MICROFOUNDATIONS OF FIRM INTERNATIONALIZATION: THE OWNER CEO EFFECT

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Running head – **Internationalization of Firms: The Effect of Owner CEOs**

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ABSTRACT

Research summary: In this paper we examine the influence of owner CEOs' motivations and authority on the strategic risk-taking behavior of firms as reflected by their investments in foreign markets. We theorize that owner CEOs, aided by their strategic leadership, long-term orientation and less-restricted decision making powers, will facilitate their firms' strategic decisions that are exploratory in nature and thus more risky. We further propose that the owner CEO effect is likely to differentially interact with performance aspirations and governance structures of firms in influencing internationalization. We test our predictions on a longitudinal panel data set of 226 Indian manufacturing firms over the ten-year period from 2002 to 2011 and find support for our hypotheses. We contribute to the emerging literature on microfoundations and behavioral strategy.

Managerial summary: Given that a large number of firms around the world are characterized by concentrated ownership and owners who also assume CEO roles, we explore the influence of owner CEOs on firms' strategic risk-taking behavior. We propose that firms with owner-CEOs, particularly founder owner CEOs, are likely to exhibit higher degree of internationalization as compared to firms with professional CEOs. Further, we propose that the positive owner CEO effect is stronger when the firm performance is above aspirations and also in standalone firms when compared to firms affiliated to business groups. We test our predictions using a sample of 226 Indian manufacturing firms over the ten-year period from 2002 to 2011 and find support for our predictions.

INTRODUCTION

Strategy scholars have recently been advocating a focus on micro-foundations to decompose macro-level constructs into micro actions and interactions of lower level organizational members (Felin, Foss, and Ployhart, 2015; Foss and Pedersen, 2014). Arguing that extant work focuses primarily on firm or industry level explanations of outcomes, they call for attention on the mechanisms at lower levels, particularly at the level of individuals (Lippman and Rumelt, 2003; Gavetti, 2005; Gavetti, 2012; Barney and Felin, 2013), which have the potential to be more stable, fundamental and general than macro level explanations (Foss and Pedersen, 2014). As reasoned by Felin and Foss (2005: 441), "… to fully explicate organizational anything – whether identity, learning, knowledge or capabilities – one must fundamentally begin with and understand the individuals that compose the whole…." In particular, Gavetti (2012) argues for the need to probe the role of strategic leaders (or strategic agency) in understanding firms' decisions to pursue cognitively distant opportunities that may be exploratory in nature and involve higher risk.

Building on these emerging insights from the micro-foundations and behavioral strategy literatures, the purpose of our paper is to understand the role of owner CEOs in explaining firm internationalization through investments in foreign markets. While the international strategy research acknowledges that the strategic decision to internationalize, especially through high commitment modes such as foreign investments, entails exploratory search behavior due to the various liabilities of foreignness, much of this research has identified institutional, industry and firm level factors that may influence risk-taking behavior (Griffith, Cavusgil and Xu, 2008). The limited research alluding to a micro-foundation perspective focuses on the influence of top management team (TMT) characteristics on internationalization (e.g., Sambharya, 1996; Reuber and Fischer, 1997). More research at the level of individuals, such as the role of leaders and CEOs,

has the potential to further enrich and lead to a deeper understanding of a firm's internationalization processes (Hutzschenreuter, Volberda, and Pedersen, 2007; Griffith et al., 2008).

Strategic leaders such as CEOs can have a significant influence on firms' strategic direction (Westphal and Fredrickson, 2001; Gavetti, 2012) and this influence is likely to be distinct when owners also take on the role of CEOs (Fahlenbrach, 2009; Adams, Almeida and Ferreira, 2009; Souder, Simsek, and Johnson, 2012). Owner CEOs have more latitude of action and can not only identify strategic opportunities but can act on, legitimize and realize such opportunities (Gavetti, 2012). Using a microfoundations perspective, we build on behavioral and economic theories to examine the influence of owner CEOs in shaping firms' internationalization paths (Zahra, 2003; Hutzschenreuter et al., 2007). Such a perspective, which includes the prospect of deliberate actions and strategic choices of managers, is able to better explain the internationalization processes of firms which are less path-dependent and more path-creating in nature (Chittoor, Aulakh and Ray, 2015). CEOs differ from one another in terms of both subjective motivations stemming from risk propensity and agency issues (Sitkin and Pablo, 1992; Fama and Jensen, 1983) and objective considerations such as the authority available to them to make and execute the decisions (Gavetti, 2012). We argue that an owner CEO, compared to a professional CEO, is faced with lower agency conflicts and is likely to play a stewardship role with long-term interests of the firm in mind (Miller and Breton-Miller, 2006). An owner CEO is likely to identify internationalization as a strategic opportunity and is able to act on it, even if it is perceived to be riskier in the short term (Eisenmann, 2002; Zahra, 2003; Gavetti, 2012). In addition, owner CEOs enjoy high levels of legitimacy and influence with stakeholders and with the rest of the owners and thus are less constrained to pursue strategies with longer pay-off periods such as internationalization, more freely (James, 1999;

Souder et al., 2012). Hence we expect firms with owner CEOs to display a higher degree of internationalization compared to those with professional CEOs.

We further probe the influence of owner CEOs on firm internationalization by examining its interactions with the two underlying mechanisms that influence risky strategic decisions, motivation and authority. First, research anchored in the behavioral theory of the firm has highlighted the effect of performance feedback on exploratory search behavior. Driven by problemistic search, firms are expected to indulge more in strategic change such as internationalization when performance falls below aspirations (Greve, 2003; Gavetti, Greve, Levinthal and Ocasio, 2012). Similarly, firms tend to conserve gains when performance is above target and refrain from risky decisions (Kahneman and Tversky, 1979). Empirical studies show that firms internationalize more when the actual performance is below aspirations and less when it is above aspirations (Jung and Bansal, 2008; Lin, 2014). We add to this body of work in an important way, by hypothesizing that this performance feedback effect on internationalization is likely to be the opposite in firms with owner CEOs, who are more secure and less affected by behavioral concerns arising from below-par performance than professional CEOs. Thus, we expect that the underlying motivations related to performance aspirations will vary for the two types of CEOs thus impact internationalization decisions.

Second, we examine how the influence of owner CEOs interacts with the governance structures within which strategic decisions are made. Specifically, we examine how the embeddedness of firms in a business group (BG), a significant and unique governance structure of many economies (Morck and Yeung, 2003), influences the effect of owner CEOs on the internationalization of firms. Building on agency theory, we propose that the positive effect of owner-CEO on internationalization is higher for standalone firms compared to BG firms due to

potentially higher personal pay-offs for owner CEOs in standalone firms (Eisenmann, 2002). BG owner CEOs may have more diversified personal investment portfolios than their counterparts in standalone firms and hence are comparatively less invested in value creation in the specific firms that they head. Further, the resource value of owner CEOs is higher for standalone firms that do not possess the resources and network support that a BG could provide to its affiliated firms. Firms that are not affiliated to BGs, need and benefit more from the strategic leadership that owner CEOs provide in identifying internationalization as a strategic opportunity and acting on it. In addition, Figure 1 captures our overall conceptual model.

Figure 1 goes about here

We test our predictions using a proprietary, longitudinal panel data set of 226 Indian manufacturing firms (that were a part of the BSE 500 index as of September 2012) over the ten-year period from 2002 to 2011 and find support for our hypotheses. We chose India as the research setting for this study for several reasons. The last two decades have seen the emergence of a large number of international firms from India. In the latest list of "BCG global challengers: Companies on the move" in which Boston Consulting Group (BCG, 2014) identifies 100 global companies from developing economies, 19 firms are from India - second only to China in terms of the number of firms from a single country. Second, India has a substantial number of firms that are managed by owner CEOs, even among the large firms. Sixty five per cent of the firms in our sample were managed by CEOs who were also owners. Third, India provides an ideal setting to examine how the effect of owner CEOs on a firm's internationalization is influenced by the firm's embeddedness within a business group. Firms belonging to business groups form an important part of the Indian corporate sector, constituting about one-third in terms of number of firms, and over two-thirds in terms of revenues and profits (Chittoor and Aulakh, 2015).

Our study contributes to a much needed microfoundations focus in global strategy research. We theorize on the important influence of owner CEOs on firms' internationalization processes. Our study also contributes to the literature on behavioral theory of the firm by highlighting the role of owner CEOs on the relationship between performance feedback and internationalization. We posit that problemistic search triggered by performance below aspirations is more muted in the case of firms with owner CEOs. In addition, we add to the rich body of work on business groups by examining how the effect of owner CEOs is moderated by the governance structures that a firm is embedded in, such as a firm's affiliation to BGs. Finally, we make an empirical contribution by examining evidence in the context of India, an important emerging economy, that reinforces the view that 'the interaction between the institutional legacies of developing economies and the dynamic capabilities of their corporate entrepreneurs will be crucial for understanding the internationalization strategies that the latter pursue' (Child and Rodrigues, 2005: 405).

The rest of the paper is organized as follows: we first develop our theory and specific hypotheses by building on the microfoundations perspective as well as including insights from the behavioral and economic theories. We then describe the methodology and report the empirical findings. In the subsequent section, we discuss the contributions and implications of our findings. We conclude by highlighting a few limitations of our study and offering directions for future research.

THEORY AND HYPOTHESES

There is a strong tradition in international business research that examines the internationalization behavior of firms in terms of the processes, paths, and modes of operation. One stream of research based on internalization theory and the eclectic paradigm (Buckley and Casson, 1976, 1998; Dunning, 1980, 1988) rests on the assumption that internationalizing firms already possess the technology and product-related knowledge (ownership advantages) needed in order to meet the

demand of the foreign markets, and the act of internationalization is undertaken in order to exploit this stock of existing know-how (Hitt, Tihanyi, Miller, and Connelly, 2006). The internationalization process model or the stages model (Johanson and Vahlne, 1977; Kogut and Zander, 1993), the other widely used theory to explain international expansion, postulates that internationalization progresses incrementally through a systematic process of learning-by-doing. This path-dependent model argues that firms accrue internationalization capabilities to deal with cultural diversities and operational uncertainties of operating in foreign markets through an endogenous process of experiential learning. According to this view, much of the tacit knowledge required to compete in unfamiliar international environments can only be attained through organizational learning which is largely experiential in nature and occurs in situ (Johanson and Vahlne, 1977). As per both these dominant theoretical perspectives, internationalization is a path dependent process based on accumulation of knowledge (internationalization process model) or exploitation of proprietary assets through internal hierarchy as against market transactions (internalization theory and eclectic paradigm) (Hutzschenreuter et al., 2007). Furthermore, both these models acknowledge the risks related to the liabilities of foreignness for firm internationalization and identify firm, industry and macro-institutional factors that may influence the risk perceptions of firms and thus influence both the process of internationalization as well as the modes of expansion (Griffith et al., 2008).

Recent management research has emphasized a microfoundations perspective to better explain phenomena (Foss and Pedersen, 2014). Microfoundations-based theories could supplement and reinforce macro-level explanations as well as offer alternative explanations (Felin and Foss, 2005; Foss, 2010). Broadly defined, microfoundations would mean locating the cause of any phenomenon at a level lower than the phenomenon itself and thus include all multilevel

theorizing (Felin, Foss, Heimeriks and Madsen, 2012). Microfoundations work in strategy focuses on individuals and emphasizes the role of heterogeneous individuals in the top management of a company in driving strategic decisions and firm level outcomes (Barney and Felin, 2013). While not explicitly anchored in the micro-foundations perspective, a few papers on global strategy have started to explore the influence of top management characteristics on internationalization processes. For example, in a sample of U.S.-based multinationals, Sambharya (1996) finds that the foreign experience of top management team (TMT) members is positively associated with international diversification strategies. In another study focused on SMEs, Reuber and Fischer (1997) report that TMT's international experience leads to a greater propensity of foreign partnerships and faster accrual of foreign sales. Chittoor, et al. (2015) argue that risky internationalization strategies (involving substantial financial commitments) are jointly determined by firms' risk propensity and the ability to avail the necessary resources and absorb downside risks. They empirically demonstrate that TMT experience through prior exposure to international markets facilitates overcoming the liability of foreignness and increases risk taking propensity in the context of overseas acquisitions. These studies thus represent some preliminary attempts to move the analysis from the macro firm level characteristics to the one that incorporates managerial characteristics in explaining heterogeneity in firm internationalization. We expand on this emerging research stream to examine the influence of CEOs, who are also owners, (hereafter owner CEOs) in driving more involved modes of internationalization such as through FDI.

Greater incorporation of a microfoundations perspective and the role of strategic leaders proposed by research on behavioral strategy becomes particularly important to understand the internationalization paths of born-global firms in general or specifically the global players from emerging economies (Guillen and Garcia-Canal, 2009; Matthews, 2006). Luo and Tung (2007)

observe that such firms often follow unique strategies and activities, which distinguish their internationalization trajectories from that of traditional multinationals. These new emerging multinationals are much less path dependent and much more risk taking and 'undertake outward internationalization in some unconventional ways' (Luo and Tung, 2007: 481). They tend to internationalize rapidly and employ innovative strategies to create space for themselves in foreign markets already dominated by incumbents (Mathews, 2006; Aulakh, 2007). Often deviating from conventional internationalization paths, these firms tend to expand first into developed markets rather than into other emerging markets and they don't shy away from making large investments and resource commitments during the initial stages of expansion (Guillen and Garcia-Canal, 2009; Luo and Tung, 2007; Mathews, 2006). Their internationalization paths are more exploratory, and thus riskier (Dunning 2006; Korhonen, Luostarinen, and Welch, 1996), with capability development and competitive advantage following, rather than leading, their internationalization (Dunning 2006; Chittoor, Sarkar, Ray and Aulakh, 2009). Hutzschenreuter et al. (2007) suggest the need to distinguish theories that emphasize path-dependent internationalization perspectives (where internationalization is more evolutionary and path dependent) from the ones that emphasize path-creating internationalization perspectives (where managers, through their deliberate strategic choices have the ability to alter their firm's internationalization trajectory).

Owner CEOs and Firm Internationalization

CEOs, through their deliberate strategic choices, are in a position to significantly influence the internationalization processes of a firm. Behavioral strategists have argued that CEOs can act as strategic leaders, who can "challenge, stretch, and change…mental representations of reality and act on them…to discover and pursue cognitively distant opportunities that lie outside the purview of predominant ways of thinking. Firms that are superior at this game will be rewarded more

generously than will those that are superior only at an incremental game" (Gavetti, 2012: 267-268). Such leaders create "strategic intent" which enables firms to stretch themselves and pursue aspirations much beyond what their starting resource positions would suggest (Hamel and Prahalad, 1994: 129). CEOs who are strategic leaders are able to spot opportunities that are cognitively distant, legitimize them by influencing key stakeholders and are able to realize them by acting upon them (Tripsas and Gavetti, 2000; Gavetti, 2012).

However, when it comes to making these strategic choices and in strategic decision making, CEOs' risk taking behavior plays an important role (Sitkin and Pablo, 1992). Subjective motivations stemming from risk propensity and risk perception of key decision makers such as the CEOs significantly influence risky decision making behavior in organizations (Sitkin and Weingart, 1995). Shapira (1986) reports that managers have a high tendency for loss aversion and perceive any possibilities of negative outcomes as high risk whereas strategic decisions could lead to either highly positive or highly negative outcomes. Managerial risk taking propensities vary across individuals and the acceptability of a risky alternative depends on the positive and negative expectations of outcomes as well as the aspiration level of the decision maker (March and Shapira, 1987). In addition to these subjective influences, the actual authority vested in the decision maker to make and implement the decisions plays a significant role. Thus, a decision maker's propensity to take risky strategic decisions is influenced by individual or subjective assessment of the decision context as well as the objective considerations such as the authority available to make the decision (Wiseman, Gomez-Mejia and Fugate, 2000).

Among top managers, owner CEOs are particularly influential and powerful as strategic leaders compared to professional CEOs (Zander, 2004; Fahlenbrach, 2009; Souder et al., 2012). Concentrated ownership and the phenomenon of one of the owners assuming the CEO position is

very prevalent in most economies around the world[1] (La Porta, Lopez-de-Silanes and Shleifer, 1999; Morck, 2000). In terms of their influence on strategic decision making, owner CEOs fundamentally differ from professional CEOs in both the dimensions discussed above – a) motivation and b) authority. Let us first delve into the systematic differences in the motivations of owner and professional CEOs. Agency theory has been one of the widely used economic theories to understand how the motivations of managers or agents differ from that of the owners or principals (Fama and Jensen, 1983). From an agency perspective, managers are risk neutral and owners are likely to take risks if they see potential increases in returns commensurate with the risks (Carpenter, Pollock and Leary, 2003). Secondly, when ownership is widely diffused, as is the case in countries such as the US or UK, agency problem arises out of the information asymmetry between owners/principals and agents/managers. In such a scenario, managers are likely to appropriate resources and act in their own self-interest resulting in an agency cost. In the case of owner CEOs, such agency costs will be lower as the identity and interests of the owners and managers are aligned (Fama and Jensen, 1983; Miller and Breton-Miller, 2006). Further, the personal pay-offs to owner CEOs and professional CEOs from sponsoring strategic investments that are risky, such as FDI, are likely to be very different (Eisenmann, 2002). Owner CEOs enjoy the support of core shareholders and hence the members of the board. Due to this, the risk of termination for them is minimal even if the strategic investment does not pan out as expected or goes awry. Compared to owner CEOs, the risk of termination for professional CEOs due to failed investments is much higher and hence they would be more reluctant to take FDI decisions. On the other hand, the upside potential or personal pay-off from strategic investments is much higher for

[1] except in a few like the US or UK (La Porta, Lopez-de-Silanes and Shleifer, 1999).

owner CEOs than professional CEOs as their wealth is tied up with the firm's value and they gain directly from value creation in the firm.

In addition to agency theory, stewardship theory too guides us in understanding how owner CEOs' motivations differ in their influence on the firm internationalization decisions (Miller and Breton-Miller, 2006). Stewardship theory informs that many individuals and leaders, when they are assigned powerful and responsible positions, do not act just to serve their individual interests but rather for the collective good of their firms (Donaldson and Davis, 1991). Such stewardship behavior is particularly triggered in owner CEOs when they are charged with the responsibility for the overall interests of the ownership family (Zahra, 2003; Miller and Breton-Miller, 2006). Prior research on family businesses and small and medium enterprises (SMEs) that has examined the effect of managerial ownership on internationalization found evidence in line with these arguments (Zahra, 2003; George, Wiklund and Zahra, 2005). Zahra (2003) argues that owner managers are subject to altruistic behaviors. i.e., they place the firm's objectives or family wealth ahead of their own objectives. Owner CEOs are thus likely to undertake internationalization, even when the perceived risks are high, if they believe that internationalization improves a firm's long-term value and hence family wealth (Adams et al., 2009).

The second important dimension by which owner CEOs differ from professional CEOs is the authority they enjoy and are able to exercise. This is as important a dimension as motivation which we discussed above because, without authority it is not possible to action or implement the CEOs' intentions. Compared to professional CEOs, owner CEOs also have the power to take and act on strategic decisions such as internationalization. Gavetti (2012) argues that mere identification of strategic opportunities is not adequate for creation of a competitive advantage, but leaders should have the ability to legitimize them among key stakeholders and shape them into

reality. Internationalization involves a series of strategic decisions that would require the consent of shareholders, the board of directors as well as the senior management team from time to time. Owner CEOs are in a position to influence key stakeholders, legitimize and act on strategic opportunities. They are likely to be more long-term oriented and less restricted in their decision making powers. Therefore, firms that have CEOs who are also owners are likely to pursue more involved modes of internationalization such as foreign direct investment (FDI) and attain higher degree of internationalization. On the other hand, professional CEOs (or agent CEOs) tend to be risk-averse and are less likely to embark on exploratory strategic decisions because of the possibility of "risking human capital when sponsoring risky investments" or due to lower individual pay-offs (Eisenmann, 2002: 515). Based on these arguments, we propose that,

H1a: Ceteris paribus, firms with owners as CEOs are likely to exhibit higher internationalization as compared to firms with professional CEOs.

Owner CEOs can be further categorized into founder owner CEOs and non-founder owner CEOs or second generation owner CEOs. All the arguments that we made above supporting a positive relationship between owner CEOs and firm internationalization are likely to be further strengthened in the case of founder owner CEOs. Founder CEOs strongly identify with the firm they created and possess higher power and credibility vis-à-vis key stakeholders when compared to successor CEOs (He, 2008). They often consider the firm as their life's achievement, enjoy more influence and decision making power and pursue long term value maximization strategies as against short term actions (Fahlenbrach, 2009). Hence, the positive relationship between owner CEOs and internationalization is likely to be much stronger in the case of founder owner CEOs. Therefore,

H1b: The effect of owner CEO on internationalization of a firm would be stronger for founder owner CEOs when compared to non-founder owner CEOs.

Performance Feedback and the Owner CEO Effects

We argued above how owner CEOs are able to drive a firm's internationalization much more than professional CEOs due to fundamental differences in their motivation and authority. We will now examine two factors which moderate this influence stemming from motivation and authority respectively. An important behavioral factor that influences a CEO's motivation to pursue internationalization is performance feedback or the gap between performance and aspiration. One of the cornerstones of behavioral theory of the firm is problemistic search, which is triggered by the goal of overcoming performance shortfalls. A search for solutions is initiated when performance is below aspirations (Cyert and March, 1963). There is a large body of work on performance feedback that examines the tendency of low-performing organizations to take more risks (Greve, 2003). For example, Chen and Miller (2007) find that firms increase their R&D search intensity as their performance falls below aspirations. A similar effect has been observed in a number of activities involving strategic change such as mergers and acquisitions (Haleblian, Kim and Rajagopalan, 2006), growth (Audia and Greve, 2006), diversification (McDonald and Westphal, 2003; Ref and Shapira, 2016) and internationalization (Jung and Bansal, 2009). This view resonates with economic theories such as prospect theory, which proposes that individuals and firms avoid risks and conserve their gains when their performance is above expectations/targets (Kahneman and Tversky, 1979). These two behavioral perspectives suggest that firms indulge in more risky activities when their performance is below aspirations and avoid risks when performance is above aspirations (Fiegenbaum and Thomas, 1988).

Performance feedback effects in line with the behavioral theory of the firm and prospect theory have been observed in the context of firm internationalization too. Jung and Bansal (2009) find that firm performance relative to aspirations is negatively associated with internationalization.

More recently, Lin (2014) finds that Taiwanese firms increase their pace and scope of internationalization when their performance falls below their aspirations and an opposite effect similar to Jung and Bansal (2009) when the performance is above aspirations. We further probe this by examining how these effects are likely to differ when a firm is headed by owner CEOs instead of professional CEOs.

From our earlier discussion of the likely predispositions of owner CEOs versus professional CEOs, it follows that the negative performance feedback effects are likely to be triggered primarily in professional CEOs than owner CEOs. According to the behavioral theory, boundedly rational managers form aspirations by comparing their firms' performance to their historical performance levels or against similar organizations, and shortfalls relative to aspirations are perceived as failures, thus inducing risk-taking behavior (Greve, 2003). The pressures related to attainment discrepancy (Lant, 1992) are likely to be higher for professional CEOs, who are prone to job security concerns (i.e., human capital risk (Eisenmann, 2002)) much more than owner CEOs. Owner CEOs feel more secure even when the performance falls below aspirations and are not compelled to try out significant changes such as internationalization or diversification. In fact, when owner CEOs are at the helm, a firm is likely to indulge in strategic decisions such as internationalization when performance is above aspirations, as is logically expected from resource-based arguments. Therefore, we hypothesize that,

H2: The effect of CEO on the internationalization of the firm is likely to be stronger when the firm performance is above aspirations than when it is below aspirations.

Owner CEOs and BG Governance Structure

Another important factor that is likely to alter the influence of authority of owner CEOs on firm-level outcomes is a firm's governance structure. Most entrepreneurship in emerging economies starts off as a stand-alone family firm, which then diversifies into multiple businesses, each held

in a different firm, under common ownership – a organizational/governance structure popularly known as 'business groups'. Such BGs control and coordinate two or more distinct legal firms (or affiliates), often in different businesses, through commonly held equity ownership stakes, often complemented by social ties. The business group as a distinct organizational form, which is prevalent in a large number of countries (Morck and Yeung, 2003), creates stark distinctions between owner CEOs (who are likely be members of the family that controls multiple affiliated firms within the group) and professional CEOs (who are likely to be in-charge of one affiliate within the portfolio). In particular, we suggest that differences between owner and professional CEOs in terms of access to group resources, decision-making independence and ability to diversify risks are likely to differentially influence the strategic role of owner CEOs for firms that are part of business groups versus those that are stand-alone (or independent).

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 (Kim, Kim, and Hoskisson, 2010; Lamin, 2013). A significant advantage that BGs bring to a firm's internationalization efforts is their positive reputation and brand image. 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). Business groups typically invest in an umbrella brand name and build a reputation for fair dealing (Khanna and Rivkin, 2001) leading to better credibility in domestic and international markets. Internationalization efforts of members firms of such groups are likely to derive significant support from the groups' brand image and reputation. 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). Sirmon and Hitt (2003) identify the specific advantages

of family firms (which are akin to BGs) emanating from social capital (from network of relationships) and patient financial capital (long-term orientation).

Firms affiliated to business groups have structural advantages related to resource availability and risk absorption mechanisms that allow exploratory search behavior (Vissa, Greve, and Chen, 2010; Gubbi, Aulakh, and Ray, 2015). Thus numerous studies in different empirical contexts have found positive effects of group affiliation on firms' internationalization. On the flip side, these studies suggest that stand alone (or independent) firms, not having the structural advantages of the business group network, are more resource constrained and risk averse in taking strategic decisions outside their comfort zone. One would therefore expect that strategic leadership (or strategic agency) possibilities underlying owners as CEOs would be stronger for such firms. Secondly, as a family firm evolves into a large business group, it would typically develop two levels of strategic decision making – one at the firm level and another at the level of BG headquarters. For example, at the Tata group in India, group level initiatives are defined and directed by two main decision-making bodies, the Group Executive Office (GEO) and the Group Corporate Center (GCC), which comprised of members from the holding company. The owner CEO in the case of BG firms needs to convince both the affiliate board as well as the group level decision-making body with regard to major strategic decisions. Owner CEO in a BG, therefore, will not have as much freedom as in a stand-alone company to influence international expansion decisions. Hence the decision making power of the owner CEO is much higher in a standalone firm when compared to a BG firm.

Furthermore, the personal pay-offs to owner CEOs in BG and standalone firms from risky strategic investments such as FDI are likely to be quite different (Eisenmann, 2002). While the traditional agency theory focused on the conflict of interests between shareholders and managers,

Morck and Yeung (2003) pointed out another form of agency cost that could arise due to conflict of interests between controlling shareholders and minority shareholders. In the BG governance structure, such principal-principal (P-P) agency issues are more predominant than the traditional principal-agency (P-A) problems (Morck and Yeung, 2003). The ownership stake of BG owners varies significantly across the different firms affiliated to a BG. Even though the BG owner may take up the CEO position in a particular BG firm, he/she is likely to pay more attention and take more interest in the firms in which they have a higher ownership (Bertrand, Mehta and Mullainathan, 2002). In addition, BG owner CEOs are likely to have more diversified personal investment portfolios with ownership stakes in multiple firms in a BG thereby diffusing their interest away from the focal firm. On the other hand, by definition, owner CEOs of standalone firms have all their investment and wealth concentrated in a single firm (in which they are CEOs). Hence, the upside potential or personal pay-off from strategic investments is much higher for owner CEOs in standalone firms than in BGs as more of their wealth is tied up with value creation in the focal firm (Deutsch, Keil and Laamanen, 2010). Therefore, the owner CEOs of standalone firms, when compared to owner CEOs of BG firms, are more interested in and focused on strategic decisions such as internationalization which create long-term wealth for themselves. Based on these reasons, we propose that

H3: The effect of owner CEO on internationalization of a firm would be stronger in standalone (independent firms) compared to business group affiliated firms.

METHODS

Data

Developing economies pose several challenges in terms of availability of systematic data for research (Hoskisson, Eden, Lau and Wright, 2000). *Prowess*, an electronic database from the Centre for Monitoring Indian Economy (CMIE), has been increasingly used by researchers

(Khanna and Palepu, 2000; Khanna and Rivkin, 2001; Bertrand, Mehta and Mullainathan, 2002; Chittoor et al., 2009; Gaur, Kumar and Singh, 2014) for financial data on a comprehensive set of Indian companies. As such we have used *Prowess* for financial data of our sample companies; 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., owner as CEO, age and other characteristics of the CEO) and FDI-based internationalization (e.g., international subsidiaries and their geographic spread). To overcome this data challenge, we carried out the laborious task of culling the data on additional measures manually from company annual financial reports for the period 2002-2011.

We chose the five hundred companies that are a part of the S&P BSE 500 index (as on September 2012) as our initial sample set. The index represents nearly 93% of the total market capitalization on Bombay Stock Exchange (BSE), the oldest stock exchange in India. We chose S&P BSE 500 index over a similar index of the National Stock Exchange (NSE, a stock exchange established more recently), as the number of firms listed in BSE is over three times the number of firms listed on NSE; further nearly all the NSE firms are also listed on BSE. The companies in the S&P BSE 500 Index show a good balance in terms of composition in terms of size, age, ownership, affiliation to business groups, business mix and scale of internationalization. In comparison to the population of Indian companies, our sample can be said to have a slight large-firm bias. However, given the fact that India was a highly protected economy until major reforms were ushered in 1991, a majority of the firms undertaking FDI-driven internationalization are likely to be represented in S&P BSE 500. When we add to this the fact that most of our key variables needed to be hand collected, we believe that the S&P BSE 500 firms as a starting sample is optimal and is fairly representative of the population. S&P BSE 500 index also includes listed Indian subsidiaries of

foreign multinational companies and services firms. We eliminated such subsidiaries of foreign companies as we are concerned with the international expansion of Indian firms. We further excluded firms that solely operate in services domain as the internationalization behavior and drivers of services firms have been found to be different (Capar and Kotabe, 2003). Thus we were left with a sample of 226 Indian manufacturing firms from the S&P BSE 500 index.

Next, we collected the detailed annual financial reports of the 226 firms for the past ten years (2002-2011) and culled data on the variables of our interest such as those related to CEO characteristics and to the firm's degree of internationalization. We focused on a ten year period as most of the data of our interest (ownership and outward FDI) was disclosed by Indian companies in their annual reports only since 2002. On internationalization, we collated information on the number of active foreign subsidiaries (that generated positive income for a particular year), the countries they were located in and so on. We followed a similar process to collect information regarding CEO characteristics such as CEO age, CEO international education and experience and whether CEO is a member of the owner family (Owner CEO). The data was collected by a graduate assistant and cross-checked by one of the authors.

We then collected financial data on these 226 firms from the *Prowess* database for the ten year study period. The financial data for some of the firms was not available for some years because these firms were privately owned and went public sometime during the study period. Our final sample was thus an unbalanced panel dataset with 2107 non-zero observations for sales (compared to 2260 potential observations).

Dependent Variables

Firm internationalization

Our dependent variable is internationalization of a firm. Internationalization is a multi-dimensional construct and the constituent variables representing its different dimensions could have asymmetrical antecedents and effects with respect to other organizational attributes (Ramaswamy, Kroeck, and Renforth, 1996). Researchers have used a variety of measures to assess the degree of internationalization of a firm in previous research. The most common measure for FDI based internationalization in the literature is a count of the number of foreign subsidiaries (Ramaswamy et al., 1996). Based on Sanders and Carpenter (1998), Lu and Beamish (2004) construct a more comprehensive measure for a firm's FDI activities by using data on both the number of foreign subsidiaries and the number of countries in which a firm has overseas subsidiaries. These are then converted it into an index (Lu and Beamish, 2004), which we use as a measure of internationalization in our study. To compute this index, each of the two count measures are divided by the maximum number of foreign subsidiaries and the maximum number of FDI countries respectively to convert them into ratios. We then calculate the average of the two ratios for our *FDI intensity* measure. We also conduct robustness checks using the number of foreign subsidiaries as an alternative measure for internationalization.

We collected the data for our measures by browsing through past annual financial reports of our sample firms. We collected data on the number of "active" overseas subsidiaries a firm had in each year of our study period, irrespective of entry mode. We defined an "active" subsidiary as one which had generated non-zero sales in that particular year. Second, we counted the number of countries in which these active overseas subsidiaries were present in any given year.

Independent Variables

Owner CEO. We created a dummy variable to capture whether the promoter[2] (or one of the promoters) of the firm was also its CEO. First, we collected each CEO's full name from the company's annual report. Some of the Indian companies do not use the title "CEO", but instead use the term 'Managing Director', whose role in the company is identical to that of a CEO as referred to in the West. For companies in which there is no one designated CEO, we collected the name of the Managing Director. *Owner CEO* was a dummy variable that took the value of one if the promoter of the firm was also the CEO and zero if the CEO was not a promoter (a professional). To operationalize this variable, we browsed through company annual reports and regulatory filings to SEBI (Securities Exchange Board of India, a regulatory body similar to the Securities Exchange Commission in the US) to first identify the promoter(s) of the company (which is typically a business family) and then use the information to determine whether the promoter (or any of promoters) also held the position of a CEO or managing director of the company in a given year. We could collect the data for the *owner CEO* variable for all firm-year observations with non-missing values for sales.

Next, using a similar procedure we further categorized the owner CEOs into Founder owner CEOs and Non-founder CEOs based on whether the CEOs are founding promoters or not. The Founder owner CEO assumes a value of one if the owner CEO is the founder and zero otherwise. Similarly, Non-founder owner CEO dummy assumes a value of one for owner CEOs who are not founders (but are typically second generation family members) and zero otherwise.

Performance-aspiration Gap. As described earlier, behavioral theorists posit that managerial behavior is influenced by the deviation of the actual performance from the aspiration or target. Two benchmarks have been used in the literature to set the aspiration level of performance. One

[2] According 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 through ownership

is the comparison with a firm's own historical performance and the other is a social comparison with a peer group, typically at the industry level (Cyert and March, 1963; Greve, 2003). It is very difficult to assess the appropriate social reference point (Washburn and Bromiley, 2012) and hence recent studies on performance feedback have used historical performance of the firm to set the aspiration level (Vidal and Mitchell, 2015; Ref and Shapira, 2016). In line with this, we measure the performance-aspiration gap as the difference between a firm's financial performance in a given year and its historical performance, where historical performance is calculated as the average performance for the two prior years. We used the commonly used measure of return on assets, the ratio of net profits to total assets, as our measure for financial performance.

Business group membership was operationalized as a dummy variable that takes the value of 1 if the firm is affiliated with a business group and 0 if it is not. About sixty four per cent of companies in our sample set are affiliated to business groups. For identifying group affiliation, we adopted CMIE *prowess*' classification of firms into business groups following Khanna and Palepu (2000) and Bertrand et al. (2002). CMIE uses a variety of sources to classify firms into groups and its process is based on continuous monitoring of company 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. We attempted to capture the existing heterogeneous resources and capabilities of firms using three variables related to the stock of technical, marketing and experiential capabilities respectively. Accordingly, *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. *Firm age*, the age of each firm since it was founded, in years, was used as a measure of experience. We controlled for a firm's e*xport intensity*, measured as ratio of a firm's total exports to total sales to control for a firm's export-driven internationalization and *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 *promoter share* which is the total shareholding held by the promoters in the company. Foreign institutional ownership can also influence the scale and scope of internationalization. Therefore we included a *foreign institutional holding* variable as a control. This measure denotes the total percentage share held by foreign institutional investors (FII) and foreign venture capital firms in the focal firm. We also controlled for other CEO characteristics through *CEO age, CEO international education* and *CEO international work experience dummy* variables. *CEO international education* is a dummy variable that takes the value of '1' if the CEO has received international education either at the graduate or undergraduate level and '0' otherwise. *CEO international work experience* takes the value of '1' if the CEO has prior work experience outside India and '0' otherwise. Finally, we used year dummies and industry dummies (at two-digit NIC level) to control for time and industry effects. Table 1 gives all the variables and measures used in our model.

Table 1 goes about here

MODEL SPECIFICATION AND RESULTS

We estimate our models using panel regression procedures. Panel estimation procedures allow us to control for unobserved firm level heterogeneity and thereby reduce the possibility of biased parameter estimates and spurious results (Greene, 1997). Given the lag effects of the independent

variables on internationalization, we used a one year lag for all our independent variables[3]. The equations used to test hypotheses 1 to 3 have the general form:

$$Internationalization_{i,t} = \delta OwnerCEO_{it-1} + \theta Business\ group_{i,t-1} +$$

$$\emptyset OwnerCEO_{it-1}.Performance - aspiration\ gap_{i,t-1} + \beta[Controls_{i,t-1}] + \alpha + u$$

where subscripts refer to firm i at time t, α is the firm specific unobserved effect, and u is the error term. The variable *OwnerCEO$_{it-1}$* represents whether the CEO is a part of the owner family in the test of H1a, where H1a: $\delta > 0$. *OwnerCEO$_{it-1}$* is replaced by the two variables *Founder OwnerCEO$_{it-1}$* and *Non-founder OwnerCEO$_{it-1}$* for testing H1b, where the coefficient for *Non-founder OwnerCEO$_{it-1}$* is expected to be positive and larger than the coefficient for *Founder OwnerCEO$_{it-1}$.* The business group affiliation effect is represented as $Business\ group_{i,t-1}$. The coefficient of $OwnerCEO_{it-1}.Performance - aspiration\ gap_{i,t-1}$ is checked to test H2, where H2: $\emptyset > 0$. To test H3, $Business\ group_{i,t-1}$ replaces $Performance - aspiration\ gap_{i,t-1}$ in the interaction term and the coefficient of $OwnerCEO_{it-1}.Business\ group_{i,t-1}$ is expected to be negative and statistically significant to support H3.

The managers of a firm choose whether to internationalize or not (Hitt, Bierman, Uhlenbruck, and Shimizu, 2006) and thus, from our point of view as researchers, whether we observe the degree of internationalization in our data. About fifty three per cent of the sample firms have zero FDI. Therefore to address this selection issue, we employed a two-part Heckman (1979) procedure. In the first stage, we ran a separate probit model to estimate the propensity of a firm to engage in FDI (Manning, Duan and Rogers, 1987) and calculated the inverse Mills ratio (results in Model 1 in Table 2). For this model, we operationalized internationalization as a dummy

[3] We cross-checked our results with different time lags and found the results to be consistent.

variable (that takes a value of 1 for non-zero values of internationalization; and zero otherwise) and used it as a dependent variable. In the second stage, we used the inverse Mills ratio calculated in the first stage as an additional explanatory variable and ran a panel regression including all independent variables and all control variables with *FDI intensity* as a dependent variable (Models 2 to 6 in Table 2). We estimate our models using random effects generalized least squares panel regression procedures as two of our key independent variables *OwnerCEO* and *BusinessGroup* are time invariant dummy variables, which ruled out using fixed effects models. Our inclusion of a comprehensive set of controls including time and year effects in our models allays any concerns of omitted variables.

Table 2 presents the descriptive statistics and the Pearson correlations for all the variables. The overall mean of the FDI intensity was 0.03 and the average number of foreign subsidiaries was 2.6 (5.5 among firms with non-zero internationalization). Sixty five per cent of the firms in our sample were being managed by CEOs who were also a part of the owner family (i.e., Owner CEOs). Remarkably this proportion is nearly the same for firms affiliated to business groups as well as standalone firms. This relatively large percentage highlights the importance of this variable in the context of emerging economies such as India. Out of the sixty five percent of the owner CEOs, about thirty per cent were founder owner CEOs and the rest (thirty five per cent) were second generation or non-founder owner CEOs. A quick comparison with the US context using S&P 500 firms shows that the percentage of firms (those that were part of S&P 500 index in 2002) with owner-CEOs was around eighteen per cent (Chen, Chen, Hui, 2009). About sixty four per cent of the firms were affiliated to business groups and the average firm had about seventeen per cent of its sales coming from exports. The average firm also had a foreign institutional shareholding of about eight per cent. The average firm in our sample was operational for thirty

four years, had a debt-equity ratio of 1.7, spent about 2.7 per cent of its sales on marketing and slightly less than one per cent of its sales on R&D. The average CEO was over fifty two years of age and about thirty per cent of the CEOs had attended an undergraduate or graduate level program from a foreign educational institution.

Table 2 goes about here

Model 1 in Table 3 presents the results of the first-stage equation that predicts the probability of a firm choosing to internationalize with internationalization dummy as the dependent variable. Model 1 is statistically significant (Pseudo R^2 = 0.2706; $p<0.001$). The coefficients and signs of all the explanatory variables are as expected. *Firm size* has a positive and statistically significant coefficient (β=0.101, $p<0.01$) indicating that larger firms are more likely to internationalize. Similarly firms affiliated to business groups are more likely to internationalize (β=0.370, $p<0.001$). Firms with lower *debt-equity ratio* (β=-0.193, $p<0.001$), higher *R&D intensity* (β=14.568, $p<0.001$), higher *marketing intensity* (β=3.907, $p<0.001$), and higher *export intensity* (β=1.528, $p<0.001$) too are more likely to internationalize. Similarly firms that have higher *foreign institutional holding* (β=1.821, $p<0.001$), and firms that have *owner CEOs* (β=0.136, $p<0.10$) are also more likely to pursue internationalization.

Table 3 goes about here

Model 2 in Table 3 has the results of the random effects regression with *FDI intensity* as the dependent variable, and all other variables (including year and industry dummies) as controls. We find model 2 to be statistically significant (R^2 = 0.2960, $p<0.001$) and all the control variables with expected signs. Model 3 in Table 3 has the results with *owner CEO* as the independent variable along with all the control variables. We find support for H1a (i.e. positive effect of owner CEOs on firm's internationalization) as *Owner CEO* has a positive and statistically significant

coefficient (β = 0.016, p<0.01). *Firm size* has a positive and statistically significant coefficient (β=0.004, p<0.05) indicating that larger firms were also likely to be highly internationalized. As expected, business group effect is positive and statistically significant (β=0.012, p<0.05). We also observe negative and statistically significant coefficient for *performance-aspiration gap* (β = -0.040, p<0.10) in line with prior literature (Jung and Bansal, 2009). The coefficients of *R&D intensity* (β =0.620, p<0.001), *CEO age* (β =0.034, p<0.01), and *foreign institutional holdings* (β =0.057, p<0.01) are positive and statistically significant. The coefficient for Inverse-Mills ratio is found to be negative and statistically significant (β = -0.009, p<0.001). In model 4, we replace the *owner CEO* variable with the variables *founder owner CEO* and *non-founder owner CEO* while keeping the rest of the variables same. The coefficient for *founder owner CEO* is positive and statistically significant (β =0.023, p<0.01) whereas the coefficient for *non-founder owner CEO* is positive, but much smaller and marginally significant (β =0.010, p<0.10), thus indicating that the owner CEO effect is primarily driven by founder owner CEOs and providing support for H1b.

The results for the test of H2 and H3 are reported in models 5 and 6 respectively in Table 3. In model 5, in addition to the owner CEO and performance-aspiration gap variables, we include the interaction term *Owner CEO*Performance-aspiration gap*. The overall model 5 is statistically significant (R^2 = 0.2986, p<0.001). The co-efficient of *performance-aspiration gap* variable is negative and statistically significant (β = -0.105, p<0.01) indicating that firms internationalize when their performance slips below the aspiration level as predicted by the behavioral theory (Gavetti, Greve, Levinthal and Ocasio, 2012). The interaction term *Owner CEO*Performance-aspiration gap* has a positive and statistically significant coefficient (β = 0.105, p<0.05) lending empirical support to our hypothesis H2 that firms with owner CEOs show behavior that is opposite to an average firm and do not internationalize when the performance is below aspiration, but when

it is above aspiration. In model 6, we replaced the owner CEO interaction with the performance-aspiration gap by the interaction term *Owner CEO*Business group*. Model 6 is statistically significant (R^2 = 0.3033, p<0.001). While the coefficients of *business group* and *owner CEO* remain positive and statistically significant, the coefficient of the interaction term *owner CEO*business group* is negative and statistically significant (β= -0.018, p<0.10) thus providing support for H3.

Post-hoc Analysis

To check the robustness of our findings, instead of the FDI intensity measure, we used a count measure of the number of foreign subsidiaries for the dependent variable predominantly used in the literature (Ramaswamy et al., 1996). Given the count nature of the dependent variable, we need to employ non-linear estimators such as Poisson or negative binomial regression models. Poisson models can be used if the mean and variance are nearly equal, but negative binomial models are appropriate when the data are over-dispersed (Penner-Haun and Shaver, 2005). Given the high over-dispersion in the count data of foreign subsidiaries, we use negative binomial panel regression procedures. We obtain results similar to the above in terms of the signs and statistical significance for all the key variables, which we do not report here for the sake of brevity.

Prior studies on the effects of performance feedback have employed spline specification to capture performance above and below aspirations separately (Lin, 2014; Ref and Shapira, 2016). We followed similar procedures to calculate two separate variables – performance-aspiration gap < 0 and performance-aspiration gap > 0. We replaced the performance-aspiration gap variable with the two spline variables in model 3 with FDI intensity as the dependent variable. The coefficient of the variable, performance-aspiration gap>0, was negative and statistically significant (p<0.10) whereas the coefficient of performance-aspiration gap<0 was not statistically significant. We did

not find the coefficient of the firm performance-aspiration gap<0 to be positive and statistically significant as reported in some similar studies (Lin, 2014; Ref and Shapira, 2016), though different dependent variables. Thus our results support the claim of behavioral theory that firms tend NOT to internationalize when the performance is above aspirations, but there is no evidence in our dataset that they internationalize more when the performance is below aspirations.

DISCUSSION AND CONCLUSION

Uncertainties in the political, economic, and regulatory domains, along with unfamiliarity of doing business in diverse institutional environments create a variety of additional costs of doing business abroad, which fall under the umbrella of liabilities of foreignness. Thus, firm internationalization (especially through foreign investments) is seen as exploratory search behavior that involves experimentation and risk-taking. Despite the acknowledgement in the literature that international expansion entails navigating numerous risks and managerial decision-making involves behavioral risk-taking, much of the literature has not paid attention to the micro-foundations of risk-taking behavior and has instead primarily focused on the macro- firm, industry and institutional factors in determining internationalization paths and outcomes.

Our paper contributes to the global strategy literature by incorporating the emerging insights from micro-foundations and behavioral strategy in understanding firm internationalization, especially through modes of expansion that entail greater risk-taking. By using the central idea that firm-level heterogeneity (macro-phenomena) in exploring cognitively distant opportunities (such as internationalization) may be located at the individual level (micro-phenomena) in strategic leaders who have the motivation and ability to overcome existing behavioral boundaries of the firm (Foss and Perdersen, 2014; Gavetti, 2012), we examine whether and under what conditions owner-CEOs influence their respective firms' internationalization due

to their distinct motivation and authority compared to professional CEOs. Using India as our empirical context, we test the effect of owner CEOs on firm internationalization of a panel of 226 Indian manufacturing firms over the ten-year period from 2002 to 2011. The overall findings strongly support our core thesis that owner CEOs positively influence firm internationalization, measured in outward-FDI, after controlling for export intensity, CEO characteristics and various other firm-level variables identified in previous research. We further find that this effect is stronger for founder CEOs. These findings support our theorized mechanisms that entrepreneurial owners, who are also in the driving position in firms as CEOs face lower agency conflicts and have greater legitimacy to impart the strategic leadership, entrepreneurial agility and risk-taking attitude needed for more involved internationalization modes such as FDI.

Besides finding empirical evidence for the micro-foundations viewpoint in understanding firm internationalization through the strategic agency of owner CEOs, we also probe the interactions of micro level phenomena with two important factors – one influencing CEO motivation namely performance aspiration gap and another affecting CEO authority namely a firm's governance structure. First, in line with existing research, we find that firms are more likely to engage in risk-taking through internationalization when their performance is below aspirations. However, owner CEOs moderate this effect in such a way that we find firms with owner CEOs are more likely to engage in internationalization when their firms are performing above aspirations. This is an intriguing finding that extends the behavior theory of the firm related to performance aspirations and risk-taking. The existing theory assumes that managers are boundedly rational and conserve their gains when performing well but take risky strategic decisions when firms are performing below aspirations. Our results show that these predictions of the behavioral theory need to be conditioned based on the type of individuals (managers) making this strategic decision,

thus further pointing towards the need to explicitly incorporate micro-foundations in studying strategic decisions.

Second, we probe how owner CEO effects on firm internationalization are conditioned by its governance structure. We use a unique governance structure in our sample, one which is prevalent in a large number of countries, namely a business group. This organizational form incorporates both principal-agent (shareholders/owners and a professional CEO) and principal-principal (shareholder/owners and an owner CEO) relationships. Our results show that the effect of owner CEO on firm internationalization is much stronger in the case of firms that are not part of the business groups (i.e., stand alone independent firms) than for BG affiliated firms. This result points to two possibilities: one that owner CEOs in BG firms are more constrained in taking strategic decisions, thus contributing to a nuanced understanding of strategic decision-making in BGs which has traditionally been based on resource based arguments. Two, one can interpret this result by looking at the underlying assumptions of agency theory in explaining risk-taking (see Eisenmann 2002; Deutsch, et al 2010). According to this research, agent-led companies tend to be more risk averse than owner-managed firms "because of differences in the personal pay-offs to owner CEOs and agent CEOs from sponsoring risky investments" (Eisenmann, 2002: 515). Our results show that this assumption holds only for owner CEOs of standalone firms, but not for owner CEOs belonging to business group affiliated firms. In BG affiliated firms, owner CEOs have more diversified portfolios (i.e., they have shareholding in multiple BG firms) and at the same time are constrained in their affiliate-related decision-making because of the presence of another principal at the group level. These results taken together point towards the need to a re-examination of some of the risk-taking assumptions in agency relationships by incorporating the unique organizational forms such as business groups.

Our paper also contributes to the growing stream of research on the internationalization of emerging economy firms by generating some important new theoretical ideas at the microfoundations level in the emerging economy context. The research on emerging market multinationals is fast evolving, but much of the extant work underlines how they differ in their internationalization processes when compared to traditional multinationals. We highlight a key explanatory factor behind the rapid and risky internationalization witnessed in the case of EE firms viz., the role of owner CEOs. Given the fact that a significant number of firms in emerging economies are led by owners who double up as CEOs, it opens a new stream of research on the possible consequences of such leadership. While much of the IB literature progressed on the internalization and stages theory perspectives, our study underscores the need for a more encompassing perspective of internationalization (Volberda and Lewin, 2003; Hutzschenreuter et al., 2007), one which is a joint outcome of managerial or strategic agency, path-dependencies, institutional and selection forces. Using a microfoundations approach in this context is particularly important because a number of studies on EE firm internationalization have argued that the pace and location of internationalization is motivated by learning and resource acquisitions (Luo and Tung, 2007). Thus, the underlying internationalization is more exploratory in nature as these firms try and develop indigenous capabilities to move up the value chain and compete with established multinationals in both domestic and global markets. According to the behavioral strategy view, "superior opportunities tend to be cognitively distant, and critical sources of superior performance lie in strategic leaders' superior ability to overcome the behavioral bounds that make it hard for the average firm to pursue" (Gavetti, 2012: 269). We have argued and empirically shown that owner CEOs have the potential to pursue cognitively distant course of actions entailed in high involvement albeit risky internationalization through foreign direct investment. Support for our

hypothesis that the effect of owner CEOs in independent firms is stronger than in BG affiliated firms helps augment the view proposed by microfoundation scholars that managerial agency is particularly important when organizations face resource and experiential constraints to undertake exploratory or distant search.

We highlight a few limitations of our paper, some of which also lead to future research. First, our theorization and empirical testing is based on observing the characteristics of CEOs (owner versus professional CEO). Given that the core theoretical mechanisms espoused by microfoundations and behavioral strategy scholars are predicated on understanding the bounded rationality and decision-making processes of strategic leaders, future research that can more directly observe the mental processes of owner CEOs and their ability to convince key external and internal stakeholders for exploration of distant opportunities would provide a stronger support for this emerging view. Second, there are limitations to the generalization of our findings given that our empirical setting is only India and future work should test our predictions in multiple country settings. In particular, there is an emerging literature arguing for country level institutional effects (e.g., institutional development, role of the state, etc.) that either constrain or facilitate exploratory search behavior of firms. It may be useful to examine how strategic leaders are able to resist or expedite these institutional expectations that may arise from national goals. Despite these limitations, we believe that our study provides some promising empirical evidence on the importance of using a micro-foundations approach to study international strategy and opens up a new stream of research on the consequences of owner CEO leadership.

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Table 1
Variables and Measures

Variables	Measures
Firm internationalization	(number of foreign subsidiaries/maximum number of foreign subsidiaries) + (number of countries with overseas subsidiaries/ maximum number of FDI countries) / 2 Lu and Beamish (2004)
	Alternative measure: Number of foreign subsidiaries Ramaswamy, Kroeck and Renforth (1996)
Owner CEO	Dummy measure that takes a value of '1' if the CEO is a member of the owner family and '0' otherwise.
Founder CEO	Dummy measure that takes a value of '1' if the CEO is one of the founders and '0' otherwise. Fahlenbrach (2009)
Performance aspiration gap in year '*t*'	Return on assets in year '*t*' – (return on assets in year '*t-1*') + (return of assets in year '*t-2*') --- 2
Business group affiliation	Dummy measure that takes a value of '1' if the firm is affiliated to a business group and '0' otherwise. Khanna and Palepu (2000)
Firm size	Natural logarithm of total sales
R&D intensity	Ratio of annual R&D expenses to total sales
Marketing intensity	Ratio of annual marketing expenses to total sales
Firm age	Age of firm since founding
Export intensity	Ratio of total exports to total sales
Debt-equity ratio	Ratio of total outside liabilities to equity
Promoter share	Percentage shareholding held by promoters
Foreign institutional holding	Percentage shareholding held by foreign institutional investors
CEO age	Age of the CEO in years
CEO international education	Dummy measure that takes the value of '1' if the CEO received graduate or undergraduate education outside India and '0' otherwise
CEO international experience	Dummy measure that takes the value of '1' if the CEO has prior work experience outside India and '0' otherwise
Year effects	Year dummies
Industry effects	Industry dummies at two-digit NIC level

Table 2: Means, Standard Deviations and Correlations [a]

	Variables	Mean	S.D	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Internationalization – FDI intensity	0.03	0.06																		
2	Internationalization dummy	0.47	0.50	0.44																	
3	Internationalization - No of foreign subsidiaries	2.60	7.87	0.96	0.35																
4	Owner CEO	0.65	0.48	0.04	0.10	0.02															
5	Founder owner CEO	0.30	0.46	0.07	0.07	0.05	0.47														
6	Non-founder owner CEO	0.35	0.48	-0.03	0.04	-0.03	0.54	-0.48													
7	Business group	0.64	0.48	0.14	0.13	0.13	-0.01	-0.24	0.22												
8	Performance aspiration gap	0.01	0.05	-0.10	-0.10	-0.09	-0.03	-0.03	-0.01	-0.01											
9	CEO age [b]	3.96	0.19	0.14	0.07	0.12	-0.26	0.03	-0.28	0.06	-0.03										
10	CEO international education	0.30	0.46	0.10	0.05	0.10	0.22	-0.15	0.36	0.24	-0.02	-0.07									
11	CEO international work-ex	0.08	0.26	0.05	-0.01	0.03	-0.01	0.02	-0.04	-0.03	0.01	0.10	0.24								
12	Foreign institutional holding	0.08	0.09	0.32	0.28	0.27	0.08	-0.01	0.09	0.14	-0.10	-0.01	0.14	0.02							
13	Ownership stake	0.53	0.18	-0.13	-0.14	-0.12	-0.13	-0.03	-0.10	-0.20	0.01	0.02	-0.19	-0.11	-0.33						
14	Firm size [b]	9.35	1.65	0.20	0.13	0.20	-0.31	-0.32	-0.00	0.06	-0.11	0.22	-0.02	-0.03	0.30	-0.02					
15	Firm age	34.28	22.84	0.10	0.08	0.12	-0.28	-0.37	0.08	0.17	-0.01	0.34	0.07	0.05	0.02	-0.17	0.29				
16	Debt-equity ratio	1.73	2.24	-0.10	-0.19	-0.08	-0.04	0.01	-0.05	0.01	0.05	-0.08	-0.04	0.01	-0.09	-0.03	0.01	-0.04			
17	R&D intensity	0.01	0.02	0.29	0.26	0.24	0.13	0.10	0.03	-0.02	-0.11	-0.01	0.05	0.06	0.18	-0.00	0.02	-0.05	-0.10		
18	Marketing intensity	0.03	0.08	0.14	0.18	0.10	0.03	0.03	0.01	0.12	-0.03	-0.01	0.07	-0.02	0.11	0.00	-0.14	-0.02	-0.06	0.15	
19	Exports intensity	0.17	0.22	0.12	0.23	0.09	0.23	0.28	-0.04	-0.12	-0.08	-0.07	-0.05	0.04	0.13	-0.13	0.00	-0.18	0.03	0.28	0.01

[a] Pearson correlations are significant at the 0.10 level (two-tailed test) at |.037|

[b] Natural logarithm

Table 3
Owner CEO Effects on Internationalization [a]

		Propensity to Internationalize (First stage)		Degree of Internationalization (Second stage)			
	RE Models	***Model 1 (Probit)***	***Model 2***	***Model 3***	***Model 4***	***Model 5***	***Model 6***
1	Intercept	-2.681**	-0.141**	-0.181**	-0.159**	-0.188**	-0.197***
		(1.031)	(0.060)	(0.063)	(0.064)	(0.063)	(0.064)
2	Inverse Mills ratio		-0.009***	-0.009***	-0.009***	-0.009***	-0.008***
			(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
3	Exports intensity	1.528***	0.029**	0.028*	0.026*	0.030**	0.027*
		(0.230)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
4	Marketing intensity	3.907***	0.051**	0.051**	0.051**	0.053**	0.052**
		(0.700)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)
5	R&D intensity	14.568***	0.610***	0.620***	0.625***	0.630***	0.618***
		(4.250)	(0.108)	(0.108)	(0.108)	(0.108)	(0.108)
6	Debt-equity ratio	-0.193***	-0.000	-0.000	-0.001	-0.000	-0.000
		(0.034)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
7	Firm age	0.001	0.000	0.000^{+}	0.000*	0.000^{+}	0.000^{+}
		(0.002)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
8	Firm size [b]	0.101**	0.003^{+}	0.004*	0.005*	0.005*	0.005*
		(0.041)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
9	Ownership stake	-0.720**	-0.003	-0.001	-0.001	-0.002	0.002
		(0.283)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
10	Foreign institutional holding	1.821***	0.056**	0.057**	0.057**	0.060**	0.056**
		(0.517)	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)
11	CEO international work-ex	-0.029	0.002	0.002	0.002	0.002	0.001
		(0.168)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
12	CEO international education	-0.003	0.004	-0.001	0.001	-0.001	0.000
		(0.104)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
13	CEO age [b]	0.375^{+}	0.030**	0.034**	0.027*	0.035**	0.033**
		(0.243)	(0.014)	(0.014)	(0.015)	(0.014)	(0.014)
14	Performance aspiration gap	-0.241	-0.042*	-0.040^{+}	-0.040^{+}	-0.105**	-0.041^{+}
		(0.897)	(0.026)	(0.026)	(0.026)	(0.041)	(0.026)
15	Business group	0.370***	0.012*	0.012*	0.014**	0.013*	0.026*
		(0.098)	(0.006)	(0.007)	(0.006)	(0.006)	(0.012)
16	Owner CEO	0.136^{+}		0.016**		0.016*	0.029**
		(0.107)		(0.007)		(0.007)	(0.013)
17	Founder owner CEO				0.023**		
					(0.009)		
18	Non-founder owner CEO				0.010^{+}		
					(0.008)		
19	Owner CEO x Performance aspiration gap					0.105*	
						(0.052)	
20	Owner CEO x Business group						-0.018^{+}
							(0.014)
	Year dummies	Included	Included	Included	Included	Included	Included
	Industry dummies	Included	Included	Included	Included	Included	Included
	<u>Model Indices</u>						
	Adjusted R-square	Pseudo R^2 = 0.2706	0.2960***	0.2970***	0.3097***	0.2986***	0.3033***
	Number of observations	1,368	1,318	1,318	1,318	1,318	1,318

$^{+}$p <0.10, * p <0.05, **p <0.01, *** p <0.001; All one-tailed tests.

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

[b] Natural logarithm

Figure 1
Conceptual Model