
Gustavson School of Business

Faculty Publications

This is a post-review version of the following article:

What Drives Overseas Acquisitions by Indian Firms? A Behavioral Risk-Taking Perspective

Raveendra Chittoor, Preet S. Aulakh, and Sougata Ray

March 2015

This version of the article has been accepted for publication, after peer review (when applicable) and is subject to Springer Nature's [AM terms of use](#), but is not the Version of Record and does not reflect post-acceptance improvements, or any corrections.

The Version of Record (final copy) of this article was originally published at:

<https://doi.org/10.1007/s11575-015-0238-7>

Citation for this paper:

Chittoor, R., Aulakh, P.S. & Ray, S. (2015). What Drives Overseas Acquisitions by Indian Firms? A Behavioral Risk-Taking Perspective, *Management International Review*, 55(2), 255-275. <https://doi.org/10.1007/s11575-015-0238-7>.

**WHAT DRIVES OVERSEAS ACQUISITIONS BY INDIAN FIRMS?
A BEHAVIORAL RISK-TAKING PERSPECTIVE**

Raveendra Chittoor
Assistant Professor of Strategy
Indian School of Business
Hyderabad, India
raveendra_chittoor@isb.edu

Preet S. Aulakh*
Professor and Pierre Lasonde Chair in International Business
Schulich School of Business
York University
Toronto, ON CANADA
paulakh@schulich.yorku.ca

Sougata Ray
Professor of Strategy
Indian Institute of Management Calcutta
Kolkata, INDIA
sougata@iimcal.ac.in

*Corresponding Author

May 2014

Chittoor, R., Aulakh, P. S., & Ray, S. (2015). What drives overseas acquisitions by Indian firms? A behavioral risk-taking perspective. *Management International Review*, 55, 255-275.

WHAT DRIVES OVERSEAS ACQUISITIONS BY INDIAN FIRMS? A BEHAVIORAL RISK-TAKING PERSPECTIVE

Abstract

Overseas acquisitions as a mode of international expansion entail a high level of risk, especially for firms from emerging economies which face considerable liabilities of foreignness and newness in international markets. Building on the behavioral risk-taking perspective, we examine the role of ownership characteristics on the propensity of Indian firms to make foreign acquisitions. Empirical results from a sample of BSE 500 Indian firms during the 2002-2011 period show that after controlling for firm level resources and capabilities identified in the prior literature, international experience of firm CEOs, promoter shareholding, and ownership share of foreign institutional investors positively influence firms' acquisition propensities in foreign markets. Furthermore, our results show that the effects of these determinants on overseas acquisitions are stronger for stand-alone independent firms than for those affiliated to business groups.

Keywords: *international acquisitions; risk-taking propensity; business groups; ownership; India, emerging economy multinationals*

Introduction

The past decade has marked a rapid increase in overseas expansion of Indian firms across various industries and countries, with acquisitions as a primary mode of expansion (Gubbi, Aulakh, Ray, Sarkar and Chittoor 2010; Nayyar 2008). Acquisitions by Indian firms of well-known and branded companies in advanced economies form a part of an overall trend of the emergence of a number of firms from developing countries as important players in global markets (BCG 2009; Guillen and Garcia-Canal 2009).¹ The rapid internationalization of these firms (also referred to as emerging multinational enterprises or EMNEs) is intriguing because these firms are beset by many disadvantages that hinder their international expansion (Aulakh 2007; Guillen and Garcia-Canal 2009; Khanna and Palepu 2006; Gaur, Kumar and Singh 2014). EMNEs have to not only deal with the liability of foreignness faced by internationalizing firms (Zaheer 1995), but also overcome the late mover disadvantages (Guillen and Garcia-Canal 2009) by competing with established multinational firms from the most advanced economies that are endowed with superior resources and capabilities (Guillen 2002). In addition, EMNEs hail from economies with underdeveloped institutional environments, due to which their costs of accessing resources and doing business in general are higher (Khanna and Palepu 1997). There has been, therefore, an increasing interest among scholars (Aulakh 2007; Guillen and Garcia-Canal 2009; Khanna and Palepu 2006; Luo and Tung 2007; Ray and Gubbi 2009) as well as practitioners (BCG 2009; Business Week 2006; OECD 2006; The Economist 2008), to explore

¹ Some examples of high profile acquisitions include Hindalco, an Indian company owned by the Aditya Birla group, acquiring Novelis for US\$ 6.0 billion to emerge as the world's largest manufacturer of rolled aluminum products and the fifth-largest integrated aluminum maker in the world (The Times of India 2007), the acquisition by Tata Steel, of the Anglo-Dutch major Corus for about US\$ 12 billion to jump from 56th to 5th largest steel company in the world in 2007 and the acquisition of the iconic Jaguar and Land Rover by Tata Motors for US\$ 2.3 billion (The Financial Express 2008).

and understand the unique internationalization behaviors of these emerging multinationals (EMNEs).

Past research on acquisitions, both domestic and cross-border, as well as internationalization behavior of firms shows that this mode of international expansion entails numerous risks (Caves 1982; Barkema, Bell and Pennings 1996). Thus natural questions arise as to why emerging economy firms, which are relatively in the early stages of internationalization and face liabilities of newness and foreignness in international markets, undertake risky foreign expansion paths through overseas acquisitions. Anchoring our research in behavioral risk taking theory (Carpenter, Pollock and Leary 2003; Sanders and Hambrick 2007; Sitkin and Pablo 1992; Pablo, Sitkin and Jemison 1996), we identify a set of drivers or determinants of overseas acquisitions of Indian firms and test our predictions using a longitudinal dataset of overseas acquisitions of publicly listed Indian firms during the ten-year period from 2002 to 2011. Specifically, we argue that international experience of a firm's CEO, ownership concentration, and extent of investments by foreign institutional investors influence risk-taking behavior by key decision-makers which in turn increase firms' propensity to engage in cross-border acquisitions. Prior exposure of the CEO of a firm to international markets, either through education or work experience, is likely to positively influence his/her risk perception and risk propensity towards internationalization. Similarly concentrated shareholding by the owners enables firms to pursue risky, long-term growth strategies such as cross border acquisitions. Also, foreign institutional investors supply key resources – financial as well as knowledge – that facilitate acquisitions. These factors are particularly relevant in the context of emerging economy firms which have to overcome challenges stemming from the lack of significant ownership advantages. Finally, given that business groups play an important role in India's organizational landscape, we examine how

the institutional advantages conferred on firms by virtue of being affiliated to a business group condition the risk-taking behavior associated with the firm level top-management and ownership characteristics.

A growing body of work has argued that the internationalization processes and trajectories of EMNEs differ significantly from those of the multinationals from the West (Ramamurti 2004; Mathews 2006; Luo and Tung 2007; Aulakh 2007; Guillen and Garcia-Canal 2009). These new multinationals tend to internationalize faster and prefer higher risk entry modes such as acquisitions (Madhok and Keyhani 2012). Facing the threats of competition from better endowed developed country MNCs, coupled with difficulties in acquiring resources and capabilities locally due to underdeveloped strategic factor markets for finance, technology, managerial capabilities, and other intangible assets at home (Uhlenbruck et al 2003), firms are motivated to look out aggressively and expeditiously beyond their national borders. They follow unconventional internationalization paths, sometimes preferring to expand first into developed markets rather than into other similar developing economies (Luo and Tung 2007).

While this body of research has fairly established that EMNEs are different and has captured in great detail how their internationalization behavior differs from traditional MNCs, we are yet to fully understand some of the fundamental drivers of their distinct and risky internationalization modes such as overseas acquisitions. A number of recent studies have examined the drivers of emerging economy firms' outward investments from institutional and resource-based perspectives (e.g., Athreya and Kapur 2009; Cui and Jiang 2012; Gaur, Kumar and Singh 2014; Morck, Yeung and Zhao 2008). These studies argue that institutional reforms in their home markets necessitate indigenous firms to look for new growth opportunities abroad, which are in turn facilitated by institutional advantages possessed by these firms. For example,

in examining the foreign direct investment behavior of Chinese multinationals, Cui and Jiang (2012) highlight the role of state ownership in facilitating their international expansion. By virtue of its ownership and affiliation with the internationalizing firms, the state provides the resources and absorbs the inherent risk entailed in international investment. Similarly, Gaur, Kumar and Singh (2014) examine the institutional advantage conferred by membership to business groups and show how business group affiliation facilitates the transition from exporting to foreign direct investment as modes of international expansion.

Our paper complements this emerging body of research by incorporating more firm level characteristics such as ownership concentration, composition of ownership, experiences and aspirations of managers and owners, which influence risk taking behavior of firms and in turn influence various aspects of FDI decision making. The Indian context provides a unique window to develop and test theory related to the internationalization of EMNEs. India, unlike China, followed the model of mixed economy (Nayyar 2008) and had the historical presence of private owned independent firms and those belonging to business groups, MNC's and firms with dispersed owners, coexisting with dominant state owned firms. It has been following the dictates of the neoliberal model (Harvey 2005) for the last twenty two years which has resulted in the reemergence and even dominance of vibrant and heterogeneous sets of private owned firms across sectors. In fact, most of the international acquisitions made by Indian firms in the last two decades have been by non-state owned enterprises and thus provides us with a rich natural experimental setting to develop and test our theories (Ramamurti 2013).

THEORY AND HYPOTHESES

Early research on the EMNEs, or the Third-world Multinationals (TMNCs) as they were initially called, posits that they leveraged their advantages either through internationalization into

other developing country markets (Lall 1983; Khanna and Palepu 2006) or by positioning within an established MNC's global value chain networks (Craig and Douglas 1997; Dawar and Frost 1999). However, these explanations do not completely account for the rapid emergence of the global players from emerging economies and the development of capabilities by them to produce advanced value-added products and services required in globally competitive product markets (Guillen and Garcia-Canal 2009; Matthews 2006). Luo and Tung (2007) observe that EMNEs often follow unique strategies and activities, which distinguish their internationalization trajectories from that of both western multinationals and TMNCs. These new emerging multinationals are much less path dependent and much more risk taking when compared to TMNCs of the 1980s and 'undertake outward internationalization in some unconventional ways' (Luo and Tung 2007: 481) such as through cross border acquisitions. Cross-border acquisitions serve as effective means for becoming EMNEs by offering developing economy firms highly valued time compression economies (Dierickx and Cool 1989), give access to strategic assets (Capron, Dussauge and Mitchell 1998; Coff 1999) available in foreign markets, and permit inter-firm knowledge transfer leading to superior complementarities in resource and product markets (Luo and Tung 2007; Mathews 2006).

Arguably the two most important conditions that are necessary for firms to undertake overseas acquisitions are - (a) firms should have the risk propensity to undertake riskier modes of internationalization such as cross border acquisitions and (b) firms should have the necessary resources and capabilities to internationalize through acquisitions. Past research on outward FDI by two prominent emerging economy firms, China and India, have shown that state-ownership and business group affiliation respectively enable satisfying these two conditions. International expansion is often guided by furthering national competitiveness goals (in the case of state

controlled Chinese firms) or global ambitions (in the case of business groups in India), thus increasing propensity of risky strategic moves. Furthermore, both state ownership and business group affiliation of firms allows them to tap into the necessary resources required for risk taking behavior (Morck, Yeung and Zhao 2008). However, this rationale of institutional advantages and risk-taking behavior does not take into consideration other, within firm-level factors. The literature conceptualizing the determinants of risk behavior in organizations is well developed (See Sitkin and Pablo 1992 for a review and reconceptualization of this literature). Sitkin and Weingart (1995) developed a model emphasizing the central role of two constructs *risk propensity* and *risk perception* as determinants of risky decision making behavior. We build on this behavioral decision making theory to identify and theorize on managerial and organizational factors that could influence the propensity of firms to undertake cross border acquisitions.

Risk is an inherent characteristic of all strategic decisions and particularly so in the case of internationalization decision due to its associated liability of foreignness (Zaheer 1995). Compared to internationalization modes such as licensing, exports, foreign direct investment (FDI) through representative offices, joint ventures or greenfield subsidiaries, FDI through overseas acquisitions is considered a high involvement and high risk mode of internationalization (Woodcock, Beamish and Makino 1994). Acquisitions are considered risky because of high rates of failure (Ravenscraft and Scherer 1987). Due to this, acquisitions also carry significant levels of risk for the decision makers involved. We therefore draw from the large body of work on the determinants of risky decision making behavior to identify some of the drivers of overseas acquisitions.

Sitkin and Pablo (1992) have integrated and reconceptualized the large body of extant work on decision making under risk and proposed two key mediating mechanisms through which

a variety of variables act to influence risky decision making behavior in organizations. These two mechanisms/constructs are risk propensity and risk perception; and various empirical findings have since supported this model (e.g., Sitkin and Weingart 1995; Simon, Houghton, and Aquino 2000). *Risk propensity* is defined as the ‘general tendency for a person to either take or avoid risks’, and this influences how a decision maker evaluates risk and decides what risks are acceptable (Sitkin and Pablo 1992: 14-15). *Risk perception* on the other hand is defined as ‘an individual’s assessment of the risk inherent in a situation’ (Pablo, Sitkin and Jemison 1996: 725). We now examine some specific organizational and managerial factors that affect the risk propensity and risk perception towards overseas acquisitions and thereby influence the probability of a firm engaging in them.

According to Wiseman, Gomez-Mejia and Fugate (2000: 321), “a decision-maker’s consideration of risk is colored by individual (that is, subjective) assessments of the decision context in addition to whatever objective information may be available.” The differences in subjective judgment of risk are related to the experience of decision-makers thus influencing the reasonableness of the risk, or what Carpenter, Pollock and Leary (2003: 807) call “reasoned risk-taking.” The risk propensities and risk perceptions of the senior management of a company, in particular that of the CEO, significantly influence strategic decisions. While there can be arguably many factors that can affect the risk propensity and perception of a CEO, a key factor related to the international acquisition decision would be the prior exposure of the CEO to international markets. A CEO’s exposure to international markets would positively influence his/her risk perception of internationalization through acquisitions. Internationally experienced CEOs are more likely to have experienced the general liabilities of foreignness and have greater problem domain familiarity (Sitkin and Pablo 1992). Such international exposure would shape

the intentions of management which are to have an influence on strategic and acquisitive behavior of firms (Haleblian et al 2009). Managerial intentionality is gaining emphasis in the international business (IB) literature in explaining the internationalization processes and trajectories. Hutzschenreuter et al (2007) distinguish between theories that emphasize path-dependent internationalization perspectives (where internationalization is more evolutionary and path dependent) and ones that emphasize path-creating internationalization perspectives (where managers, through their deliberate strategic choices have the ability to alter their firm's internationalization trajectory). They argue that path-dependency theories do not explain fully why some firms internationalize early while others (in the same cohort) do so late, or why some firms internationalize more rapidly than others. Managerial intentionality could be an important explanatory factor of the tendency of EMNEs to internationalize through overseas acquisitions. This view is supported by the upper echelons theory (Hambrick and Mason 1984), which considers the organization as a reflection of its top managers and advocates that demographic characteristics of executives may be used as proxies of executive cognitive frames that ultimately drive strategic action (Hambrick 2007). We capture these ideas through the following hypothesis:

H1: Ceteris paribus, firms with CEOs who have international experience are more likely to engage in overseas acquisitions

In addition to overseas acquisitions constituting high risk strategic decisions, they are associated with considerable resource implications. For both these reasons, they require the approval and support of the board of directors and sometimes also the shareholders. Concentrated shareholding by firm owners, as is prevalent more in emerging economies instead of widely dispersed shareholding commonly seen in the West, enable a higher control of the board. Such board control and voting power among the shareholders enables approval of such

strategic decisions easier in firms with relatively high ownership control. Furthermore, as argued by Wright, Ferris, Sarin and Awasthi (1996), if firms see growth opportunities through strategic decisions, such as in overseas acquisitions, then shareholder concentration promotes higher risk taking behavior. This view is also supported by agency theory, whereby managers are generally considered to be risk-averse, while owners are considered risk neutral. According to Carpenter, et al. (2003: 804), “owners will accept more risk-taking behavior ... to the extent that such risks are accompanied by commensurate potential increases in return on investments.” Overseas acquisitions tend to create positive value for shareholders in the case of firms from emerging economies such as India (Gubbi et al. 2010). Since international acquisitions by EMNEs are motivated by learning and asset accumulation purposes to drive these firms up the value chain, large shareholdings by promoters allows these firms to pursue risky long-term growth opportunities. Similarly, large shareholding by key decision-makers (TMT and promoters) can serve two important purposes: “serving as a more efficient substitute for direct board monitoring... and increasing managerial risk-taking” (Carpenter, Pollock and Leary 2003: 807). Therefore, the higher the share of the controlling shareholder in the firm, i.e., the higher the promoters’ share², the higher is the risk-taking propensity and the lower the risk perception of overseas acquisitions. Accordingly, we hypothesize that:

H2: Ceteris paribus, firms with a higher shareholding by promoters are more likely to engage in overseas acquisitions

International expansion, particularly through overseas acquisitions, requires the possession of significant financial resources (Hitt, Bierman, Uhlenbruck, and Shimuzu 2006). Emerging economy firms also face many constraints to raise resources due to institutional voids (Khanna and Palepu 1997). Economic liberalization and opening up of the capital markets

²According to the Securities Exchange Board of India (SEBI), a promoter is defined as any person or persons who are directly or indirectly in control of the company

presented an opportunity to emerging economy firms to overcome some of the constraints in the local markets by raising capital from foreign investors. Raising overseas capital has other indirect benefits such as the reputation effect, signaling of quality to customers and corporate governance benefit, which will have a positive impact on the firm internationalization. Therefore, another important factor that is likely to influence a firm's likelihood of internationalizing through overseas acquisitions is the size of the stake held by foreign institutional investors (FIIs).

Regular contacts with FIIs also facilitate access to intermediaries such as investment bankers, consultants and legal experts. These interactions with the community of professionals conversant with the international assets market will keep the top management of firms more informed about risks and benefits of international acquisitions, possible acquisition targets, potential deal makers, availability of various avenues for financial support and so on. Greater information and knowledge therefore help reduce the fear of potential adverse selection and the risk perceptions about international acquisitions. In their study of the role of venture capitalists on the internationalization of entrepreneurial firms, Carpenter, et al. (2003: 806) argue that venture capitalists are risk-seeking and have significant experience in risk-taking, in what they call as "risk-taking specialists." Foreign institutional investors in EMNCs can also play a similar role of facilitating risk-taking inherent in acquisitions. Their experience from large investments in a variety of markets with differential outcomes and understanding of risk-return relationships facilitates the aggressive internationalization paths of their client firms. Firms having higher investments by FIIs are likely to have more frequent and deeper engagement with FII representatives and will benefit more from such engagements. Accordingly, we hypothesize that:

H3: Ceteris paribus, firms with a higher shareholding by foreign institutional investors are more likely to engage in overseas acquisitions

Business Group (BG) Affiliation and Overseas Acquisitions

We now turn to an important firm-level characteristic in the context of emerging economies in general, and India in particular, which has a significant influence on the resources available to a firm—its membership in a business group. A rich body of work has established the significance of business groups in the socio-economic landscape of emerging economies (Keister 1998; Khanna and Palepu 1997; Ghemawat and Khanna 1998). The legally independent firms affiliated to a BG are linked by numerous “axes of solidarity” such as ownership, economic and social ties (Granovetter 1995) which are coordinated by a core or central entity through common administrative, financial or managerial controls (Leff 1978, Khanna and Rivkin 2001). This coordinating entity “has high structural autonomy and control over resources and information, and thus increased potential to influence other member firms in the social network” (Yiu et al. 2007: 1553) and thereby influence the strategic autonomy of the top management of the affiliates. Many of the benefits of group affiliation such as pooling of financial capital, managerial resources, information and knowledge sharing are likely to facilitate member firms’ international expansion efforts (Lamin 2013). Favorable group reputations help firms secure resources and customers by signaling superior quality and increasing confidence in a firm’s products and services (Fombrun 2005). Accordingly, as shown by Gaur, et al. (2014), business group affiliation positively influences firms’ international investments.

Given the fact that BGs are characterized by internal markets for products, capital and management talent, business groups themselves are potential suppliers of resources. BGs can thus be viewed as a strategic network providing member firms with access to information, knowledge, resources, markets, and technologies (Elango and Pattnaik 2007). In particular, group affiliated firms can tap into the internationalization knowledge and connections of the

other firms in the group without directly learning by doing on their own. On the other hand, independent non-BG firms do not have access to such internal markets and knowledge sharing mechanisms. They prefer to tap the knowledge and experience of the dominant owners and the management and are more open to adopting the route of learning by doing. Besides, the top management of such firms tends to enjoy more discretion to shape the strategy. As noted by Hambrick (2007:35), if “a great deal of discretion is present, then managerial characteristics will become reflected in strategy and performance. If, however, discretion is lacking, executive characteristics do not much matter”.

However, unlike the stand alone firms, BG affiliates have the opportunity to draw not only from the international experiences of its own the top management, but also from that of the BG headquarters as well as other affiliates of the BG. Besides, the BGs having international aspirations tend to create group level mechanisms for accumulating international knowledge, information and experiences as well as sharing the same across affiliate firms. Most stand-alone firms do not have such central shareable mechanisms and repositories to leverage. Therefore, the stand alone firms devoid of these opportunities are likely to be more influenced by the international experiences of their top management as compared to the BG affiliates. If the top management of such firms have prior international experiences, it is likely that the management would prefer expeditious internationalization and would be less averse to adopt acquisition as the preferred mode of international expansion. Therefore, we hypothesize,

H4a: The effect of CEO's international experience on firms' likelihood to engage in overseas acquisitions is higher for stand-alone firms than for BG-affiliated firms.

We have argued earlier that higher promoters' shareholding increases the likelihood of the firm's engagement in the overseas acquisition as the owners can exercise greater control of

strategic decision making of firms. However, we observe that in case of BG affiliates, promoters' holding is not the only important factor for BGs to exercise strategic control over the affiliates. BG promoters tend to control the strategic decision making of the executives through formal mechanisms at the board level as well as informal mechanisms. Therefore, BG headquarters can influence strategic decisions including overseas acquisitions even in such situations where the BG promoters' shareholding is lower as compared to stand alone firms. However, for standalone firms not affiliated to any BG, the extent of promoters' shareholding will be a dominant factor in exercising control on strategic decisions. Therefore, the positive effect of promoters' shareholding will be more pronounced in the stand alone firms as compared to BG affiliates.

H4b: The effect of promoter shareholding on firms' likelihood to engage in overseas acquisitions is higher for stand-alone firms than for BG-affiliated firms.

Similarly, we have argued that greater information and knowledge on international markets for acquisitions by interacting regularly with representatives of FIIs helps reduce the fear of potential adverse selection and the risk perceptions of top management of firms about international acquisitions. While these arguments prevail for all firms, the dependence for such knowledge and information from FIIs and the concomitant benefit is likely to be more pronounced in the case of non-BG firms. Access to FIIs and the associated resource advantages and risk-taking propensities would be more valuable to independent firms. BGs tend to create group level mechanisms and repository for acquiring and storing such information from FIIs as well as other sources, which individual BG affiliates have access to. Besides, in most of the BGs, the BG central teams provide assistance to top management and participate in strategic decision making such as overseas acquisitions. Not being able to benefit from such central repositories of information and knowledge and shared services beyond the firm level, the top management of

stand-alone firms are likely to benefit more from engagement with the FIIs in reducing the risk perceptions and risk propensity of overseas acquisitions. In addition, stand-alone firms are likely to have greater autonomy to make strategic decisions based on this information than group affiliated firms where important decisions are made by the controlling family or the core entity. Therefore,

H4c: The effect of foreign institutional shareholding on firms' likelihood to engage in overseas acquisitions is higher for stand-alone firms than for BG-affiliated firms

METHOD

Data

We chose the five hundred companies that are a part of the Bombay Stock Exchange (BSE) 500 index (as on September 2012), which is an index in India comparable to S&P 500, as our initial sample set. The companies in the BSE 500 Index show a good balance in composition in terms of size, age, ownership, affiliation to business groups, industry diversity and degree of internationalization. BSE 500 index also includes listed Indian subsidiaries of foreign multinational companies. We eliminated such subsidiaries of foreign companies (63) as we are only concerned with the overseas acquisitions by Indian firms. Our final sample included 437 Indian firms constituting an unbalanced panel dataset with 3477 non-zero observations for sales. We focused on the past ten year period as most of the data of our interest (ownership data and overseas acquisitions) was disclosed by Indian companies in their annual reports only since 2002. We collected information on the international mergers and acquisitions (M&A) carried out by these firms during the ten year study period. To collect this information as comprehensively as possible, we relied on two popular M&A databases (Thomson Reuters's SDC Platinum and Bureau van Dijk's Zephyr) and then supplemented it with additional information from a research report on the foreign acquisitions by Indian companies (Mape Group 2006). For financial data

we relied on the *Prowess* database; however *Prowess* or any other readymade secondary database in India does not contain in-depth operational or management information including top management characteristics (e.g., CEO age, CEO international education and experience, length of tenure of the CEO). We collected this information manually from company annual financial reports for the period 2002-2011³. The annual reports were sourced from a data base called Sansco services as well from the company websites.

Dependent Variables:

International acquisitions: Our dependent variable is a dummy variable that takes a value of ‘1’ ($y_{it} = 1$) if a firm ‘i’ completes an overseas acquisition in the year ‘t’ or earlier during the study period and ‘0’ otherwise⁴. The firms in our sample have completed a total of 372 international acquisitions during the ten-year period of the study. For the purpose of this study we have considered all international acquisitions in which the Indian company acquired at least 5% equity stake in the foreign target company (Yin 2013). There were only 7 instances where the acquisition stake was less than 10% and we performed robustness checks by excluding these deals from the analysis.

Independent and Moderator Variables:

CEO’s international experience: As part of the improvement in regulatory disclosures introduced since 2001-02 in India, it has been made mandatory for public firms to disclose a brief profile of each of the directors on its board, which typically includes details of work experience and education. The equivalent of a chief executive officer (CEO), a term commonly employed in the West, is a managing director in India, who assumes the authority and the

³ This data collection, which took about six months, was carried out with the help of a research associate and cross-verified by one of the authors

⁴ As the companies are not expected to make overseas acquisitions every year, we were interested in the determinants a company making a cross-border acquisition at least once during our study period. About 34% of our sample firms made an overseas acquisition at least once during the study period.

responsibility of the chief executive for the entire firm. Sometimes he/she is designated in India as ‘Managing Director and CEO’ or just a ‘CEO’. We collected from the annual reports of the sample firms the profile of the executive designated as CEO (or if not, the managing director), and dummy coded it as ‘1’ if he/she has overseas work experience and ‘0’ otherwise.

Promoter share: Promoter share was defined as the percentage shareholding held by the promoters or the controlling owners⁵. This information was obtained from *Prowess* which captures the shareholding break-up of most publicly listed companies since the early 2000s.

Foreign institutional share: was measured as the total percentage share held by foreign institutional investors (FII) and foreign venture capital firms in the focal firm. This data too was culled from the break-up of shareholding by different shareholders obtained from the *Prowess* database.

BG affiliation dummy: We operationalized a firm’s membership in an Indian business group through a dummy variable which took the value of ‘1’ if the firm was affiliated to a business group and ‘0’ if it was not. For identifying group affiliation, we adopted CMIE *Prowess*’ classification of firms into groups following Khanna and Palepu (2000) and Bertrand, Mehta and Mullainathan (2002). CMIE uses a variety of sources to classify firms into various ownership groups based on continuous monitoring of company shareholding, new announcements and a qualitative understanding of the group-wise behavior of individual companies.

Control Variables:

A comprehensive set of variables were included to control for possible confounds. *Firm size*, measured as natural logarithm of total sales, was used to control for size effects. *Firm age*, the age of each firm since it was founded, in years, was used as a measure of experience. We

⁵According to the Securities Exchange Board of India (SEBI), a promoter is defined as any person or persons who are directly or indirectly in control of the company

controlled for a firm's *debt-equity ratio*, measured as the ratio of firm's total outside liabilities to net worth to control for a firm's financial leverage. We controlled for three CEO characteristics. First, CEO's prior experience in the company, *CEO tenure*, was operationalized as the length of time in years between the year when the person joined the company and the observation year. Second, we controlled for *CEO age*. Third, *CEO's international education* was measured as a dummy variable that takes a value of '1' if the CEO had a graduate degree from an overseas educational institution and '0' otherwise. As shown by Gaur, et al. (2014), firm's prior participation in international markets, and its existing resources and capabilities influence propensity to take risky international modes such as foreign direct investment. Accordingly, we controlled for these three aspects. *Export intensity* was measured as ratio of a firm's total exports to total sales and was used as a proxy for a firm's prior international exposure. As a majority of firms from emerging economies are in the early stages of the internationalization process and use exporting as the dominant mode of international expansion (Aulakh, Kotabe and Teegen 2000), this measure is contextually appropriate compared with more involved internationalization measures, such as FDI for measuring prior international experience. *R&D intensity* was measured using the percentage of annual research and development (R&D) expenses to sales. *Marketing intensity* was operationalized as the percentage of total annual marketing expenses to sales. Finally, we used year dummies and industry dummies (at two-digit NIC level) to control for time and industry effects.

ANALYSIS and RESULTS

Table 1 reports the descriptive statistics and Pearson product-moment correlations for all the variables. There have been acquisitions in about twenty one per cent of the total firm-years in our sample. 149 out of the total 437 companies in our sample (thirty four per cent) have carried

out at least one overseas acquisition during the study period (2002-2011). The share of the promoters for an average company in our sample is about 53% and the average share of foreign institutional investors is about 9%. The average CEO is aged 52 years and has been with the company for over 11 years. Only about 8% of the CEOs have work experience overseas, but 28% of the CEOs have earned a graduate degree abroad. Around 61% of the sample firms are affiliated to business groups. An average firm spent about 1% on R&D and about 4% on marketing activities.

Insert Table 1 about here

Given the dichotomous nature of our dependent variable, we used probit models to estimate the propensity of a firm to engage in overseas acquisitions (Manning, Duan and Rogers 1987)⁶. The equations used to test hypotheses H1 to H4 have the general form:

$$International_Acquisition_dummy_{it} = \theta \cdot M_{it} + \pi \cdot BG_Dummy_{it} + \Omega \cdot M_{it} \cdot BG_Dummy_{it} + \beta \cdot [Controls]_{it} + \alpha_i + \varepsilon_{it}$$

where subscripts refer to firm i at time t , α_i is the firm specific unobserved effect, and ε_{it} is the error term. M_{it} represents the independent variables – *CEO's international experience*_{it} in the test of H1a, *Promoter Share*_{it} in the test of H2, *Foreign institutional holding*_{it} in the test of H3; where the support for the hypotheses requires the coefficient $\theta > 0$. Testing hypotheses H4a to H4c requires the coefficient of the interaction term M_{it} with BG_Dummy to be negative i.e., $\Omega < 0$.

The results are presented in Table 2. We report p -values using standard errors corrected for non-independence within firms over time, as well as adjusted for heteroscedasticity (White 1980) in all models.

⁶ We preferred probit over logit models based on the curve fit with the data. Results were similar in both the cases.

Insert Table 2 about here

Models 1 to 2 in Table 2 present the test of hypotheses H1 to H3. Model 1 has the results of the probit regression with all the control variables including the industry and the year dummies. The signs of the coefficients of all the control variable are on expected lines. Larger firms are more likely to carry out overseas acquisitions as indicated by the coefficient of the variable *firm size* ($b=0.215$, $p<0.001$) which is positive and statistically significant. Similarly firms with relatively better capabilities are more likely to indulge in overseas acquisitions, which ties in with the findings of Gaur, Kumar and Singh (2014). The coefficients of the variables *R&D* and *marketing intensity* are both positive and statistically significant (*R&D intensity*, $b=18.303$, $p<0.001$; *marketing intensity*, $b=1.039$, $p<0.001$). The coefficient of the variable *export intensity* is positive and statistically significant ($b=1.266$, $p<0.001$). The coefficients of the variables *CEO age* and *CEO tenure* are not statistically significant, but the coefficient of *CEO international education* is positive and statistically significant ($\beta=0.353$, $p<0.001$). Similarly, the coefficient of business group affiliation is positive a significant ($\beta=0.404$, $p<0.001$),

Model 2 in Table 2 has the results after adding all the independent variables as given by M_{it} in equation (1) namely *CEO international experience*, *Promoter share*, and *Foreign institutional share*. Once again in model 2, the coefficients of all the control variables are as expected similar to those seen in model 1. The first hypothesis was based on the influence of CEO international experience. H1 is supported as indicated by the positive and statistically significant coefficient of the variable ($b=0.391$, $p<0.001$). H2 predicted that higher *Promoter share* will positively influence acquisition propensity. This is supported ($b=0.749$, $p<0.001$).

Hypothesis 3 is also supported as the coefficient of *Foreign institutional share* is found to be positive and statistically significant ($b=2.282$, $p<0.001$).

The next set of hypotheses H4a to H4c relate to the moderating effect of a firm's affiliation to a business group on the relationships between independent variables M_{it} and a firm's propensity to make cross border acquisitions. The normal approach to test moderation effects is by including the interaction terms. However, according to Norton, Wang and Ai (2004: 154) the intuition from standard linear models does not apply to probit and logit models: "the marginal effect of a change in both interacted variables is not equal to the marginal effect of changing just the interaction term. More surprisingly, the sign may be different for different observations." In light of these concerns, we use a sub-group analysis based on whether a firm is independent or affiliated to a business group. We have theorized that the three independent variables are likely to have a stronger effect for independent firms since these cannot tap into the institutional infrastructure provided to business group firms. We run two regressions for each sub-group and compare the respective coefficients. The results of these moderating effects are in shown in Table 3. As shown in the Table 3, we find support for the business group moderating effects. For CEO international experience, the coefficients for stand-alone firms is 0.972 ($p<.001$) while for affiliated firm it is 0.217 (marginally significant), thus supporting H4a. For the effect of promoter shareholding, both coefficients are statistically significant, although the effect for stand-alone firms ($b=2.269$, $p < .001$) is much stronger than for BG affiliated firms ($b=1.334$, $p < .001$), thus supporting H4b. Similarly for foreign institutional shareholding, we find a stronger effect for stand-alone firms ($b=2.549$, $p < .001$) than for group affiliated firms ($b=1.804$, $p < .001$) supporting H4c. We also performed Z tests of differences in coefficients and found significant differences at .01 levels.

Insert Table 3 about here

Discussion and Conclusion

Over the past decade, emerging economy firms internationalized rapidly using high involvement, risky mode of overseas acquisitions. In this paper, we examined some of the drivers of overseas acquisitions by Indian firms. We argued that factors which bring about a reduction in the risk perception of overseas acquisitions as a means of international expansion influence the propensity of a firm to go for overseas acquisitions. Our empirical results based on overseas acquisitions of Indian firms over a ten year period show that prior experience by the CEO has a significant effect on the probability of a firm engaging in cross border acquisitions. We also find that companies with a high concentration in ownership, i.e., a large controlling shareholding by the promoters, indulge more in overseas acquisitions. One of the ways by which Indian firms raise the necessary resources and obtain knowledge for overseas acquisitions seems to be from foreign investors as we find that firms with a large shareholding by foreign institutional investors engage more in cross border acquisitions.

The above results add to the recent research in Chinese and Indian contexts which shows that institutional advantages conferred on firms by virtue of being state-owned or business group affiliated facilitates internationalization through foreign direct investment because these meso-institutions (i.e., the state and business group) provide the resources (both tangible and intangible) for such investments as well as facilitate risk-taking needed in such investments. Our study, by focusing on firm level ownership and managerial characteristics and theorizing their linkages to risk-taking perceptions and propensities highlights the behavioral determinants of

risk-taking, which together with earlier conceptualization based on institutional and resource-based theories, provide a broader perspective on the determinants of overseas acquisitions.

Given the specific context of India, our study also provides additional support to a recent paper that examines the determinants of Indian firms' shift from exports to FDI as vehicles of international expansion (Gaur, et al 2014). Similar to that study, our results show that firms' prior experience in international markets (i.e., export intensity), existing resources and capabilities (reflected in marketing and R&D expenditures), and presence of institutional infrastructure (by being affiliated to a business group) positively impact the propensity of firms to internationalize through acquisitions. These findings, taken together provide additional support for Gaur, et al.'s (2014) conceptualization. We also find that larger and older firms of Indian origin are more inclined to pursue overseas acquisitions, which is consistent with the observations of past studies on MNCs primarily from developed markets. Besides, firms with lower financial leverage exhibit greater propensity for overseas acquisitions as they are favorably positioned to exploit their less leveraged status to raise debt for funding the acquisitions. Past research demonstrates that different classes of investors bring different benefits to the firms resulting in differences strategic actions such as internationalization and restructuring (Elango and Pattnaik 2007; Hoskisson, Cannella, Tihanyi, and Faraci 2004). Our study adds to this body of literature by specifically demonstrating the differences in acquisitive behavior of EMNCs owing to ownership differences.

While our paper identifies some new determinants explaining outward foreign direct investment behavior of emerging economy firms, as well as replicates some of the related findings, it also departs from previous conceptualizations of the role of business group affiliation on these strategic decisions. Gaur, et al. (2014) find business group affiliation to play a

complementary role to firms' existing stock of resources and capabilities. In particular, they argue that "impact of traditional firm resources on the shift in a firm's international operating strategy, from exports to FDI, increases when combined with institutional resources, such as being affiliated with a business group." Accordingly they find that the positive impact of marketing and R&D expenses on foreign investments is stronger for business group affiliated than stand-alone firms. Our theorization sees business group affiliation to provide more of a substitutive role to risk-taking behavior associated with ownership characteristics. We find that the influence of CEO's international experience, concentrated ownership and foreign institutional shareholding on the propensity to indulge in overseas acquisitions is higher in stand-alone firms than those affiliated to business groups.

These findings have important theoretical and managerial implications. As discussed earlier in the paper, existing research on emerging market multinationals highlights the gap-filling and coalitional functions (Langlois 2010) of institutions such as the state and business groups that facilitate risk-taking behavior of firms. These institutions also provide the resources for international investments. This conceptualization does not explain how firms lacking such institutional support pursue growth opportunities in international markets, including those necessitating overseas acquisitions. While we do not discount the role of resources provided by such institutions, our results show alternate ways that firms can compensate for the lack of institutional support inherent in state-owned and business group affiliated firms. In particular our results show that stand-alone independent firms can tap onto both the experiential knowledge of CEOs and foreign institutional investors as well as risk-taking characteristics arising from such experience and concentrated ownership, to pursue risky growth opportunities. With improvements in macro-institutions and liberalization of economies in a number of emerging

economies, the gap-filling role of meso-institutions such as state and business groups is likely to diminish. Our findings suggest that in these new institutional environments, independent firms through strong CEOs and owners, as well as access to international resources, could pursue similar growth strategies traditionally available to state-owned or business group affiliated firms.

Secondly, our paper adds to the growing body of work that stresses the influence of behavioral aspects on the internationalization of firms, both in developing and developed economies (Gavetti, Greve, Levinthal and Ocasio 2012; Jung and Bansal 2009). While Jung and Bansal (2009) highlight how firm internationalization is influenced by past performance of firms (performing above and below their target performance), our paper stresses the significant role played by the risk propensity and risk perception of managers in acquisition-based internationalization of developing economy firms. Our findings are also likely to be relevant and applicable to developed economy firms such as early stage firms (McDougall and Oviatt 2000) and small and medium enterprises (Lu and Beamish 2001). Such firms face challenges similar to the developing economy firms such as lack of resources and ownership advantages and their internationalization could be significantly influenced by the risk taking propensity of their managers.

While our study contributes to the emerging literature on international behavior of firms from developing economies, our findings should also be considered preliminary given some limitations. First, we identified a set of factors that influence risk-taking behavior of firms. However, there is a vast literature that identifies different types of risks and the determinants of these could be based on numerous other factors than those identified in this paper. Second, risk-taking propensity has been linked to firms' aspirations (including performance aspects). Our study did not incorporate the motives and aspirations behind the overseas acquisitions of Indian

firms. Third, similar to earlier studies, our operationalization of business group affiliation is somewhat coarse-grained. Business groups differ in terms of size and diversification levels, and there is also heterogeneity in the standing of various affiliates within the same business groups. Thus, the inherent institutional advantages conferred by group affiliation may vary across firms in the same business group, thus influencing their risk-taking perceptions and propensities, as well as access to resources. Similarly, business groups vary across countries (e.g., Chinese business groups being more vertically connected versus Indian business groups being horizontally diversified). Further research is warranted to fine-tune these institutional advantages as well as their complementary or substitutive role with respect to firm characteristics. We hope that our preliminary findings will initiate more fine-grained research to understand the rapid internationalization of firms from emerging/developing markets.

REFERENCES

- Athreye, S., & Kapur, S. (2009). Introduction: The internationalization of Chinese and Indian firms – trends, motivations and strategy. *Industrial and Corporate Change*, 18(2), 209-221.
- Aulakh, P.S., Kotabe, M., Teegen, H. (2000). Export strategies and performance of firms from emerging economies: Evidence from Brazil, Chile, and Mexico. *Academy of Management Journal*, 43(3), 342-361.
- Aulakh, P. S. (2007). Emerging multinationals from developing economies: Motivations, paths and performance. *Journal of International Management*, 13, 235-240.
- BCG. (2009). The 2009 BCG 100 new global challengers: How companies from rapidly developing economies are contending for global leadership
http://www.bcg.com/impact_expertise/publications/publication_list.jsp?pubID=2815.
Accessed 12 September 2009.
- Barkema, H. G., Bell, J. H. J., & Pennings, J. M. (1996). Foreign entry, cultural barriers and learning. *Strategic Management Journal*, 17, 151-166.
- Bertrand, M., Mehta, P., & Mullainathan, S. (2002). Ferreting out tunneling: An application to Indian business groups. *Quarterly Journal of Economics*, 117(1), 121–148.
- Business Week*. (2006). Emerging giants. July 31, 40.
- Capron, L., Dussauge, P., & Mitchell, W. (1998). Resource redeployment following horizontal acquisitions in Europe and North America, 1988–1992. *Strategic Management Journal*, 19, 631-661.
- Carpenter, M. A., Pollock, T. G., & Leary, M. M. (2003). Testing a model of reasoned risk-taking: Governance, the experience of principals and agents, and global strategy in high-technology IPO firms. *Strategic Management Journal*, 24, 803-820.
- Caves, R. E. (1982). *Multinational Enterprise and Economic Analysis*, Cambridge: Cambridge University Press.
- Coff, R. W. (1999). How buyers cope with uncertainty when acquiring firms in knowledge-intensive industries: Caveat emptor. *Organization Science*, 10(2), 144-161.
- Craig, C. S., & Douglas, S. P. (1997). Managing the transnational value chain: Strategies for firms from emerging markets. *Journal of International Marketing*, 5(3), 71-84.

- Cui, L., & Jiang, F. (2012). State ownership effect on firms' FDI ownership decisions under institutional pressure: a study of Chinese outward-investing firms. *Journal of International Business Studies*, 43, 264-284.
- Dawar, N., & Frost, T. (1999). Competing with giants: Survival strategies for local companies in emerging markets. *Harvard Business Review*, 77(2), 119-129.
- Dierickx, I., & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science*, 35(12), 1504-1513.
- Elango, B., & Pattnaik, C. (2007). Building capabilities for international operations through networks: A study of Indian firms. *Journal of International Business Studies*, 38(4), 541-555.
- Fombrun, C. (2005). Corporate reputations as economic assets. In M. Hitt, R. E. Freeman, & J.S. Harrison (Eds.), *The Blackwell Handbook of Strategic Management*, 289-312. Oxford: Blackwell.
- Gaur A. S., Kumar, V., & Singh, D. A. (2014). Resources, institutions and internationalization of emerging economy firms. *Journal of World Business*, 49, 12-20.
- Gavetti, G., Greve, H. R., Levinthal, D. A., & Ocasio, W. (2012). The behavioral theory of the firm: Assessment and prospects. *The Academy of Management Annals*, 6(1), 1-40.
- Ghemawat, P., & Khanna, T. (1998). The nature of diversified business groups: A research design and two case studies. *Journal of Industrial Economics*, 46(1), 35-61.
- Granovetter, M. (1995). Coase revisited: Business groups in the modern economy. *Industrial & Corporate Change*, 4 (1), 93-130.
- Gubbi, S., Aulakh, P. S., Ray, S., Sarkar, M. B., Chittoor, R. (2010). Do international acquisitions of emerging economy firms create value? The case of Indian firms. *Journal of International Business Studies*, 41(3), 397-418.
- Guillen, M. F. (2002). Structural inertia, imitation, and foreign expansion: South Korean firms and business groups in China, 1987–1995. *Academy of Management Journal*, 45(3), 509-525.
- Guillen, M. F., & Garcia-Canal, E. (2009). The American model of the multinational firm and the “new” multinationals from emerging economies. *Academy of Management Perspectives*, 23(2), 23-35.
- Haleblian, J., Deever, C. E., McNamara, G., Carpenter, M. A., & Davison, R. B. (2009). Taking stock of what we know about mergers and acquisitions: A review and research agenda. *Journal of Management*, 35(3), 469-502.

- Hambrick, D.C. (2007). Upper Echelons Theory: An Update. *Academy of Management Review*, 32: 334-343.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9: 193–206.
- Harvey, D. 2005. *A brief history of neoliberalism*. Oxford: Oxford University Press.
- Hitt, M. A., Bierman, L., Uhlenbruck, K., & Shimizu, K. (2006). The importance of resources in the internationalization of professional service firms: the good, the bad, and the ugly. *Academy of Management Journal*, 49 (6), 1137-1157.
- Hoskisson, R. E., Cannella, A. A., Tihanyi, L., & Faraci, R. (2004). Asset restructuring and business group affiliation in French civil law countries. *Strategic Management Journal*, 25 (6), 525-539.
- Hutzschenreuter, T., Pedersen, T., & Volberda, H. W. (2007). The role of path dependency and managerial intentionality: A perspective on international business research. *Journal of International Business Studies*, 38(7), 1055-1068.
- Jung, J. C., & Bansal, P. (2009). How firm performance affects internationalization. *Management International Review*, 49, 709-732.
- Keister, L. A. (1998). Engineering growth: Business group structure and firm performance in China's transition economy. *American Journal of Sociology*, 104(2), 404-440.
- Khanna, T., & Palepu, K. (1997). Why focused strategies may be wrong for emerging markets. *Harvard Business Review*, 75(4), 41-51.
- Khanna, T., & Palepu, K. (2000). The future of business groups in emerging markets: Long-run evidence from Chile. *Academy of Management Journal*, 43(3), 268-285.
- Khanna, T., & Palepu, K. (2006). Emerging giants: Building world-class companies in developing countries. *Harvard Business Review*, 84(10), 60-71.
- Khanna, T., & Rivkin, J. W. (2001). Estimating the performance effects of business groups in emerging markets. *Strategic Management Journal*, 22 (1), 45-74.
- Lall, S. (1983). *The new multinationals: The spread of Third World enterprises*. New York: Wiley.
- Lamin, A. (2013). Business groups as information resource: An investigation of business group affiliation in the Indian software services industry. *Academy of Management Journal*, 56(5), 1487-1509.

- Langlois, R.N. (2010). Economic institutions and the boundaries of business groups. In *The Oxford Handbook of Business Groups*, Colpan, A.M., Hikino, T. & Lincoln, J.R. (eds). Oxford University Press: 629-649.
- Leff, N. H. (1978). Industrial organization and entrepreneurship in the developing countries: The economic groups. *Economic Development and Cultural Change*, 26 (4), 661-675.
- Lu, J. W., & Beamish, P. W. (2001). The internationalization and performance of SMEs. *Strategic Management Journal*, 22(6-7), 565-586.
- Luo, Y., & Tung, R. L. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies*, 38(4), 481-498.
- Madhok, A., & Keyhani, M. (2012). Acquisitions as entrepreneurship: asymmetries, opportunities, and the internationalization of multinationals from emerging economies. *Global Strategy Journal*, 2(1), 26-40.
- Manning, W. G., Duan, N., & Rogers, W. H. (1987). Monte Carlo evidence on the choice between sample selection and two-part models. *Journal of econometrics*, 35(1), 59-82.
- Maape Advisory Group, (2006). India Inc. goes abroad.
www.maapegroup.com/images/press.../India_Inc_Goes_Abroad.pdf
 Accessed 1 September 2012
- Mathews, J. A. (2006). Dragon multinationals: New players in 21st century globalization. *Asia Pacific Journal of Management*, 23(1), 5-27.
- McDougall, P. P., & Oviatt, B. M. (2000). International entrepreneurship: The intersection of two research paths. *Academy of Management Journal*, 43(5), 902-906.
- Morck, R., Yeung, B., & Zhao, M. (2008). Perspectives on China's outward foreign direct investment. *Journal of International Business Studies*, 39, 337-350.
- Nayyar, D. (2008). The internationalization of firms from India: Investment, mergers and acquisitions. *Oxford Development Studies*, 36(1), 111-131.
- Norton, E. C., Wang, H., & Ai, C. (2004). Computing interaction effects and standard errors in logit and probit models. *The Strata Journal*, 4(2): 154-167.
- OECD. (2006). Emerging multinationals: Who are they? What do they do? What is at stake?
http://www.oecd.org/document/33/0,3343,en_2649_33731_36223265_1_1_1_1,00.html.
 Accessed 12 September 2009.

- Pablo, A. L., Sitkin, S. B., & Jemison, D. B. (1996). Acquisition decision-making processes: The central role of risk. *Journal of Management*, 22(5), 723-746.
- Ramamurti, R. (2004). Developing countries and MNEs: Extending and enriching the research agenda. *Journal of International Business Studies*, 35(4), 277-283.
- Ramamurti, R. (2013). Cross-border M&A and competitive advantage of Indian EMNEs. In P.J. Williamson, R. Ramamurti, A. Fleury, & M.T.L. Fleury (Eds.), *The Competitive Advantage of Emerging Market Multinationals*. New York: Cambridge University Press.
- Ray, S., & Gubbi, S. R. (2009). International acquisitions by Indian firms: Implications for research on emerging multinationals. *The Indian Journal of Industrial Relations*, 45(1): 11-26.
- Sanders, W. G., & Hambrick, D. C. 2007. Swinging for the fences: The effects of CEO stock options on company risk taking and performance. *Academy of Management Journal*, 50(5): 1055-1078.
- Sitkin, S. B., & Pablo, A. L. (1992). Reconceptualizing the determinants of risk behavior. *Academy of Management Review*, 17(1), 9-38.
- The Economist*. (2012). Indian takeovers abroad. Running with the bulls. March 3rd.
- The Economist*. (2008). Emerging-market multinationals. January 10.
- The Financial Express*. (2008). Tata Motors completes JLR acquisition. June 2.
- Uhlenbruck, K., Meyer, K. E., & Hitt, M. A. (2003). Organizational transformation in transition economies: Resource-based and organizational learning perspectives. *Journal of Management Studies*, 40(2): 257-282.
- White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica: Journal of the Econometric Society*, 48, 817-838.
- Wiseman, R.M., Gomez-Mejia, & Fugate, M. (2000). Rethinking compensation risk. In S.L. Rynes & B. Gerhart (Eds.), *Compensation in organizations*. San Francisco: Josey-Bass, 311-347.
- Wright, P., Ferris, S., Sarin, A., & Awasthi, V. (1996). Impact of corporate insider, blockholder, and institutional equity ownership on firm risk taking. *Academy of Management Journal*, 39(2), 441-463.
- Woodcock, C. P., Beamish, P. W., & Makino, S. (1994). Ownership-based entry mode strategies and international performance. *Journal of international business studies*, 24(2), 253-273.

- Yin, S. (2013). The acquisitiveness of youth: CEO age and acquisition behavior. *Journal of Financial Economics*, 108, 250-273.
- Yiu, D.W., Lu, Y., Bruton, G.D., & Hoskisson, R.E. (2007). Business groups: An integrated model to focus future research. *Journal of Management Studies*, 44(8), 1551-1579.
- Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management Journal*, 38(2), 341-363.

Table 1
Means, Standard Deviations and Correlations^a

	Variable	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Overseas Acquisition	0.21	0.41	1.00													
2	Business group (BG) Affiliation	0.61	0.49	0.12	1.00												
3	Promoter shareholding	0.53	0.19	-0.07	-0.18	1.00											
4	Foreign institutional shareholding	0.09	0.11	0.26	0.11	-0.37	1.00										
5	Export intensity	0.18	0.26	0.24	0.02	-0.14	0.13	1.00									
6	CEO international experience	0.08	0.27	0.07	0.03	-0.07	-0.01	0.12	1.00								
7	CEO international education	0.28	0.45	0.13	0.22	-0.08	0.05	0.02	0.27	1.00							
8	CEO tenure	11.22	9.93	0.04	0.06	-0.07	0.02	0.13	0.01	0.00	1.00						
9	CEO age	52.07	9.83	0.08	0.10	0.06	-0.01	0.01	0.04	-0.03	0.33	1.00					
10	R&D intensity	0.01	0.02	0.25	0.06	-0.02	0.11	0.19	0.06	0.06	0.13	0.03	1.00				
11	Marketing intensity	0.04	0.15	0.02	0.12	0.01	0.11	-0.01	0.01	0.01	0.00	-0.04	0.04	1.00			
12	Firm size ^b	8.84	2.10	0.26	0.13	0.05	0.18	0.06	-0.02	0.02	-0.04	0.29	0.08	-0.23	1.00		
13	Firm age	30.71	23.14	0.06	0.20	-0.08	0.02	-0.08	0.03	0.10	0.04	0.33	-0.01	-0.02	0.29	1.00	
14	Debt-equity ratio	1.73	2.46	-0.11	0.03	0.01	-0.06	-0.05	-0.05	-0.03	-0.02	-0.04	-0.07	0.04	-0.05	0.01	1.00

^a Pearson correlations are significant at the 0.10 level (two-tailed tests) at |.04|

^b Natural Logarithm

Table 2
Probit Model: Determinants of international acquisitions by Indian firms^a

		DV= Overseas acquisition	
		<i>Model 1</i>	<i>Model 2</i>
1	Intercept	-4.623*** (0.425)	-5.024*** (0.493)
2	CEO tenure	-0.004 (0.004)	-0.001 (0.004)
3	CEO age	0.001 (0.004)	-0.001 (0.004)
4	R&D intensity	18.523*** (2.498)	17.910*** (2.550)
5	Marketing intensity	0.760** (0.286)	1.222*** (0.379)
6	Firm size ^b	0.198*** (0.029)	0.152*** (0.033)
7	Firm age	-0.000 (0.001)	0.004** (0.002)
8	Debt-equity ratio	-0.067** (0.021)	-0.056* (0.024)
9	Export intensity	1.006*** (0.149)	1.266*** (0.165)
10	Business group (BG) Affiliation	0.404*** (0.077)	0.362*** (0.083)
11	CEO international education	0.280*** (0.073)	0.268*** (0.079)
12	CEO international experience		0.391** (0.124)
13	Promoter shareholding		0.749*** (0.225)
14	Foreign institutional shareholding		2.282*** (0.364)
	Year dummies	Included	Included
	Industry dummies	Included	Included
	<u>Model Indices</u>		
	Pseudo R-square	0.3045	0.3120
	Wald chi-square	714.92***	654.38***
	Number of observations	2740	2351

⁺p <0.10, * p <0.05, **p <0.01, *** p <0.001 ; All two-tailed tests.

^a Unstandardized regression coefficients with robust standard errors corrected for non-independence within firms, in parenthesis.

^b Natural logarithm

Table 3
Probit Model: Determinants of international acquisitions – Sub-group analysis^a

		Stand-alone (non-BG) firms	Business group firms
		<i>Model 3</i>	<i>Model 4</i>
1	Intercept	-9.554*** (0.930)	-5.658*** (0.619)
2	CEO tenure	0.064*** (0.013)	-0.014** (0.005)
3	CEO age	-0.030* (0.013)	0.004 (0.005)
4	R&D intensity	32.408*** (6.045)	20.538*** (3.379)
5	Marketing intensity	4.973 (3.190)	1.415*** (0.445)
6	Firm size ^b	0.343*** (0.070)	0.222*** (0.050)
7	Firm age	-0.008 (0.008)	0.006*** (0.002)
8	Debt-equity ratio	-0.357*** (0.080)	-0.037 (0.025)
9	Export intensity	2.016*** (0.349)	0.967*** (0.249)
10	CEO international education	-0.786** (0.317)	0.373*** (0.091)
11	CEO international experience	0.972* (0.436)	0.217# (0.141)
12	Promoter shareholding	2.269*** (0.484)	1.334*** (0.322)
13	Foreign institutional shareholding	2.549*** (0.733)	1.804*** (0.461)
Year dummies		Included	Included
Industry dummies		Included	Included
<u>Model Indices</u>			
Pseudo R-square		0.4264	0.3447
Wald chi-square		971.61***	494.30***
Number of observations		603	1568

⁺p < 0.10, * p < 0.05, **p < 0.01, *** p < 0.001 ; All two-tailed tests. # p = 0.123

^a Unstandardized regression coefficients with robust standard errors corrected for non-independence within firms, in parenthesis.

^b Natural logarithm