk, 2011; Dunning and Lundan, 2008). Indeed companies can overcome this liability of foreignness through both firm-specific (or ownership-specific) advantages and location-specific advantages. Moreover, this

liability of foreignness impacts the returns of these companies. Thus, EM companies are required to cultivate legitimacy that will help them surmount drawbacks coupled with their country-of-origin and liability of foreignness (Bell et al., 2008; Klossek et al., 2012; Rugman and Verbeke, 2004). Similarly, authors have looked at the legitimization process of Indian companies in foreign markets (Pant and Ramachandran, 2012).

From the domestic country perspective, there are good grounds for believing that legitimacy generated in emerging markets will influence the tradeoffs between domestic and overseas investments. This has implications at a macroeconomic level as companies need to choose whether they will invest within their country or engage in outward investment (Gubbi et al., 2010). Hence, it is important to examine the returns that these companies derive abroad vis-à-vis their domestic investments.

Our paper focuses on the following unanswered questions: Do Indian firms accrue value for their shareholders if they internationalize after the legitimation process? Do these returns hold over a period of time, i.e., is there a degree of persistence in the legitimacy-generated abnormal value or is it mainly driven by euphoria in financial markets? The legitimacy that we discuss in this paper is not grounded in firms but rather is *in the air*. Legitimacy is created in the global business environment and Indian companies leverage it. However such cognitive legitimacy brought about overoptimism, or euphoria, in financial markets and, like fragrance, it fades away after initial exuberance as Indian companies are unable to leverage it anymore.

We contribute to the narrative on organizational legitimacy and internationalization in two ways. First, our study shows that legitimacy created in the global business environment can impel organizations from EM to create value for their shareholders via cross-border acquisitions. Second, we use the euphoria effect to explain the temporal limitations on the leverage of legitimacy in these cross-border acquisitions.

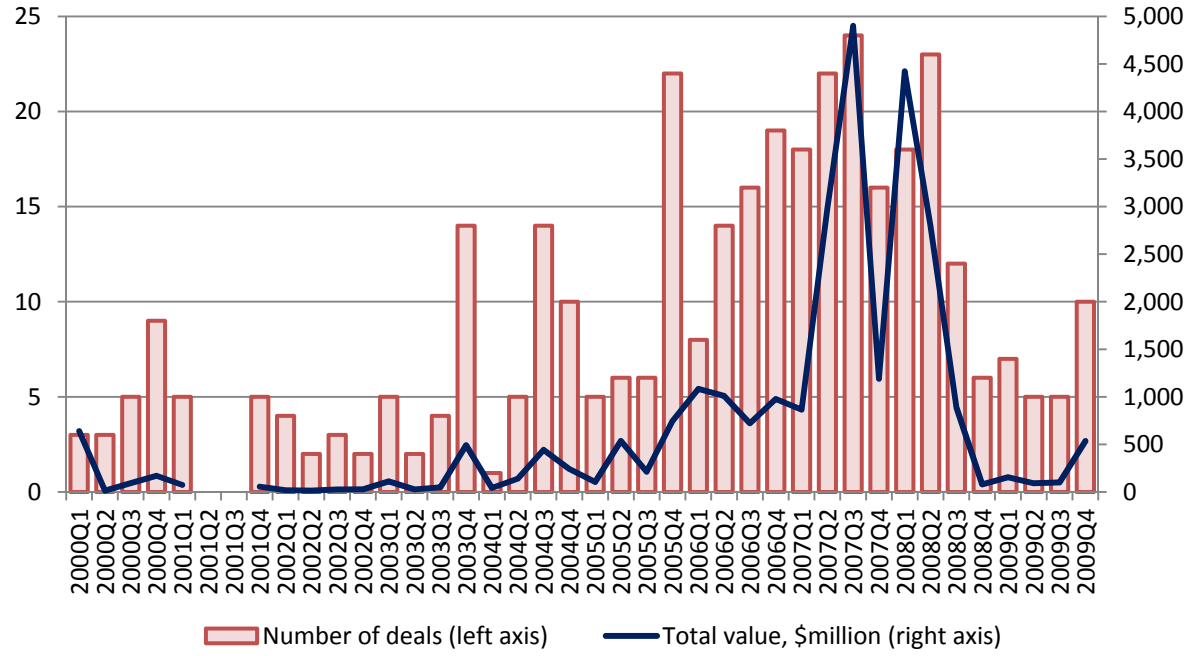
Cross-border and domestic acquisitions by Indian companies form the empirical context of our study. In their internationalization process, Indian companies traditionally entered foreign markets through greenfield investments. However, a growing number of Indian companies alter their mode of entry into foreign markets, now adopting inorganic growth through overseas acquisitions (Gubbi et al., 2010; Hattari and Rajan, 2010; Kumar, 2008).[1] We use the time period 1999-2009 to undertake our empirical analysis. This period has seen a built-up of internationalization process by Indian firms. As seen on Figure 1 (Panel A), the number and value of cross-border acquisitions have grown considerably since 2000. Half way through the period, a Goldman Sachs report (Goldman Sachs, 2003) was published, which we argue creates a window of opportunity through legitimacy for Indian firms in their overseas acquisitions. The fact that this report acted as a legitimacy-building event for Indian companies is justified by the literature, both academic and professional (Armijo, 2007; Bloomberg, 2003; Hult, 2009; Wansleben, 2013), and motivated by informal discussions with Indian businesses.[2] Figure 1 (Panel B) shows the surge in cross-border deal announcements – and value – right after the publication of the report in October 2003. Thus, our choice of country and time window provides an excellent setting to investigate our hypotheses. While the contribution of this paper will be specific to the particular context of Indian companies, it represents a progression towards a better understanding of the process by which EM firms are able to overcome the liability of foreignness in international markets and how legitimacy that is grounded in the external environment generates positive effects for companies only in period of euphoria.

[1] The number of foreign acquisitions by Indian companies has risen from only three in 1992 to 2,195 in 2001 UNCTAD (2011).

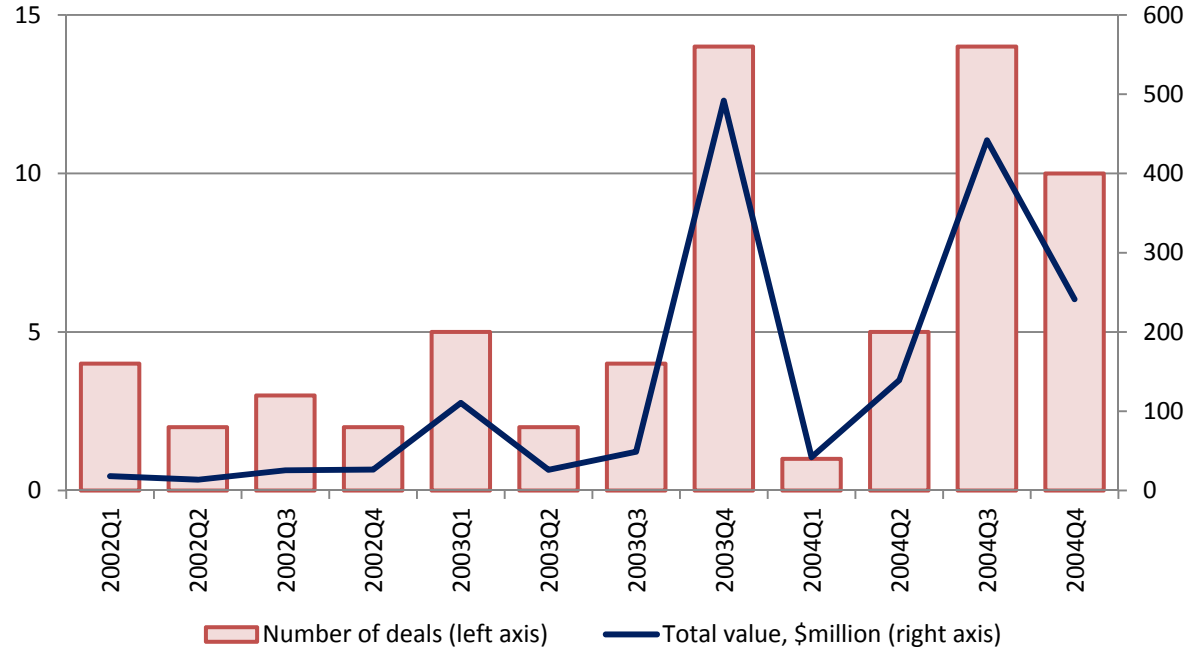
[2] Between January 2009 and December 2013, we conducted several interviews with stakeholders of two Indian companies, as well as one acquisitions consultant in India. Both companies had limited foreign investment activity before 2003, and there was an overall consensus among respondents that the Goldman Sachs report had a great impact on the perception of Indian companies in foreign markets, and hence the firms' cross-border investment strategy.

Figure 1. Number and value of cross-border acquisitions by Indian companies by announcement date

Panel A. 2000-2009



Panel B. 2002-2004



Source: Thomson One

In the next section of the paper we formally develop our hypotheses using theory and empirical evidence on legitimacy and euphoria and follow it with details on data and methodology. Results of our analysis are presented in the subsequent part, and finally, we conclude with discussion of our results and avenues for future research.

THEORY AND HYPOTHESES

In this paper, we focus on a legitimacy-creating event at the country-level and see how its impact trickles down to firm-level. This is consistent with the institutional approach of organizational legitimacy, i.e., the existence of an exogenous legitimacy-building event that can affect how people understand and evaluate organizations (Suchman, 1995). The idea is that Indian companies are able to gain credibility and comprehensibility in the global environment, in line with the cognitive definition of legitimacy (Palazzo and Scherer, 2006; Suchman, 1995). Pant and Ramachandran (2012) also argue that Indian firms are able to achieve cognitive legitimacy in their cross-border operations through what they call *empirical credibility*. Focusing on the software services industry, they show that empirical credibility was enhanced by the industry's focus on "compilation and dissemination of extensive statistics on software services firms that enabled stakeholders to develop credible images of the Indian software industry". Moreover, they emphasize the importance of industry studies published by consulting firms such as McKinsey and Boston Consulting Group that have substantial referent power in the host country's institutional environment.

Similarly, our legitimacy-creating event for Indian acquirers is the publication of a Goldman Sachs report (Goldman Sachs, 2003) considered as the first study assessing the tremendous growth potential of India and other BRIC countries. The economic liberalization of several emerging economies in the East (Ahlstrom et al., 2008) and the arrival of new transition economies of Eastern Europe in the 1980s-1990s have created a buzz in the global business environment. At that time, the idea that trade liberalization and other moves to free

up markets would generate a growth take-off represented a hope rather than a well-founded expectation (Krugman, 1995). Moreover, liberalization policies might not necessarily encourage companies to go abroad, even if they can act as enablers (Nayyar, 2008).

It was noted that prior to 2003 much of the excitement about the new members of the global order was relatively muted (Goldman Sachs, 2003). Most of these emerging economies were pertinent for cheap labor and raw material, among others factors (Miller et al., 2008b). These emerging economies were leveraged by developed-economy firms for their demographic dividends, with a large number of young people forming part of their sweatshops. Though in some developing countries it had generated disposable income and improved the quality of life for citizens, it had done very little otherwise.

The Goldman Sachs report altered the world vision. The countries in the periphery of the global business community were suddenly catapulted to the center of world discussion (Goldman Sachs, 2003; Rasiah et al., 2010). As soon as the report went public, Bloomberg Businessweek published an article stating that “the provocative conclusions, which initially stemmed from a demographic study, are already attracting wide interest” (Bloomberg, 2003). Although the Goldman Sachs report equally praises all BRIC countries, we believe its impact was strongest for Indian companies. For instance, China was already more advanced in terms of reform process, financial liberalization, openness to foreign investment, and organizational legitimacy (Huang and Khanna, 2003; Purushothaman, 2004). We argue that this report at the end of 2003 provided the necessary momentum to these Indian firms to capture the imagination of world business markets, including their domestic financial markets. Similar to Pant and Ramachandran (2012), we believe that the 2003 Goldman Sachs report emphasized the challenges to international growth of Indian companies and helped Indian firms gain widespread international credibility. The important contribution of the Goldman Sachs report was to develop powerful frames about challenges faced, capabilities developed, and

opportunities available for Indian companies. The picture of cheap laborers milling away in some dingy low-overhead factory was replaced by newly rich and ready to spend consumers who had taste for top-end products. National champions like Haier, Lenovo and Tata Group went on cross-border spree (Bonaglia et al., 2007). Indeed a direct consequence of this exogenous legitimacy building is the sudden increase in outward foreign direct investment, and more specifically overseas acquisitions, from Indian companies (Gammeltoft, 2008; Kumar, 2008).

In India, cross-border acquisitions increased dramatically after 2003, mostly to gain market access to developed countries (Rasiah et al., 2010). Other authors have commented on the fact that Indian cross-border acquisitions have picked up from the year 2003 (Kohli and Mann, 2012), although they have not explored the reasons for this growth in acquisitions. We argue that those companies choosing to internationalize were able to channelize cognitive legitimacy developed by this report in the international business environment and generate value in their inorganic growth. This gain in credibility should mostly benefit cross-border acquisitions. Hence, following previous studies (Gubbi et al., 2010; Moeller and Schlingemann, 2005) we define the cross-border effect as the difference between the average abnormal return of foreign acquisitions and the average abnormal return of domestic transactions. Based on previous discussion and definition, we expect a positive cross-border effect to exist only after the legitimacy-building event:

Hypothesis 1. After Indian firms gained cognitive legitimacy in the global environment, they experienced greater abnormal returns from their cross-border acquisitions as compared to their domestic acquisitions.

Some of these acquisitions have been very high profile and have led to a perception of value-generating propositions in Indian business world (Khanna and Palepu, 2010). This could have also led to the creation of a euphoria effect in these initial acquisitions undertaken

by Indian companies. Indeed, Indian companies prior to the fiscal policy liberalization and trade policy changes faced rather restrictive policies at home and could not invest in global markets (Gubbi et al., 2010). Hence, the Indian stock market rewarded pioneering cross-border acquisitions with higher premium driven by a novelty factor and bullish investment environment. A euphoria effect exists when something is done for the first time in the market. The results of such new activities unascertainable by the market can generate substantial interest and excitement. There is evidence that the Goldman Sachs report created country-wide euphoria, as suggested by an article from the Economic Times in 2008, "the euphoria generated over the growth potential of India may have its origin in a 2003 report put out by global investment bank Goldman Sachs" (Economic Times, 2008). But with time this effect subsides and the market reaction converges towards realistic expectations of the activity outcome.

Such euphoria has been observed in other circumstances. For instance, authors have talked about the *reunification euphoria* in German stock markets after the reunification of East and West Germany (Brooks et al., 2005; Steib and Mohan, 1997; Sultan, 1995). Minsky (2008) has mentioned the cycle of overestimation of expected returns, i.e., a phase of intense euphoria and bandwagon effect followed by a period of profit taking and finally, the cycle is completed with the recognition that earlier expectations were unjustified.

In the behavioural corporate finance literature, such euphoria exists when investors and/or managers exhibit overoptimism. Investor sentiment is when investors react to factors other than the value created by the corporate decision (e.g. merger, initial public offering, earnings announcement, stock splits, dividend payment). There is evidence that shareholder reaction to a corporate announcement is affected by investor sentiment, and that the stock price sensitivity to good news is greater during high sentiment periods (Helwege and Liang, 2004; Mian and Sankaraguruswamy, 2008).

Manager optimism can take different forms, e.g. bidders succumb to hubris and acquire overpriced targets with limited worth for the acquiring company (Roll, 1986). Managers engage in a lax assessment of the target company and might underestimate the challenges of integration in overseas acquisitions. Overall, stock market bolstered acquisitions are fraught with overvaluations and unlikely to realize full value for the acquiring firms. This kind of exuberance can result in financial cycle related acquisitions (Lubatkin and Chatterjee, 1991; Pangarkar and Lie, 2004; Shleifer and Vishny, 2003). High-equity market cycles are closely accompanied with positive economic outlook. During such high-equity market cycles, similar to the one witnessed in India after the publication of the Goldman Sachs report, managers pursue aggressive and risky acquisitions. All through the low-equity market cycle, managers act conservatively. They either resist from undertaking acquisitions or scale-down the price that they pay for their transactions (Pangarkar and Lie, 2004).[3] Thus the existence of euphoria in the home market (either from managers or from investors) will lead to an overestimation of expected returns in the short-run.

Our euphoria argument is also consistent with neoclassical theory suggesting that the occurrence of acquisitions is a consequence of economic shocks (Harford, 2005; Mitchell and Mulherin, 1996). If we consider the Goldman Sachs report as a country-wide economic shock, such economic disturbance brings about an increase in share prices, which causes shareholders to update their expectations. Such shock potentially increases acquisition synergies and creates a *hot* market, implying that bidder stock prices are more likely to increase when a deal is announced in a market where recent acquisitions by other firms have been received well (Rosen, 2006).

[3] It is important to note that aggressive acquisition activity is not necessarily driven by managers' irrationality, as managers can be perfectly rational and engage in overpriced acquisitions simply to arbitrage the presence of investor sentiment in the market (Sheifer and Vishny 2003). Indeed as long as the perceived synergy of the acquisition is high enough, the deal is in the interest of the manager.

Finally, another argument for this aggressive cross-border activity from Indian companies is the pressure from global markets to internationalize. Firms that experience low growth opportunities or that nurse world-stage aspirations look at acquisitions as a mechanism to springboard themselves into global markets and derive higher growth opportunities (Kim et al., 2011; Luo and Tung, 2007). But faced with pressures to grow fast, access international markets or acquire strategic assets, bidders might undertake lower than optimal examination of target countries or companies and overvalue the acquisitions. Thus, due to overoptimism in their domestic market and external pressure to internationalize rapidly and acquire strategic resources, many managers resulted in overpaying their acquisitions as they were less inclined to scrutinize potential targets for synergies. As many of these post-acquisition disasters are well-documented in the media, financial markets might be unenthusiastic to future overseas investments once the initial magic of cross-border acquisitions fades.

Thus, this euphoria effect is a relevant matter in this discourse on cross-border premium that companies can generate on the stock market due to legitimacy generated in the business environment. Because of euphoria, we argue that investors and/or managers overreacted to the Goldman Sachs report and that abnormal returns owned from cross-border acquisitions existed only in the few years following the report. In other words, deals announced around 2004-2006 experienced higher abnormal returns than deals announced in later years.

Hypothesis 2. The euphoria effect is short-lived, i.e., Indian companies earned abnormal returns in their cross-border acquisitions only in the few years following the legitimacy-building event.

It is also possible that firms belonging to different sectors will behave differently under similar business conditions. It is also likely that firms in some sectors will be able to

experience integration synergies and/or negative effects sooner than other sectors. For instance, it has been observed that Indian service sector firms gain the positive benefits of internationalization sooner than manufacturing firms due to quicker assimilation of social and relational capital due to service firms' superior capabilities compared to manufacturing sector (Contractor et al., 2007). Similarly, authors have suggested that the initial profitability loss from internationalization of firms is higher for manufacturing firms as opposed to service sector firms. Also, prior to the liberalization of the Indian economy, several manufacturing firms experienced local monopoly effects and did not engage actively in technology upgradation and internationalization (Gubbi et al., 2010). Hence, it is possible that service firms in India have already created legitimacy for themselves in the foreign markets before the legitimacy-building event discussed in this paper. Manufacturing firms, on the other hand, could mostly benefit from this legitimation in global markets. Thus, it is pertinent to examine whether manufacturing firms experienced a greater euphoria effect:

Hypothesis 3: Manufacturing firms will experience stronger euphoria effect after the legitimacy-building event compared to other sectors.

DATA AND METHODOLOGY

We use Zephyr database to obtain data on Indian acquisitions from January 1999 to December 2009. We use three qualifying conditions for inclusion into our sample: the acquirer is listed on Bombay Stock Exchange, the acquirer acquires a majority stake in the target company and finally, the transaction is complete. In order to compute abnormal returns, we collect data on daily stock returns and daily market returns from Thomson DataStream. The unification of Zephyr and DataStream databases generates our final sample which consists of 649 acquisitions by 314 different companies, including 385 domestic and 264 cross-border deals. For the market portfolio, we use the index BSE-200 which represents the

200 largest capitalizations on the Bombay Stock Exchange. From DataStream we also collect quarterly data on price-to-book ratio and market capitalization for our multivariate analysis.

Dependent variable. We use cumulative abnormal returns (CAR) calculated over a 5-day window around the announcement date to assess the short-term performance of acquisitions. This method is similar to extant literature which focuses on the short-term impact of acquisitions on acquirers (Cartwright and Schoenberg, 2006; Doukas and Kan, 2006; Gubbi et al., 2010; Kohli and Mann, 2012; Markides and Ittner, 1994; Moeller and Schlingemann, 2005). This ex ante performance measure prior to the actual integration of the target has been demonstrated to link well with the ex post firm level outcomes (Haleblian et al., 2006; Kale et al., 2002; Pangarkar and Lie, 2004). Moreover, this measure is relatively unbiased compared with other measures, and invariant to differences in national accounting standards (Cording et al., 2008; Gubbi et al., 2010).

Independent variables. We test our first hypothesis using a dummy variable, *Cross-Border*, which takes value one if the acquirer takes over a foreign company, zero otherwise. We test for the significance of this variable in impacting announcement returns over two sub-periods corresponding to the years before and after the 2003 Goldman Sachs report. We expect that in the post-legitimacy period (2004-2009) this variable will have a positive and significant impact, stronger than in the pre-legitimacy period (1999-2003). In order to test our second hypothesis, we need a measure of euphoria.[4] Since euphoria is related to overoptimism, we use relative trading volume (i.e., stock turnover) as a proxy for euphoria towards a particular acquirer. An abnormally high level of trading volume implies that investors are buying or selling the stock of the company in mass. If investors are particularly optimistic (pessimistic) about an acquisition, they will buy (sell) the stock, pushing its price

[4] Authors have suggested that the elemental difficulty with the idea of *euphoria* is that it cannot be calculated directly, and this dilemma has long been acknowledged in financial research on sentiment (Archer and Smith 2013).

up (down). *Volume* is then defined as the deviation of the acquirer's stock trading volume in the month of the announcement from its 12-month average. To test our euphoria hypothesis on the total sample of domestic and cross-border acquisitions, we interact this *Volume* variable with the dummy *Cross-Border*. Indeed we expect that, after the publication of the Goldman Sachs report, investors were overoptimistic about cross-border acquisitions – as opposed to domestic acquisitions. This translates into higher abnormal returns for cross-border deals when trading volume was particularly high, that is a positive coefficient for *Volume* × *Cross-Border*. We expect that in the post-legitimacy period this variable will have a positive and significant impact, stronger than in the pre-legitimacy period. We further test our euphoria hypothesis on a reduced sample of cross-border deals only, by creating three other interaction variables, *Volume* × *2004*, *Volume* × *2005* and *Volume* × *2006*. *2004*, *2005* and *2006* are year dummies taking into account potential lags in this euphoria effect. Based on our theoretical arguments, we anticipate that these coefficients will be decreasing both economically and statistically over the three years, and that the *Volume* coefficient (looking at the euphoria effect for all other years) will become insignificant. For our third hypothesis, we split the cross-border sample into manufacturing and services sectors and test for the significance of *Volume*, *Volume* × *2004*, *Volume* × *2005* and *Volume* × *2006* in explaining abnormal returns.

Control variables. To be able to isolate the euphoria effect in our data, we control for fundamental factors known to affect announcement returns. Several of these variables are used as proxies for legitimacy-building, accounting for firm valuation and learning on the part of the firms. Similar to other studies on internationalization, we control for firm-level, deal-level and target country-level characteristics. The *Acquirer Age* is defined as the difference between the year of acquisition and the year of incorporation of the firm (Sapienza et al., 2006). Since authors have indicated the impact of business group association on FDI

(Popli and Sinha, 2014), we create a control variable *Business Group* which takes value 1 if the acquirer belongs to a business group. Three variables are constructed to control for the relative valuation of the acquiring firm. *Book Value* is calculated as the percentage change in acquirer's book value of equity at the time of the announcement compared to previous year. *Market Value* is calculated as the percentage change in acquirer's market capitalisation at announcement date relative to its 12-month average. *Price-to-Book* ratio is calculated as the acquirer's market value of equity divided by its book value of equity (Lang et al., 1991; Moeller and Schlingemann, 2005). At the deal level, *Deal Value* is the value of the transaction in billion dollars (Madura and Wiant, 1994). *Relative Size* is the ratio of deal value to bidder market value of equity (Gubbi et al., 2010; Moeller and Schlingemann, 2005; Nicholson and Salaber, 2013). *Percentage Acquired* controls for the variation in ownership concentration (Moeller and Schlingemann, 2005; Nicholson and Salaber, 2013). *Same Industry* is a dummy which takes value one if both the acquirer and the target belong to the same industry group, zero otherwise (Denis et al., 2002; Moeller and Schlingemann, 2005; Shleifer and Vishny, 2003). We also create a variable, *Prior Experience*, to indicate prior acquisition experience of acquirers in our sample (Moeller and Schlingemann, 2005; Nicholson and Salaber, 2013).

At the target country level, we use different measures of economic and social distance between India and the target country (Ghemawat, 2001; Gubbi et al., 2010; Khanna et al., 2005; Rugman and Verbeke, 2004; Tsang and Yip, 2007). The dummy variable *Same Language* takes value one when both countries have the same official language (Brouthers, 2002; Demirbag et al., 2007; Ronen and Shenkar, 1985). We also use a variable *Forex* to look at the impact of foreign exchange rate variation on announcement returns (Buckley et al., 2012). Following Cakici et al. (1996), Eun et al. (1996) and Kang (1993), we calculate the relative strength of the exchange rate as the deviation of the foreign exchange rate at

announcement date from its 12-month average. To control for foreign direct investment activity in India, we include a variable *Inflow/Outflow* which is the ratio of yearly inward investments to yearly outward investments from India (Buckley et al., 2012). Finally, we have also included a variable to indicate the inward FDI into India called *IFDI*.

All these variables are fundamental factors that can explain the cross-section of cumulative abnormal returns and help rule out any rational explanation. These rational factors can be divided into "financial" and "non-financial" variables. Financial factors are related to firm valuation and include *Book Value*, *Market Value*, *Price-to-Book*, *Relative Size*, *Deal Value*, and *Forex*. Non-financial factors account for strategic and managerial explanations and include *Acquirer Age*, *Percentage Acquired*, *Same Industry*, *Prior Experience*, *Business Group*, *Inflow/Outflow*, and *Same Language*.

We compute daily abnormal returns using a standard event study methodology (Cartwright and Schoenberg, 2006; Gubbi et al., 2010; Haleblian et al., 2006; McWilliams and Siegel, 1997; Moeller and Schlingemann, 2005). This methodology allows to test whether a specific event (the announcement of an acquisition) had a positive or negative impact on shareholder wealth (Aybar and Ficici, 2009). The expected returns for each stock are estimated according to the market model (MacKinlay, 1997):

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}, \quad (1)$$

where R_{it} is the daily return on the acquirer and R_{mt} is the daily return on the market portfolio. The estimation period runs from 90 to 30 days before the announcement date. The coefficients α_i and β_i thus obtained are used to forecast the abnormal returns over each 5-day event window. The difference between the actual return and the expected return from the market model gives the daily abnormal stock return:

$$AR_{it} = R_{it} - \hat{\alpha}_i - \hat{\beta}_i R_{mt}. \quad (2)$$

We then calculate the cumulative abnormal return for each deal (CAR_i) by accumulating the daily abnormal returns over the 5-day event window [-2; +2].

As an alternative method to compute abnormal returns, we use the modified market model also used in previous event studies (Bouwman et al., 2009; Brown and Warner, 1985). Instead of estimating expected returns over a pre-announcement period, the modified market model proxies the *normal return* of company *i* on day *t* with the market return on that day.[5] We thus define abnormal returns for any day *t* as the difference between the bidder return and the market return:

$$AR_{it} = R_{it} - R_{mt}. \quad (3)$$

We then test our hypotheses by assessing the cross-border effect using CARs in a univariate analysis; and regressing the CARs on our independent and control variables. For this last step, we run several cross-sectional regressions across various types of deals based on the following multivariate models:

Hypothesis 1:

$$CAR_i = \beta_0 + \beta_1 Cross\text{-}Border + \mathbf{\beta X} + \varepsilon \quad (4)$$

This model is run over the total sample of domestic and cross-border deals. **X** is a vector representing all control variables discussed above, excluding country-level variables.

Hypotheses 2 and 3:

$$CAR_i = \beta_0 + \beta_1 Volume + \beta_2 Volume \times Cross - Border + \mathbf{\beta X} + \varepsilon \quad (5)$$

This model is run over the total sample of domestic and cross-border deals.

$$CAR_i = \beta_0 + \beta_1 Volume + \beta_2 Volume \times 2004 + \beta_3 Volume \times 2005 + \beta_4 Volume \times 2006 + \mathbf{\beta X} + \varepsilon \quad (6)$$

[5] As our sample includes several consecutive deals (i.e., the same company announcing different acquisitions within the same couple of months), we lose some deals by using a 60-day estimation period. Every time the estimation period for a particular transaction overlaps with a previous deal announcement, this transaction is discarded from the sample.

This model is run over the sample of cross-border deals only; **X** here includes country-level variables.

RESULTS

The descriptive statistics and correlations between our variables are presented in Table 1. Panel A presents the statistics across all transactions (both domestic and cross-border) whereas Panel B provides descriptive statistics for the sub-sample of cross-border deals only. With an average firm age of 35 years and a deviation of 24 years, our sample shows an eclectic mix of acquirers, some matured (e.g. Tata Group which is over a century old) and some quite young (e.g. ICICI Bank which was formed in the 1990s). In Panel B, the average CAR (1.8%) is much higher than in Panel A, suggesting that cross-border acquisitions on average earn higher abnormal returns than domestic acquisitions. However it is worth noting that the standard deviation of CARs is very close between both panels, implying that the variation in CARs is similar across domestic and cross-border acquisitions. Looking at the correlation between our variables, CAR is positively correlated with Cross-Border, Relative Size, and especially Volume. Cross-Border is also positively correlated with Business Group and Percentage Acquired. Across our control variables, no correlation coefficient is above 0.37, ensuring minimum multicollinearity issues in the regression analysis. For information, the top three target countries are OECD countries (the United States, the United Kingdom and Germany).

Cross-border effect. In order to test Hypothesis 1, we use both univariate and multivariate analyses and split our sample into two sub-periods: before the publication of the Goldman Sachs report (1999-2003) and after (2004-2009). Table 2 reports the results for the univariate analysis, calculating 5-day CARs using either the market model without estimation period (Panel A) and with a 60-day estimation period (Panel B).

Table 1. Descriptive statistics and correlation matrix

Panel A. Domestic and cross-border deals (n=222)

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 CAR	0.001	0.059	1															
2 Acquirer Age	35.57	24.31	-0.021	1														
3 Business Group	0.856	0.352	0.013	0.108	1													
4 Cross-Border	0.482	0.501	0.273***	-0.075	0.268***	1												
5 Deal Value	57.37	178.81	-0.173***	0.012	-0.131*	0.033	1											
6 Forex	-0.001	0.051	0.067	-0.027	-0.027	0.160**	0.064	1										
7 Prior Experience	0.509	0.501	-0.186***	0.006	0.290***	0.172**	0.091	0.008	1									
8 Price-to-Book	3.891	3.962	-0.066	0.072	0.089	0.097	-0.052	-0.005	0.055	1								
9 Inflow/ Outflow	2.730	3.468	0.034	-0.034	-0.117*	-0.145**	-0.035	-0.114*	-0.148**	-0.093	1							
10 Relative Size	0.118	0.307	0.185***	-0.043	-0.028	0.104	0.282***	-0.043	-0.088	-0.158**	0.014	1						
11 Same Industry	0.712	0.454	-0.112*	-0.020	-0.006	0.017	0.069	-0.057	-0.068	0.048	0.116*	0.012	1					
12 Same Language	0.838	0.369	-0.011	-0.033	-0.181***	-0.456***	0.049	-0.021	-0.090	-0.008	0.088	0.001	-0.037	1				
13 Percentage Acquired	0.793	0.298	0.081	0.024	0.010	0.305***	0.085	0.114*	-0.055	0.104	0.001	0.121*	0.009	-0.036	1			
14 Book Value (Δ)	0.265	0.429	0.059	-0.051	0.047	0.081	0.027	0.122*	-0.028	0.233***	0.069	-0.162**	0.053	0.000	0.163**	1		
15 Market Value (Δ)	0.142	0.387	0.172**	-0.014	-0.013	-0.022	-0.019	0.365***	-0.093	0.013	0.174***	0.086	0.025	0.011	0.059	0.247***	1	
16 Volume	0.034	0.793	0.296***	0.086	0.091	-0.018	0.005	0.057	-0.041	-0.035	0.112*	0.207***	0.017	-0.039	-0.118*	-0.066	0.239***	1
17 IFDI	19.26	14.19	-0.127*	-0.035	0.009	-0.056	0.054	-0.370***	0.071	0.060	-0.280***	0.098	-0.090	-0.045	-0.060	-0.071	-0.301***	-0.157**

Panel B. Cross-border deals only (n=107)

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 CAR	0.018	0.064	1														
2 Acquirer Age	33.67	21.73	-0.045	1													
3 Business Group	0.953	0.212	-0.048	0.117	1												
4 Deal Value	63.54	199.46	-0.221 **	0.168 *	-0.260 ***	1											
5 Forex	0.007	0.046	-0.022	0.020	-0.017	0.086	1										
6 Prior Experience	0.598	0.493	-0.300 ***	0.031	0.089	0.144	-0.003	1									
7 Price-to-Book	4.290	4.340	-0.218 **	0.142	0.075	-0.099	0.101	0.108	1								
8 Inflow/ Outflow	2.211	1.091	0.067	0.075	-0.090	-0.144	-0.400 ***	0.073	-0.073	1							
9 Relative Size	0.151	0.399	0.265 ***	0.010	-0.160 *	0.360 ***	-0.076	-0.103	-0.219 **	-0.102	1						
10 Same Industry	0.720	0.451	-0.154	0.046	-0.040	0.121	-0.198 **	-0.087	0.085	0.153	-0.009	1					
11 Same Language	0.664	0.475	0.171 *	-0.122	-0.158	0.093	0.093	-0.019	0.054	0.112	0.061	-0.048	1				
12 Percentage Acquired	0.887	0.223	0.015	0.145	-0.113	0.107	0.016	-0.034	0.127	-0.042	0.061	0.053	0.224 **	1			
13 Book Value (Δ)	0.301	0.511	0.044	0.030	0.087	-0.045	0.101	-0.037	0.269 ***	-0.055	-0.231 **	0.064	0.051	0.178 *	1		
14 Market Value (Δ)	0.134	0.324	0.128	0.066	0.004	-0.032	0.245 **	-0.135	0.075	-0.143	0.107	-0.051	0.002	0.027	0.072	1	
15 Volume	0.019	0.669	0.393 ***	0.147	0.058	0.018	0.070	0.080	0.004	-0.108	0.349 ***	-0.139	-0.091	-0.108	-0.142	0.172 *	1
16 IFDI	18.43	12.71	-0.074	-0.100	-0.092	0.094	-0.100	-0.026	-0.059	-0.481 ***	0.210 **	-0.096	-0.127	0.146	-0.046	-0.088	-0.005

† if $p < 0.10$, * if $p < 0.05$; ** if $p < 0.01$; *** if $p < 0.001$

Table 2. Univariate Analysis (whole sample)

Panel A. CAR without estimation period[a,b]				
	cross-border	domestic	cross-border effect[d]	t-stat
1999-2003	3.074% *n=42*	2.937% *n=89*	0.137%	0.10
2004-2009	1.747% *n=219*	0.138% *n=291*	1.609%	2.76***
Panel B. CAR with estimation period[a,c]				
	cross-border	domestic	cross-border effect[d]	t-stat
1999-2003	1.927% *n=35*	2.075% *n=80*	-0.148%	-0.09
2004-2009	1.911% *n=157*	1.815% *n=235*	0.097%	2.55**

[a] CAR is the 5-day cumulative abnormal return relative to the BSE-200 index and averaged across deals.
[b] CAR is calculated using the modified market model without estimation period.
[c] CAR is calculated using the market model with a 60-day estimation period.
[d] The cross-border effect is the difference between cross-border CAR and domestic CAR.
** p<0.05, *** p<0.01

Although in Panel A the average cross-border CAR for 1999-2003 is almost twice the average CAR for 2004-2009, both are very similar (about 1.9%) when CAR is calculated using the market model with estimation period (Panel B). The cross-border effect is the difference between cross-border CAR and domestic CAR. In order to test for this cross-border effect, we perform a t-test comparing the average CARs of domestic and foreign acquisitions. The t-statistics show that the cross-border effect is significant only in the post-legitimacy period. Thus, we observe support for our first hypothesis as there is a significant difference between the abnormal returns obtained from foreign and domestic acquisitions during the period 2004-2009 (this difference is equal to 1.6% in Panel A, which is significant at the 1% level). We observe similar results for CAR with 60-day estimation period (Panel B) where the cross-border effect over 2004-2009 is lower (0.1%) but still significant at the 5% level.

Table 3. Univariate Analysis (matched sample)

Panel A. Without estimation period[a,b]				
	cross-border	domestic	cross-border effect[d]	t-stat
1999-2003	3.46% *n=36*	2.23% *n=37*	1.23%	0.72
2004-2009	1.92% *n=179*	0.21% *n=178*	1.71%	2.46**
Panel B. With estimation period[a,c]				
	cross-border	domestic	cross-border effect[d]	t-stat
1999-2003	2.94% *n=31*	1.05% *n=31*	1.90%	1.18
2004-2009	2.22% *n=139*	0.09% *n=146*	2.13%	2.62***

[a] CAR is the 5-day cumulative abnormal return relative to the BSE-200 index and averaged across deals.
[b] CAR is calculated using the modified market model without estimation period.
[c] CAR is calculated using the market model with a 60-day estimation period.
[d] The cross-border effect is the difference between cross-border CAR and domestic CAR.
** p<0.05, *** p<0.01

As a robustness check, we create a matched sample of deals based on three criteria: both domestic and cross-border deals have to be generated from the same bidder's industry; the announcement dates of both deals have to be less than one year apart, and the difference between both bidder's size has to be as small as possible (Moeller and Schlingemann, 2005). Results for the matched sample are presented in Table 3 and are similar to those shown in Table 2, i.e., we observe a cross-border effect only after the legitimacy-generating event. The 2004-2009 cross-border effect is even higher than for the whole sample (1.71% in Panel A and 2.13% in Panel B).

In order to test Hypothesis 1 in a multivariate framework, we regress individual CARs on the explanatory and control variables using OLS method. Several observations were dropped due to missing values. Results with robust standard errors obtained using

Huber-White sandwich estimator are provided in Table 4 models (1) and (4). The variable of interest, *Cross-Border*, has a strong impact on abnormal returns in the post-legitimacy period but not in the pre-legitimacy period. Prior to 2003, the *Cross-Border* coefficient is not statistically significant; whereas post-2003, the coefficient is significant at 0.1% level. This result is consistent with findings from Tables 2 and 3, and strongly supports our first hypothesis, that is cross-border acquisitions by Indian companies earn higher announcement returns than domestic acquisitions in the post-legitimacy period. It is worth noting that the control variables – accounting for fundamental factors – behave differently across the two sub-periods. For instance, the two variables measuring the relative valuation of the acquirer (*Book Value* and *Market Value*) have a negative impact on CAR in the first period and a positive impact in the second period – though none of the coefficients are statistically significant. *Deal Value*, *Same Industry*, and *Prior Experience* have no significant effect on CAR during 1999-2003 but have a significant (negative) impact during 2004-2009.

Euphoria effect. The other models in Table 4 provide a preliminary test for Hypothesis 2 on the total sample of domestic and cross-border acquisitions. In models (2) and (5), the cross-border effect is still stronger in the post-legitimacy period, even when accounting for abnormal trading volume. The *Volume* variable has a positive impact on CAR in both periods, although its statistical significance is higher after 2003. The positive coefficient is consistent with overoptimism in financial markets, i.e., investors react positively to the acquisition's announcement by buying the stock of the company in mass, creating short-term abnormal returns not explained by other fundamental factors. Models (3) and (6) allow us to test whether such overoptimism was higher for cross-border deals than for domestic ones. The variable of interest, *Volume* × *Cross-Border*, has a stronger impact on abnormal returns in the post-legitimacy period compared to the pre-legitimacy period.

Table 4. Results of OLS regression with 5-day window cumulative abnormal returns (Sample of domestic and cross-border deals)

	1999-2003			2004-2009		
	(1)	(2)	(3)	(4)	(5)	(6)
Cross-Border	0.0269	0.0291†		0.0380***	0.0362***	
	(0.0161)	(0.0155)		(0.0082)	(0.0083)	
Volume		0.0171*	0.0190**		0.0232***	0.0005
		(0.0067)	(0.0063)		(0.0068)	(0.0097)
Volume × Cross-Border			-0.0187			0.0432**
			(0.0161)			(0.0129)
Acquirer Age	-0.0003	-0.0005*	-0.0006*	0.0001	0.0001	-0.0001
	(0.0002)	(0.0002)	(0.0003)	(0.0002)	(0.0002)	(0.0002)
Book Value	-0.0120	-0.0183	-0.0235	0.0123	0.0149	0.0172
	(0.0196)	(0.0204)	(0.0197)	(0.0128)	(0.0125)	(0.013)
Market Value	-0.0020	0.0186	0.0155	0.0143	0.0049	0.0035
	(0.0281)	(0.019)	(0.0163)	(0.0133)	(0.0132)	(0.0137)
Price-to-Book	-0.4672†	-0.5505*	-0.4911*	-0.1000	-0.0814	-0.0906
	(0.2561)	(0.2386)	(0.2033)	(0.1004)	(0.1051)	(0.0889)
Relative Size	-0.1316*	-0.0641	-0.0807	0.0427†	0.0300†	0.0272†
	(0.0649)	(0.0582)	(0.0584)	(0.0231)	(0.017)	(0.0147)
Deal Value	-0.0003	-0.0004*	-0.0004*	-0.0001**	-0.0001***	-0.0001***
	(0.0002)	(0.0002)	(0.0002)	(0.0000)	(0.0000)	(0.0000)
Percentage Acquired	0.0140	0.0371†	0.0535*	-0.0102	-0.0091	0.0129
	(0.021)	(0.0212)	(0.0232)	(0.0131)	(0.0131)	(0.0138)
Same Industry	0.0141	0.0177	0.0131	-0.0202*	-0.0208*	-0.0173*
	(0.0178)	(0.0162)	(0.0152)	(0.0086)	(0.0082)	(0.0086)
Prior Experience	-0.0217	-0.0058	0.0057	-0.0186*	-0.0247**	-0.0254**
	(0.0174)	(0.0151)	(0.0142)	(0.0085)	(0.0083)	(0.0084)
Business Group	-0.0108	-0.0288	-0.0245	-0.0108	-0.0075	0.0084
	(0.0275)	(0.0196)	(0.0223)	(0.0132)	(0.0132)	(0.0135)
Constant	0.0396	0.0325	0.0321	0.0149	0.0198	0.0065
	(0.0305)	(0.0257)	(0.029)	(0.0162)	(0.016)	(0.0175)
R-squared	0.240	0.505	0.473	0.248	0.308	0.280
Observations	50	47	47	179	175	175

Note: Robust standard errors are in parentheses, † if p<0.10, * if p<0.05; ** if p<0.01; *** if p<0.001

Prior to 2003, the *Volume* × *Cross-Border* coefficient is not significant, whereas it is strongly significant (at the 1% level) post-2003. Interestingly, *Volume* is not significant anymore in model (6), suggesting that the overoptimism observed after the legitimacy-building event (model 5) is entirely directed towards cross-border acquisitions. These

findings provide preliminary support to our euphoria hypothesis, that is cross-border acquisitions earned higher abnormal returns than domestic acquisitions in the post-legitimacy period because of overoptimism.

Finally, we observe that most of our control variables have negative or no impact on 5-day CARs. The variable with the most significant impact (especially during 2004-2009) is *Deal Value*, that is acquirers are penalized for targeting large companies. Interestingly, *Price-to-Book* ratio has a significant impact during 1999-2003 but not during 2004-2009. On the contrary, *Same Industry* and *Prior Experience* of acquirer negatively impact CARs only in the second period.

Next, we investigate the temporal limitation of the euphoria effect, i.e., the fact that overoptimism towards cross-border acquisitions was concentrated in the few years following the Goldman Sachs report. Table 5 presents the yearly cross-border effect over 2000-2009 using both the modified market model (Panel A) and the market model (Panel B). We use t-test as before to examine the significance of the cross-border effect. This analysis of yearly CARs shows that the cross-border effect was very strong in 2004 (4.16% 5-day abnormal return in Panel A) but does not exist beyond. Also, in 2004, investors did not reward on average companies that bought domestically. One explanation for this could be that as value was being generated in overseas acquisitions (Roll, 1986), bidders that invested in local markets were expected to succeed less than their globalizing counterparts. Though a mild cross-border effect is observed in 2009 (Panel A), this effect is no more significant when using a 60-day estimation period (Panel B).[6]

[6] There are fewer cross-border acquisitions in 2009 (only 10) and their relatively high average CAR is driven by one high-profile deal, the acquisition by IT solutions provider Softpro Systems of South Africa based Cura Risk Management software for $ 19 million in June 2009.

Table 5. Yearly average of cumulative abnormal returns

Panel A. Without estimation period[a,b]

	cross-border		domestic		cross-border	t-stat
	n=	CAR	n=	CAR	effect[d]	
2000	5	5.74%	18	2.84%	2.90%	
2001	4	2.66%	12	7.66%	-5.00%	
2002	9	2.87%	20	1.32%	1.55%	
2003	21	1.74%	34	2.01%	-0.27%	
2004	22	3.83%	45	-0.33%	4.16%	***
2005	38	1.75%	43	1.42%	0.33%	
2006	48	1.69%	40	0.58%	1.11%	
2007	53	2.34%	42	0.95%	1.40%	
2008	47	-0.31%	82	-0.45%	0.15%	
2009	10	3.68%	34	-1.60%	5.28%	†

Panel B. With Estimation period[a,c]

	cross-border		domestic		cross-border	t-stat
	n=	CAR	n=	CAR	effect[d]	
2000	4	1.84%	16	2.04%	-0.19%	
2001	4	-1.17%	12	6.44%	-7.61%	
2002	6	1.73%	18	2.31%	-0.58%	
2003	19	1.31%	29	0.36%	0.95%	
2004	15	4.04%	37	-1.17%	5.21%	***
2005	24	1.44%	36	0.80%	0.64%	
2006	30	1.96%	32	0.02%	1.94%	
2007	44	2.73%	33	1.38%	1.35%	
2008	33	-0.62%	62	-0.41%	-0.21%	
2009	10	4.23%	30	-0.16%	4.39%	

[a] CAR is the 5-day cumulative abnormal return relative to the BSE-200 index and averaged across deals.
[b] CAR is calculated using the modified market model without estimation period.
[c] CAR is calculated using the market model with a 60-day estimation period.
[d] The cross-border effect is the difference between cross-border CAR and domestic CAR.
† p<0.1, *** p<0.001

Results for the multivariate analysis on cross-border deals over the whole sample period (1999-2009), including Huber-White robust standard errors, are presented in Table 6. Reducing the sample to cross-border deals allows us to control for relevant country-level

variables and hence increase the explanatory power of the model. In the first model, *Volume* is positive and highly significant, which indicates the existence of overoptimism towards cross-border deals without any consideration of timing. Thus, the variable *Volume × 2004* captures the short-term effect of euphoria on the CARs derived from acquisitions announced in 2004, i.e., just after the legitimacy event. We also test whether this euphoria effect still existed with 1-year and 2-year lags after the legitimacy event. In model (2), the coefficient for *Volume × 2004* is positive and statistically significant (equal to 7.99%). *Volume × 2005* is positive although not significant; whereas, *Volume × 2006* is positive and significant (equal to 3.59%), thus we detect a lagged effect of euphoria on acquisition returns. Most importantly, the *Volume* coefficient is halved when including the three interaction terms, and its significance decreases from 0.1% to 10%. These results support our short-term euphoria effect, that is shareholders are mostly overoptimistic about cross-border acquisitions after the legitimacy event (over 2004-2006) but not so much before and/or after. The result is even stronger when looking only at manufacturing companies: the euphoria around cross-border acquisitions is mainly significant in 2004 (almost 11%), and to a lesser extent, in 2006 (4.4%), whereas *Volume* becomes insignificant. We do not find any euphoria effect for service sector acquisitions, except for a mild effect in the year 2006. These findings are consistent with our Hypothesis 3. For manufacturing firms, which represent more than 60% of the cross-border sample, we observe that *Deal Value*, *Price-to-Book* ratio, *Prior Experience* and *IFDI* have a negative and significant effect on CARs; whereas *Book Value* and *Same Language* have a positive and significant impact.

We conducted several robustness checks which are discussed in Appendix A for brevity. To summarize, we find support for our hypotheses, i.e., cross-border acquisitions by Indian firms significantly benefited from increased legitimacy.

Table 6. Results of OLS regression with 5-day window cumulative abnormal returns (Sample of cross-border deals)

	All cross-border deals		Manufacturing		Services	
	(1)	(2)	(3)	(4)	(5)	(6)
Volume	0.0378 ***	0.0194 †	0.0471 ***	0.0221	0.0331	0.0243
	(0.0074)	(0.0115)	(0.0113)	(0.0139)	(0.0205)	(0.0292)
Volume × 2004		0.0799 **		0.1094 **		0.0667
		(0.0292)		(0.0311)		(0.3768)
Volume × 2005		0.0220		0.0079		-0.0321
		(0.0233)		(0.0456)		(0.0501)
Volume × 2006		0.0359 *		0.0440 **		0.1100 *
		(0.0174)		(0.0146)		(0.049)
Acquirer Age	0.0000	0.0000	0.0001	0.0002	-0.0009	-0.0011
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0008)	(0.001)
Book Value	0.0228 †	0.0192	0.0401 **	0.0412 **	0.0057	0.0095
	(0.0132)	(0.0137)	(0.0139)	(0.0132)	(0.027)	(0.0304)
Market Value	0.0007	0.0065	-0.0530 †	-0.0499	0.0191	0.0169
	(0.0184)	(0.0195)	(0.0279)	(0.0334)	(0.0409)	(0.0423)
Price-to-Book	-0.3374 ***	-0.3474 ***	-0.3502 ***	-0.3861 ***	-0.3554	-0.3496
	(0.082)	(0.0824)	(0.0758)	(0.0755)	(0.3125)	(0.3695)
Relative Size	0.0304 *	0.0253	0.0091	-0.0068	0.0517 †	0.0626 *
	(0.0142)	(0.0192)	(0.0155)	(0.0101)	(0.0263)	(0.0268)
Deal Value	-0.0001 **	-0.0001 **	-0.0001 **	-0.0001 ***	-0.0008	-0.0010
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0005)	(0.0007)
Percentage Acquired	0.0097	0.0067	-0.0035	0.0079	0.0529	0.0565
	(0.0174)	(0.0173)	(0.0195)	(0.0187)	(0.0365)	(0.0481)
Same Industry	-0.0130	-0.0100	-0.0067	0.0001	-0.0287	-0.0327
	(0.0106)	(0.011)	(0.0117)	(0.0108)	(0.0312)	(0.0299)
Prior Experience	-0.0312 **	-0.0298 **	-0.0271 *	-0.0211 *	-0.0298	-0.0381
	(0.0102)	(0.0103)	(0.0106)	(0.0098)	(0.0272)	(0.0316)
Business Group	-0.0205	-0.0197	-0.0034	-0.0075	-0.0841 *	-0.0948 *
	(0.0311)	(0.0283)	(0.0158)	(0.0151)	(0.0361)	(0.0387)
Inflow/Outflow	0.0020	0.0020	0.0038	-0.0001	-0.0042	-0.0139
	(0.0085)	(0.0082)	(0.0093)	(0.0092)	(0.0178)	(0.0213)
Same Language	0.0252 *	0.0232 *	0.0257 *	0.0240 *	-0.0194	-0.0428
	(0.0101)	(0.0093)	(0.0112)	(0.0097)	(0.0282)	(0.0308)
Forex	-0.0539	-0.0189	-0.0213	0.0161	-0.0541	-0.3479
	(0.1138)	(0.1209)	(0.095)	(0.0975)	(0.3442)	(0.4207)
IFDI	-0.0004	-0.0004	-0.0009	-0.0012 *	-0.0010	-0.0019
	(0.0004)	(0.0004)	(0.0006)	(0.0005)	(0.0012)	(0.0017)
Constant	0.0519	0.0528	0.0401	0.0436	0.1731 †	0.2577 *
	(0.0453)	(0.0438)	(0.0324)	(0.0311)	(0.087)	(0.1106)
R-squared	0.459	0.498	0.635	0.714	0.505	0.572
Observations	107	107	66	66	39	39

Note: Robust standard errors are in parentheses, † if p<0.10, * if p<0.05; ** if p<0.01; *** if p<0.001

Overall, these abnormal returns disappear after the initial euphoria created by the Goldman Sachs report, i.e., CARs become insignificant after 2006.

DISCUSSION AND CONCLUSION

In this article, we look at how a legitimacy-building event can lead to short-term euphoria in Indian financial markets and follow-up adjustment in shareholders' value. As cross-border acquisitions imply a trade-off between domestic and foreign investments, with effects at a macro level, this is an important avenue for research at a time when many emerging markets are experiencing rapid growth (Gubbi et al., 2010).

In our study, organizational legitimacy is generated at the country level due to activities exogenous to individual firms. We argue that the publication of the 2003 Goldman Sachs report on BRIC countries was a game-changer for Indian companies in their internationalization process (Goldman Sachs, 2003; Rasiah et al., 2010). This report had a major impact on reducing the opportunity cost vis-à-vis legitimacy building for these internationalizing firms. Using a large sample of domestic and cross-border acquisitions over the period 1999-2009, we find that the legitimacy-building event generated a positive stock market expectation about the acquisition performance of Indian multinational companies in their foreign investments. In the post-legitimacy period, companies investing abroad generated around 4 percent more short-term shareholder returns on average (equivalent to 18 percent monthly returns) than firms acquiring within their own borders. These post-legitimacy abnormal returns are mainly driven by euphoria generated around the Goldman Sachs report. Indeed, over 2004-2009, overoptimism (measured by trading volume) was significantly higher for cross-border acquisitions than domestic acquisitions. By looking at cross-border deals only, we are able to investigate the temporal effect of euphoria for Indian companies. Consistent with theory, the post-legitimacy euphoria effect emphasized above is short-lived, i.e., the overoptimism of investors towards cross-border acquisitions is concentrated in the few years after the publication of the Goldman Sachs report (over 2004-

2006) and doesn't exist outside of this period. Hence, our paper is the first to provide empirical evidence on the importance of euphoria in the legitimation process of Indian companies undertaking cross-border acquisitions.

As with any study, this work is not without some limitations. Focusing on publicly listed companies implies that our results need to be reflected under the cognizance that private firms might have different motivations for acquisitions and experience dissimilar results from those observed for public companies. We acknowledge this selection bias in our study. Another possible limitation is the event study methodology used. This method has been frequently used in other works on international business (Aybar and Ficici, 2009; Gubbi et al., 2010), and it focuses on the short-run abnormal share price reaction to acquisition announcements. Hence we make the implicit assumption that shareholders are the dominant players who shape and drive strategic choices within a firm and that the stock market is efficient, i.e., all information related to the company and its expected future performance is incorporated in its stock price (Binder, 1998; Gubbi et al., 2010).

Our study has implications for practice and research. This paper highlights the fickleness of legitimation in foreign acquisitions. The positive value differential generated during cross-border acquisitions subsides over a period of time. One possible explanation is that as companies struggle to derive value from their foreign investments, the domestic stock market becomes skeptical of any future investments abroad. Another explanation is that investors reward domestic consolidation after the legitimacy-building event, which signifies improvement in firms' survival rates and financial stability (Goldberg et al., 2000). A third explanation is that domestic acquisitions are led by profitable firms and thus stock markets predict a potential for transfer of superior corporate governance methods to the acquired firms (Gubbi et al., 2010). This explanation corroborates previous empirical evidence (Aybar

and Ficici, 2009; Dewenter, 1995; Moeller and Schlingemann, 2005). It is also likely that these converging returns between domestic and foreign acquisitions are driven by the booming domestic market.[7] Thus, we argue that although in the short term euphoria creates value-enhancing investment opportunities for Indian firms acquiring abroad, in the long term rapidly growing domestic sectors are likely to create similar opportunities for value creation at home.

Finally, focusing on Indian bidders to test our hypotheses does not undermine our results as India is the biggest market in terms of transactions (especially cross-border deals) within emerging economies. An interesting area for future research would be to investigate such euphoria effect in countries with similar level of development and international exposure like the N-11 countries. Overall, we believe that our research will act as a stepping stone for a series of interesting questions and answers in the future.

[7] Sun Life Asset Management Co Ltd's takeover of Alliance Capital Asset Management (India) Ltd, Punjab National Bank's acquisition of Nedungadi Bank and ICICI bank's takeover of Tata Finance's credit card portfolio are examples of this effervescent domestic market. Another example in the transportation and logistics sector is Gateway Distriparks with several acquisitions between 2004 and 2006.

Appendix. Robustness Checks

Test	**Outcome**
Alternative proxies for the stock market index: BSE-30 and BSE-100 market indices	Our conclusions remain the same.
Different time windows (3-day and 11-day) (Gubbi et al., 2010; Miller et al., 2008a)	Our conclusions remain the same.
The data was screened out for any event where there was an overlap between two deal announcements (Gubbi et al., 2010; McWilliams and Siegel, 1997)	The analysis of non-confounding events led to no changes in our results
Alternative industry classification: we reclassified each deal using the SIC of bidders and targets. The *Same Industry* variable was equal to one for acquirers and targets with the same SIC code.	Our conclusions remain the same.
Alternate economic and legal institutions variables: *Same Language* was replaced by *Legal Distance* (highly correlated).	Our conclusions remain the same.
Outliers: we removed outliers from our sample (10% at top and bottom end each year). Similarly, we conducted the analysis for positive CARs and negative CARs separately.	Our conclusions remain the same.
Year dummies were added to the cross-sectional regressions to control for fixed effects.	Our results are similar to those presented in this paper.

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