



# Does Knowledge from Home Markets Boost Outward Foreign Direct Investments of Emerging Economy Multinationals? Evidence from Indian Family EMNEs

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## Cover Page Footnote

An earlier version of this paper has been selected for the 2020 HKUST Best Paper for Global Strategy Finalist Award at the Academy of Management Annual Conference, 2020.

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## ABSTRACT

Despite increasing research on multinationals from emerging economies (EMNEs), our understanding of the antecedents of their international expansion is still limited. In this study, we seek to examine whether knowledge gained from operating in their complex and diverse domestic markets deter or aid the outward foreign direct investments of EMNEs. As family firms are dominant in emerging economies, we further explore how heterogeneity within family firms moderate this relationship. We conduct our investigations using a proprietary longitudinal dataset comprising 213 EMNEs from India featuring in the S&P Bombay Stock Exchange (BSE) 500 index covering a six-year period from 2007-08 to 2012-13, of which 175 were family EMNEs and find supporting evidence for our theoretical predictions.

## KEYWORDS

Internationalization, Diversification, Family Firm, Socioemotional Wealth, Business Groups, Emerging Economy, Knowledge Based View

## INTRODUCTION

Since the last decade, emerging market multinationals (EMNEs) have been accounting for a significant share of global outward foreign direct investments (OFDI) with family-owned enterprises constituting a vast majority of the EMNEs (Ray et al., 2018; De Massis et al., 2018; Stoian and Mohr, 2016). In 2014, OFDI from developing and transition economies accounted for approximately 40% of global FDI volume (UNCTAD, 2016). The total OFDI stock CAGR growth, in emerging economies, in the period, 2010-2018 is 10.72% (UNCTAD, 2019). Given that family businesses constitute two-thirds of all businesses worldwide, family businesses have a major role in the growth of OFDI from emerging economies (Family Firm Institute, 2017).

One of the prominent examples of foreign investments by emerging market firms is the Lenovo acquisition of IBM x86 server business in 2014-2015, for approximately \$2.1 billion (Lenovo, 2014). The Tata group, a leading family business group in India, has invested around \$20 billion in acquisitions of foreign companies and earns about three-fifths of its revenue from foreign sales (The Economist, 2011).

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The TCC group of Thailand, acquired F&N's soft drinks, dairy, and publishing businesses for \$11.2 billion (Reuters, 2013). Such widespread investments pose a conundrum to the international business and family business scholars alike. EMNEs, in general, are considered to lack critical ownership related advantages while being plagued with negative 'country of origin' effects (Ray et al., 2018; Baskaran et al., 2017; Stoian and Mohr, 2016; Narula and Kodiyat, 2016; Deng, 2013; Madhok and Keyhani, 2012). Moreover, since OFDI requires significant resource commitments and takes years to generate steady profits, it is even more challenging for typically resource-constrained family EMNEs (Hu and Cui, 2014; Bhaumik et al., 2010). Consequently, insights into the antecedents of their international expansion and its contingencies are critical for understanding the survival and future growth of family EMNEs.

Extant literature acknowledges the importance of home country context in the international venturing strategies of developed country MNEs (Iurkov and Benito, 2018; Cuervo-Cazurra and Genc, 2008; Nadkarni and Perez, 2007; Grosse and Trevino, 1996). In this study, we examine how operating in their complex and diverse domestic markets affects the OFDI investments of EMNEs and thus respond to recent calls from scholars to focus attention on home country factors as antecedents of OFDI by EMNEs. Large and diverse emerging economies like India, China, and Brazil offer widespread intra-country linguistic, cultural, institutional and political variations (Dheer et al., 2015; Gaur and Kumar, 2009) that require new products and adaptation of product lines to cater to the specific requirements of a heterogeneous customer base. Also, managing such complex activities in these diverse home markets requires significant resource commitments. Kumar (2009) demonstrated that firms that seek to simultaneously diversify along both, the domestic and international dimensions, will face resource constraints in terms of managerial attention and the abilities of the R&D, marketing and manufacturing personnel in transferring and absorbing new tacit knowledge from various markets in the short-term. Given these resource constraints, he argues that it would be more prudent for firms to seek growth along a single dimension. It is hence, important to understand whether a diversified portfolio deters or aids overseas investments.

However, there are conditions that could either amplify or attenuate the effect of product diversification on international investments (Mayer et al., 2015). Family firms constitute the majority of publicly listed firms in many emerging economies (35 to 66% of the listed companies in Southeast Asia) (AFBR, 2011), and their strategic choices are different from those of non-family firms due to their unique socioemotional wealth (SEW) considerations (Berrone et al., 2012; Gómez-Mejía et al., 2007). How family firms moderate the relationship between existing product diversification and subsequent international investments of EMNEs is a critical factor. Moreover, there is significant heterogeneity within family firms (Chua et al., 2012), leading to varied outcomes and differential response to the antecedents to OFDI investments. Compared to family-controlled firms (at least 50% of the shares belong to family members), family-influenced firms (less than 50% of the shares belong to family members) have different risk preferences because of shared financial risks but have the lesser ability in shaping the family firms' strategies (Ray et al., 2018). Hence, they will have a differential impact on product diversification-international investments relationship. Another important institutionally determined organizational form in the emerging economies is the business group (BG) structure (Gaur and Kumar, 2009; Singh and Gaur, 2009; Khanna and Rivkin, 2001). Due to the strong hold of the family on business, many business groups with varying family ownership, such as the Tata, Birla, or Adani groups, have emerged on the business landscape. We argue that the ability to utilize domestic knowledge in OFDI investments of the business group network will be different from the independent family firms.

We anchor our research in the knowledge-based view of the firm (Low and Ho, 2016; Lu et al., 2014; Habbershon and Williams, 1999; Nahapiet and Ghoshal, 1998; Grant, 1996) and examine the contingent role played by family firms' SEW considerations and the heterogeneity within. We test our prediction

using a proprietary, longitudinal panel data set of 213 EMNEs from India, of which 175 are family oriented. These EMNEs feature in the S&P Bombay Stock Exchange (BSE) 500 index. The analysis covers six-years from 2007-08 to 2012-13. We make three specific contributions to the international business and family firm internationalization literature. We partake the debate on the influence of product diversification on international diversification (Batsakis and Mohr, 2017; Mayer et al., 2015; Lu et al., 2014; Kumar, 2009). Our initial results demonstrate that knowledge from product diversification in a diverse and complex domestic market is a distinct advantage for EMNEs that enables them in their decision to invest internationally. Additionally, we show that while knowledge is important and necessary for EMNEs' international expansion, it is not a sufficient condition. We demonstrate that non-family EMNEs that have adopted product diversification strategies are more likely to internationalize through the higher commitment mode of OFDI as compared to comparable family EMNEs. We contend that SEW considerations shape family EMNEs' decisions and hence, these firms are more likely to be skeptical about adopting aggressive growth strategies.

Secondly, we provide evidence on the strategic impact of heterogeneity within family EMNEs. We find that family EMNEs with lower family control are more likely to utilize product diversification knowledge in their OFDI-based internationalization efforts. We reason that greater reliance on SEW as a reference for decision making by firms with greater family control influences the capability to apply acquired domestic knowledge in the OFDI-based internationalization contexts. Thirdly, we demonstrate that product market diversification enables the internationalization of family firms through OFDI to a greater extent when they are affiliated to family business groups. In essence, in this paper, we argue that group structure motivates affiliate firms to expand internationally through OFDI by giving the affiliates access to network-level knowledge resources, thus shaping the risk-bearing capacity of the affiliated firms. Moreover, such network advantages frame the SEW considerations of the family business groups differently from those of independent family firms, and thus, change the reference point for the decision to invest overseas. Our findings add to a more nuanced understanding of the prevailing debate on the differences in internationalization pathways within family EMNEs. Novel perspectives augment our understanding of the internationalization process of EMNEs. We, thereby, respond to the calls of Sharma and Chua (2013) and Wright et al., (2014), encouraging scholars to study the internationalization of family firms from unexplored yet interesting institutional contexts like Asia.

## **THEORY AND HYPOTHESES**

### **KNOWLEDGE-BASED VIEW OF THE FIRM AND EMNE'S OFDI EXPANSION**

The 'knowledge-based view of the firm' (KBV) considers knowledge to be the most strategically significant resource for firms to gain sustainable competitive advantage (Grant, 1996; Kogut and Zander, 1992). KBV conceptualizes MNEs as knowledge-sharing systems whose success depends on the MNEs' ability to learn, transfer, and combine knowledge more effectively than their competitors (Kogut and Zander, 1992). While researchers have argued that factors such as economic, political, cultural, and geographic distance have an impact on the FDI flows between countries (Grosse and Trevino, 1996; Ghemawat, 2001), MNEs develop and maintain organizational structures and processes to facilitate knowledge flows within the organization (Ambos and Ambos, 2009). MNEs accumulate experiential knowledge and skills from international operations. MNEs' structures and processes facilitate two-way transfers of this accumulated knowledge and skills between the headquarters and subsidiaries, thereby counterbalancing the liabilities of foreignness and newness in increasingly distant

international markets (Bartlett and Ghoshal, 1989; Kogut and Zander, 1993; Barkema, et al., 1996). Although MNEs gain knowledge from a multitude of sources, including subsidiaries and competitors, their home markets remain an important source of knowledge.

Home markets of MNEs have an influence on the international investments of MNEs. In the context of developed country MNEs, Grosse and Trevino (1996) establish the impact of several macroeconomic factors such as size and relative prosperity of the home market, pre-existing trade treaties, cultural and geographic similarity, and political risk on the extent of FDI flows between the home and the host countries. Iurkov and Benito (2018) suggest that embeddedness in home country networks leads to the development of strong location-bound firm-specific advantages, thereby reducing the international investments of MNEs. Nadkarni and Perez (2007) argue that the knowledge and learning gained in domestic markets influence the international commitments of firms from developed countries.

In the context of emerging economies, factors like the competition from local and foreign players in the home industry and shortages of strategic resources such as technology and talent may motivate domestic firms to venture abroad (Gaur et al., 2018; Luo and Tung, 2018; 2007). Luo and Tung, (2007, 2018) further argue that EMNEs use international expansion as a springboard to acquire the strategic resources they need to compete in their home markets. In other words, EMNEs invest internationally to seek new knowledge and technology to overcome the weaknesses in their R&D and knowledge base (Baskaran et al., 2017). Deng (2013) throws further light on the significance of the state in encouraging OFDI and the growth of EMNEs through policy support and ownership of enterprises. Cuervo-Cazurra and Genc (2008) posit that knowledge gained from navigating the institutional voids in their home markets becomes an advantage for EMNEs when competing with developed country MNEs in the least developed countries. Meyer and Grosse (2018) contend that home market conditions in emerging economies enable frugal innovations that help local entrepreneurs compete with developed country MNEs through locally produced “good enough” products, which are subsequently extended to overseas markets. Paul and Benito (2018) categorize home market conditions that influence international investments of EMNEs into push and pull factors – the pull factors being resources that are available abroad to fuel domestic growth, and the push factors being institutional voids which increase transaction costs of domestic operations and positive factors such as policies to facilitate OFDI and institutions that regulate OFDI. Clearly, the effect of the home market environment is complex. It hence becomes important to understand how MNEs, and especially those from emerging markets, leverage home market conditions for their international expansion.

Given the central role of knowledge acquisition, assimilation, and dissemination in explaining firm internationalization, it is quite surprising that precious little is known about the role of knowledge related activities of EMNEs in enabling them to leapfrog directly from exports to OFDI (Gaur et al., 2014). A case in point is India, with its inter-regional disparity in economic and institutional development and different levels of purchasing power. Domestic product diversification may help EMNEs from India develop the requisite expertise and knowledge by operating in a complex and diverse home market.

Product diversification in complex domestic markets encourages EMNEs' international expansion moves by developing EMNEs' coordination skills, knowledge transfer mechanisms, and vicarious learning processes. Product diversification exposes EMNEs to different competitive strategies of domestic and international competitors and enables vicarious learning (Dau, 2012). Customer feedback to these competitive strategies reinforces the vicarious learning of EMNEs (Nadkarni et al., 2011; Nadkarni and Perez, 2007). India is well known for its diversity in culture, religion, ethnicity, language, and food habits. Indian EMNEs undertaking extensive product diversification develop the

above-mentioned advantages which help them expand overseas as previous strategic decisions generate “internal momentum” impacting future strategic behavior (Child and Rodrigues, 2005; Liu and Buck, 2009). Such knowledge enables EMNEs to develop organizational capabilities about gaining legitimacy and overcoming the liabilities of ‘foreignness’.

Bharti Airtel illustrates the role of product diversification in enabling OFDI of EMNEs. Bharti Airtel is a large family-owned business group and was one of the early entrants to the telecom sector in India. Post the liberalization of the Indian economy in 1991, it acquired its first license to operate in 1992 and started providing telephony services by 1995. By 2002, Bharti Airtel was present in different sectors of the telecom business. In the period 2007-2010, Bharti Airtel launched telecom services internationally in Sri Lanka and Bangladesh and entered Africa after buying Zain Group’s Africa operations. It expanded into the retail sector in 2007 through an international joint venture and launched its direct-to-home (DTH) television service in 2008 (Bharti Airtel, 2010). Bharti Airtel developed its expertise in low-cost operations through outsourcing and technology adoption (Giesen et al., 2007). The company innovated novel business models for diverse products in India and then utilized this expertise to enter different international markets.

Knowledge developed in domestic markets is an important resource for international expansion, but, there are other factors at play. In this paper, we examine the moderating role of another significant institutional factor, the family owners’ willingness to extend capabilities in investing abroad.

#### **PRODUCT DIVERSIFICATION COST-BENEFIT ANALYSIS AND INTERNATIONAL EXPANSION OF EMNES**

Domestic markets are an important source of experimentation and learning for international expansion strategies by EMNEs. We argue that product diversification enables firms to accumulate knowledge for international expansion (Chandler, 1990) in the following multiple ways. Firstly, it helps develop capabilities that can integrate the knowledge derived from new customers, suppliers, and competitors with its existing knowledge base (Tang et al., 2019). Market intelligence from diverse markets produces a more nuanced analysis of trends, customer needs, and competitor analysis. When such assimilated knowledge is synthesized and shared across the organization, it translates into superior customer value generation.

When EMNEs expand in a foreign market similar to their own, their domestic operating experience generates invaluable market insights and helps combat the ‘liabilities of outsidership’. If the firm springboards to dissimilar foreign markets (Luo and Tung, 2007), these capabilities are still relevant and useful in identifying new customer niches, channel partners, suppliers, and competitors (Kumar et al., 2011). Moreover, in order to operate in multiple product markets, firms accumulate generic experience that develops their absorptive capacity (Cohen and Levinthal, 1990) which, further augments the capabilities developed as a result of its multi-market orientation.

Secondly, as opposed to single product firms, managing a successful entry into new product segments with varying customer demands enables EMNE managers to gain proficiency in handling larger responsibilities (Hitt et al., 1997). Lastly, the exposure gained through multi-market competitions help EMNEs to become efficient through increased productivity and innovation, acquire managerial knowledge (Child and Rodrigues, 2005) and develop competencies needed for undertaking OFDI. Due to large scale privatization and deregulation of domestic economies, MNEs of developed countries have begun operations in emerging economies. These firms are generally large with extensive ownership-specific resources and have patient financial slack to survive losses during the gestation period. By competing with the developed country MNEs, EMNEs start improving product



quality to adhere to international standards by acquiring technological knowledge and managerial skills through investments and spillovers. They also have to configure their strategies to compete with developed country MNEs based on cost advantages or superior customer knowledge. These capabilities, drawn from extensive domestic operations in a competitive market environment are therefore, fungible for international investments of such EMNEs.

Diversification along the dimensions of product and international markets, while, improving the extent of international investments by EMNEs, is also resource-intensive, leading certain scholars to argue that the resultant trade-offs could result in overstretching, which, may result in suboptimal investment decisions (Kumar et al., 2012; Kumar, 2009). However, the resource constraints on firms' activities are short-term in nature, and firms with greater prior experience of diversification develop mechanisms and processes that allow them to overcome the limitations of short-term constraints (Mayer et al., 2015). Moreover, EMNEs are adept at managing resource constraints to compete with developed country MNEs in their domestic markets through frugal innovations (Meyer and Grosse, 2018). EMNEs leverage these capabilities to manage the short-term resource constraints. We hence hypothesize:

**Hypothesis 1:** *Greater the product diversification of EMNEs, higher the OFDI investments.*

### **THE MODERATING ROLE OF FAMILIAL CONNECTION**

There is general agreement in the academic literature that management practices of family firms are significantly different from those of non-family firms due to the interconnectedness of the family and the business systems in the long run (Gómez-Mejía, et al., 2011; Berrone et al., 2012). This view has been supported by a large body of empirical evidence on some of the smallest and largest, youngest and oldest enterprises, across many countries (Fernández-Aráoz et al., 2015; Zellweger et al., 2012; Gómez-Mejía et al., 2001).

Behavioral agency theorists suggest that family owners are more risk-averse than their non-family counterparts due to the fact that a large proportion of family wealth is invested in the business (Basu et al., 2009; McConaughy et al., 2001). Extending that logic, Gómez-Mejía et al. (2007), developed a general 'SEW model' that complements the behavioral agency model to explain decision-making in family firms. According to this perspective, family owners consider their endowment of SEW, namely 'non-financial aspects of the firm that meet the family's affective needs, such as identity, ability to exercise family influence, and perpetuation of the family dynasty' (Gómez-Mejía et al., 2007, p. 106) worth protecting for emotional reasons (Berrone et al., 2012). In other words, the identity and social status of the family members are closely tied to the business and the preservation of the family's SEW 'represents a key goal in and of itself' (Gómez-Mejía et al., 2007; 2011).

For family firms, risk aversion to socio-emotional endowment takes priority over risk aversion to financial losses, or in other words, the SEW maximization approach becomes the 'real reference point' for decision making (Berrone et al., 2010; Gómez-Mejía et al., 2010; Gómez-Mejía et al., 2007; Zellweger et al., 2012). The fear of losing control and jeopardizing family reputation built up over generations and the financial and social wellbeing of future generations (James, 1999; Schulze et al., 2002) hinder family firms from pursuing risky strategic activities.

Such aversion to risk deters the willingness of family firms to extend their knowledge and capabilities developed in the domestic context to international business. Family firms in emerging economies rely on their social capital to access and screen new business opportunities (Carney, 2005). They are able to leverage institutional voids and exploit opportunities through their relational

capabilities (Hernández et al., 2018). While operating in multiple product markets, they are able to access market intelligence and synthesize it with existing information through their strong relationships with distributors, suppliers, channel partners and customers developed and nurtured over the long term (De Massis et al., 2013).

However, in order to develop complex organizational structures, processes, and routines, family firms have to formalize many of their relationships, as well as utilize the services of managers, experts, and specialists who can develop these routines, processes, and structures. Effective managerial strength is required for all crucial aspects of the business (Kumar, 2009), but the family may lack the necessary expertise to manage from within the family, the existing and new complex networks of events across geographies (Claver et al., 2009). This issue is exacerbated in diversified firms as in this case, the family would need managers not just for its existing business units, but also for the new ventures. Hence, they need to hire external managers and extend their collaborations with experts and consultants from outside the family (Pukall and Calabrò, 2014), which would result in the weakening of family control and independence, an important element of SEW (Arregle et al., 2012; Zellweger et al., 2012).

Such reluctance to cede authority and control to outsiders, imposes operational constraints on family owners in simultaneously managing a diversified product portfolio and international investments. A resultant divestment may hurt the family's credibility. Collating these arguments, we believe that the average family-owned EMNE that has undertaken substantial product diversification will be unable to exploit its knowledge to expand internationally and hence, more likely to forgo opportunities to invest overseas as compared to non-family EMNEs. Therefore, we hypothesize,

**Hypothesis 2:** *Familial characteristics negatively moderate the relationship between product diversification and OFDI investments by EMNEs.*

## **THE MODERATING ROLE OF FAMILY OWNERSHIP CONTROL**

While research has established the relevance of family business as a focus of academic interest and has highlighted the differences between family and non-family firms, it does not provide sufficient explanation for the performance variance and *diversity* in strategic choices *within* family firms. Our study extends previous research on family firms by focusing on differences among family-controlled firms and family-influenced firms to tease out how unilateral family control may impact the domestic product diversification - OFDI based internationalization relationship.

The extent of family ownership is a critical component in retaining family hegemony over the business (Le Breton-Miller et al., 2011; Chrisman et al., 2005). When family members own a relatively small share, they have limited SEW invested and a weaker desire to preserve SEW. Failure is unlikely to damage their economic status and SEW. In contrast, the higher the family ownership, greater is their financial wealth investment and this gives the family the discretionary power to decide the firm's strategic development – 'in such firms, the family is a dominant influence, thus, making strategic choices based on family-identity attributes, such as values and goals, with their associated advantages and disadvantages, is more legitimate and common' (Arregle et al., 2012; Zellweger et al., 2013). As higher international investments expose family firms to greater environmental and organizational uncertainties and a higher probability of failure, highly family-controlled EMNEs are reluctant to pursue high-risk strategies.

In contrast, family EMNEs with low family ownership have already divested a certain degree of control and are less reluctant to accept external resources from other investors. Non-family individual

and institutional shareholders have access to networks distinct from the familial owners in terms of finance and information. Moreover, non-family owners also provide countervailing views in strategic decisions that can mitigate the consequences of family owners' risk aversion or group think (Arregle et al., 2012). The resources provided by non-family owners are of critical importance as they provide optimization without increasing the operational risks. These resources help in developing organizational structures, processes, and routines that can organize and integrate complex information from diverse sources and leverage them in varied contexts. Further, non-family shareholders also transform the family-influenced firms from simple mindsets to complex domestic mindsets through their own experiential learning and information networks (Nadkarni and Perez, 2007). Such a change in mindset helps overcome the psychic distance associated with international expansion.

Hence, due to a narrower base of knowledge, reluctance to cede control, lesser access to the talent required to manage complex operations, the higher risks to business and SEW, as well as the higher volatility in cash flows, highly diversified family-controlled EMNEs are less likely to exploit the knowledge developed from operations in domestic product markets to pursue high risk, high commitment OFDI based internationalization, as compared to family-influenced EMNEs. Therefore, we argue that:

**Hypothesis 3:** *Family ownership negatively moderates the relationship between product diversification and OFDI investments by family-EMNEs.*

### **THE MODERATING ROLE OF FAMILY BUSINESS GROUP AFFILIATION**

Affiliation to family business groups (FBGs) is a key feature of many firms in emerging economies like India. Defined as 'a business entity that consists of diversified affiliate firms that are associated through multiple links, including pyramidal ownership structure, close market ties (such as inter-firm transactions), and family relations through which the firms coordinate to achieve shared objectives' (Chung, 2013: 871; La Porta et al., 1999), public shareholders are brought in to provide capital but the control rests firmly with the family in the family business groups (Morck and Yeung, 2003).

As with family firms, familial considerations and SEW as the reference for decision-making continue to hold for family business groups (Gu et al., 2019). The trade-offs that family firms unaffiliated to family business groups have to consider for strategic choices are significantly different from those of the family business group affiliates in terms of resources, knowledge, and expertise.

The network structure of family business groups provides affiliates with the advantages of preferential access to inputs and outputs of the production processes, internal capital markets, and internal labor markets (Khanna and Palepu, 2000). Affiliates can use these resources to support the activities of their foreign affiliates (Singh and Gaur, 2009; Zattoni et al., 2009; Masulis et al., 2011). Further, family business groups have additional affect-related considerations, such as nurturing the next generation and succession planning that impact their strategic decisions such as entering new markets and overcome the costs of product diversification. The entry of family business groups into new markets gives family members a larger pie that the leaders of the family business group can carve out to grant autonomy and reduce conflicts in the succession process. Moreover, it provides opportunities for the next generation to learn and expand their career prospects (Gu et al., 2019).

The diversification of family business groups provides certain key non-market benefits to the affiliates that can aid in the international expansion process. For instance, higher the diversification of the family business group, more significant is its clout in the domestic market by dint of its impact on

the economy. This clout provides the family with privileged access to information, control over valuable resources, and vital political contacts (Fisman, 2001). Diversified family business groups can use this access to privileged information and political clout to navigate the institutional voids, as well as obtain favorable treatment for setting up operations abroad (Borda et al., 2017; Deng, 2013). The family business groups also have a strong sense of group identity (Granovetter, 2005; Guillén, 2002), which promotes the sharing of best practices and suitable strategies to be pursued in foreign markets. Thus, the absorptive capacity of the group, rather than a single standalone firm, aids in the internationalization process.

Therefore, we argue that affiliated firms enjoy certain resource-level advantages that independent family firms do not, albeit both have similar loss aversion. Family business group affiliates can learn from their operations in different product markets and, where necessary, supplement that knowledge from other affiliated family firms. Such knowledge sharing across the family business group, will strengthen the domestic complexity mindset of the focal firm, unlike the independent family firms that would have to rely on external resources. Moreover, succession related issues will induce the group to adopt extensive growth strategies. Overall, the ultimate objective of family business group affiliated firms is to preserve SEW. Compared to independent family firms, family business group affiliates' access to superior network-level resources provides them with an impetus to leverage the knowledge gained from product diversification to expand internationally through OFDI. Hence, we hypothesize:

**Hypothesis 4:** *Affiliation to a family business group positively moderates the relationship between product diversification and OFDI investments by family EMNEs.*

## METHODOLOGY

### DATA

After China, India, has been home to the largest number of EMNEs (BCG, 2013). Indian EMNEs constitute an appropriate sample for our research for two important reasons. Firstly, India has undergone significant liberalization measures since the early nineties, which eased and facilitated significant investment outflows to foreign markets. Recent research on the internationalization of Indian EMNEs suggests a fundamental shift in the internationalization trajectories with more emphasis on OFDI-based internationalization as compared to pure exports, both in developed as well as developing economies (Gaur et al., 2014). The study of the antecedents of EMNEs' OFDI based internationalization has become an area of keen scholarly interest (Chittoor et al., 2015; Gubbi et al., 2015). Secondly, India has a long history of family and community-based firms (Howorth et al., 2006). The significant overlap between the family and business systems in India often shapes their strategic choices. Moreover, India's socio-economic and cultural diversity is reflected in the heterogeneity of family EMNEs and their internationalization efforts. This heterogeneity, along with the attendant variations in their strategic choices, creates a quasi-natural experimental setting to examine our research questions of interest.

We chose the five hundred companies that feature in the Bombay Stock Exchange (BSE, the oldest in India) 500 index, comparable to global S&P 500, as our initial sample set. The index represents nearly 93% of the total market capitalization of firms listed in the BSE. Moreover, as some of the largest firms in developing countries account for the OFDI investments from these countries (Dau, 2012), our selection of S&P BSE 500 firms is appropriate to test our theoretical propositions related to the OFDI based internationalization.

We found a total of 249 MNEs, both family-owned and independent ones, from 2007 to 2013. As we are concerned with the international expansion of Indian firms only, we eliminated 10 Indian subsidiaries of foreign MNEs from that list. We excluded 13 financial services industry firms to avoid complications from different applicable accounting principles and regulations for OFDI in this industry. Furthermore, we removed ten central government owned public sector enterprises. Also, three companies did not disclose complete information on their foreign operations even in their annual reports; hence these firms were dropped from the sample. Our research examined a final sample of 213 MNEs, of which 175 were family-owned, and the rest were independent firms.

We conducted a two-step data collection process to collect the information of our interest in a comprehensive manner. Data corresponding to our main dependent variables like OFDI intensity and other firm-level financial information like family shareholdings, family business group affiliation status, etc., were taken directly from *Prowess*, a database used extensively in extant studies of Indian firms (Gadepalli and Mondal, 2018; Chittoor et al., 2015; Gubbi et al., 2015; Khanna and Palepu, 2000). In the second step of data collection, to check the robustness of our results, we sifted through the annual financial reports of all companies in the sample for the period 2007-2013 to collect data about their foreign subsidiaries.

**Table 1.** Sample Distribution

<b>2-Digit NIC</b>	<b>Percentage of Observations</b>	<b>Industry</b>
10	4.62	Manufacture of food products
11	0.84	Manufacture of beverages
13	1.40	Manufacture of textiles
16	0.84	Manufacture of wood and products of wood and cork
17	0.84	Manufacture of paper and paper products
19	1.82	Manufacture of coke and refined petroleum products
20	9.93	Manufacture of chemicals and chemical products
21	12.31	Manufacture of pharmaceuticals, chemical & botanical products
22	4.90	Manufacture of rubber and plastics products
23	4.48	Manufacture of other non-metallic mineral products
24	6.85	Manufacture of basic metals
25	1.26	Manufacture of fabricated metal products
26	0.84	Manufacture of fabricated metal products
27	1.26	Manufacture of electrical equipment
28	4.90	Manufacture of machinery and equipment n.e.c
29	0.84	Manufacture of motor vehicles, trailers and semi-trailers
30	5.45	Manufacture of other transport equipment
32	0.98	Other manufacturing activities
34	2.80	Repair and installation of machinery and equipment
35	1.96	Electricity, gas, steam and air conditioning supply
41	0.14	Construction of buildings
42	3.92	Civil engineering
46	2.94	Wholesale trade, except of motor vehicles and motorcycles
47	0.56	Retail trade, except of motor vehicles and motorcycles
50	0.84	Water transport
52	0.14	Warehousing and support activities for transportation
55	2.52	Accommodation
61	2.94	Telecommunications
62	10.49	Computer programming, consultancy and related activities
63	1.40	Information service activities
64	1.26	Financial service activities
68	1.12	Real estate activities
70	0.84	Activities of head offices; management consultancy
71	0.14	Architecture and engineering activities
78	0.56	Employment activities
86	1.12	Human health activities

Table 1 provides an overview of the sample in terms of key industries and their 2-digit NIC-level (similar to SIC) industry codes. In our sample, 12 percent of the observations come from the manufacturers of pharmaceutical products, near about 11 percent from the software services, almost 10 percent from the producers of chemical and chemical products and 7 percent from the manufacturers of basic metals and the rest from other types of manufacturing and services. Almost 26 percent of our observations are from the services sector and the remaining 74 percent from the manufacturing sector.

### DEPENDENT VARIABLE

Our dependent variable is international investments of Indian EMNEs. We evaluate *OFDI intensity* as the ratio of foreign investments to total assets of the firm (Bhaumik et al., 2010; Chari, 2013). By taking foreign investments as the numerator, this measure automatically captures a more involved or higher ‘commitment’ mode of internationalization as compared to exports (Johanson and Vahlne, 1977: 27). We used alternate measures of the dependent variable to check the robustness of our analyses. We compared our results with another measure of OFDI internationalization with foreign investments as a percentage of the total capital that firms employ in their domestic and international projects. Also, although OFDI intensity captures the extent of international investments, this does not differentiate between firms with investments in joint ventures and alliances with firms that have multiple wholly owned operations abroad. As a result, OFDI intensity often fails to illustrate the extent and array of a firm’s practical operations abroad (Dau, 2012). Therefore, we used a more precise measure - namely, the number of foreign subsidiaries of the firm-to measure the scale of a firm’s multinational practical operations, as is often used by IB scholars (Lu and Beamish, 2001; Makino et al., 2004; Dau, 2012). In both cases, we observed no qualitative difference in our results, suggesting the findings are quite robust to alternate specifications.

### INDEPENDENT AND MODERATING VARIABLES

#### PRODUCT DIVERSIFICATION

We rely on the product-mix information collated by *Prowess* database to track a firm’s product diversification over time. We use the number of products offering in any particular NIC industry (equivalent to SIC in the Indian context) as the weights in Herfindahl index computation (Zahavi and Lavie, 2013). We calculate Herfindahl diversity measure using the formula (Montgomery, 1982):

$$Product\ Diversification_{i,t} = 1 - \frac{\sum_j M_{ijt}^2}{(\sum_j M_{ijt})^2}$$

Where,  $M_{ijt}$  is the proportion of active products of firm  $i$  in market segment  $j$  in year  $t$ . This expression is essentially the number of products that the firm has in a particular market segment, divided by the total number of products it has in all market segments in a given year (Nath et al., 2011). The main advantage of this measure is its ability to capture the diversity of market segments by considering the proportion of products introduced in each segment. Extant literature has used such measures of diversity in the context of many business group studies in emerging economies (e.g. Khanna and Palepu, 2000; Kumar et al., 2012), thus validating its reliability.

## FAMILY FIRM

Based on the principles conceptualized by prior research studies (Ray et al., 2018; Singla et al., 2014), we constructed the *family firm* (FF) variable through a dummy variable that took the value of one as per the following criteria: the founding family has a minimum stake of 20 percent in the firm and either of the following two criteria are met: (i) a member of the family is either on the board; and/or (ii) the Chairperson of the Board, Managing Director or the CEO of the firm.

## FAMILY-CONTROLLED FIRM

As family firms are heterogeneous in terms of family's involvement in the firm, Sirmon et al., (2008) suggest that it is useful to differentiate between *family-influenced* and *family-controlled* firms. We operationalize *family-controlled* firms through a dummy variable that takes the value of one if the family unilaterally controls the firm through majority ownership (i.e., at least 50% of the shares) and has managerial and/or board presence (Sirmon et al., 2008; Westhead and Howorth, 2007); else zero. Hence, our study compares not only family and non-family firms but also differences within family firms.

## FAMILY BUSINESS GROUP AFFILIATES

To understand the effects of family business group affiliation, the family firms were dummy coded as belonging to family business group (1, else 0) if it belonged to a business group as classified by Prowess database.

## CONTROL VARIABLES

We include numerous control variables to account for confounding effects. The extant literature has argued that larger firms have greater financial and non-financial resources that are conducive to internationalization and vice-versa (Chen et al., 2016; Tihanyi et al., 2000). We use *firm size*, measured as the natural logarithm of total sales, to control for size effects on the firm's OFDI efforts. Since older firms have a greater ability to collect information about international operations and build the infrastructure for internationalization (and vice versa), *firm age* is controlled and measured as the log of the years a firm has been in existence (Zahra, 2003). We control for *export intensity*, computed as the ratio of exports to total sales, to control for its knowledge-based influence on OFDI investments; we control for *current ratio* and *debt to equity ratio* because available financial slack has an impact on internationalization (Tihanyi et al., 2003). Since greater investments in R&D and marketing activities are associated with higher levels of international expansion (Chittoor et al., 2009; Herrmann and Datta, 2005), we control for them in our analysis. We measure *R&D intensity* by computing its annual expenses as a percentage of sales and *marketing intensity* by computing total annual marketing expenses as a percentage of sales. We also control for the level of *pro-market reforms* implemented in India because liberalization and economic reforms influence domestic firms' internationalization trajectories (Chari, 2013; Dau, 2012). We measured *pro-market reforms* with the International Monetary Fund's structural reforms index (Sahay and Goyal 2006). This index ranges from 0 to 100, with higher values representing a higher level of pro-market reforms. Dummy variables to control the potential effects of macroeconomic conditions and industry dummies (at two-digit NIC level) to control industry effects were also used. Finally, there is extensive literature arguing that firm's *prior profitability* may



influence its international expansion decisions, we hence, controlled for this by measuring *prior profitability* as the percentage of earnings before depreciation, interest, and taxes to total assets (Gómez-Mejía et al., 2010; Ray et al., 2018; Kumar et al., 2020).

## MODEL SPECIFICATION AND RESULTS

We test our hypotheses using generalized least square (GLS) models for panel data, with correction for heteroscedasticity and autocorrelation. This model is adequate for panel data, as GLS produces residuals that estimate the unit-specific serial correction of the errors associated with panel data and transforms the model into one with serially independent errors (Beck and Katz, 1995). We can also examine the time series component of the analysis and maximize the degrees of freedom (Lee et al., 2008). In all our models, the dependent variables (from 2008 to 2013) are regressed against the lagged independent and control variables (from 2007 to 2012) to ensure that the direction of causality is from product diversification to OFDI investments and not the reverse (Lee and Park, 2008). Furthermore, we check for various assumptions of data and analysis including normality of residuals, heteroscedasticity and collinearity diagnostics. All the VIF values are less than 2.5, indicating that multicollinearity is not an issue. Table 2 presents the descriptive statistics of the variables used to test the difference between family and non-family firms, and Table 3 depicts the descriptive statistics of the sample used to tease out the effect of heterogeneity of family firms.

The average firm in our sample has been operational for thirty years, with an average return on assets of over ten percent, spends about three percent of its sales on marketing and one percent on R&D, and earned twenty-nine percent of its sales through exports. This firm has ten percent of its investments overseas.

**Table 2.** Means, Standard Deviations, and Correlations: Full Sample of 975 Observations

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12
OFDI Intensity (%)	10.2664	14.3942	1.000											
Product Diversification	0.7107	0.4053	0.1076 ***	1.000										
Family Firms (yes=1, else=0)	0.7933	0.3898	-0.0644 **	0.0690 **	1.000									
Prior Profitability (%)	10.6770	9.043	-0.0566 *	-0.0161	-0.110 ***	1.000								
Current Ratio	1.2942	0.9061	0.0077	-0.1462 ***	-0.0937 **	0.2151 ***	1.000							
Debt/Equity Ratio	0.7593	1.1017	-0.0673 **	0.0688 **	0.1156 ***	-0.3649 ***	-0.1424 ***	1.000						
Marketing Intensity (%)	2.5345	4.4846	0.1680 ***	-0.0930 **	0.1638 ***	-0.073 **	0.061 *	0.0246	1.000					
R & D Intensity (%)	0.8341	1.939	0.2025 ***	-0.1598 ***	0.0795 **	0.0332	0.123 ***	-0.035	0.2317 ***	1.000				
Firm age <sup>a</sup>	3.3928	0.6552	-0.1344 ***	0.2119 ***	0.0978 **	0.0141	-0.0483	0.0360	-0.1476 ***	-0.0173	1.000			
Firm sales <sup>b</sup>	9.7827	1.5705	-0.1467 ***	0.1194 ***	-0.0063	0.0847 **	-0.1646 ***	0.0656 **	-0.3167 ***	-0.1013 **	0.2364 ***	1.000		
Export Intensity (%)	28.8272	30.1381	0.1621 ***	-0.1486 ***	-0.1330 ***	0.1516 ***	0.2492 ***	-0.093 **	-0.0448	0.2250 ***	-0.2004 ***	-0.1213 ***	1.000	
Pro-market reform	54.2791	0.3267	-0.0209	-0.0198	0.0209	-0.0620 *	0.0016	0.0364	-0.0311	0.0024	0.0289	0.0813 **	-0.0608 *	1.000

Significance level: \* p&lt;0.10, \*\*p&lt;0.01, \*\*\* p&lt;0.001 (two-tailed); a, b Natural logarithm

**Table 3.** Means, Standard Deviations, and Correlations: Sub-sample of 793 Family Firms' Observations

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13
OFDI Intensity (%)	9.8224	14.4360	1.000												
Product Diversification	0.7332	0.4006	0.0695**	1.000											
Family Firms (yes=1, else=0)	0.4351	0.4961	-0.0715**	-0.1251***	1.000										
Family Business Group Affiliates (1, else 0)	0.8103	0.3738	0.0554	-0.0468	0.1507***	1.000									
Prior Profitability (%)	10.2010	8.9709	-0.0763**	-0.0217	0.1386***	0.0465	1.000								
Current Ratio	1.2536	0.8851	0.0109	-0.1541***	0.0371	-0.0364	0.1735***	1.000							
Debt/Equity Ratio	0.8202	1.1555	-0.0614*	0.0628*	-0.0213	-0.0337	-0.3352***	-0.1232***	1.000						
Marketing Intensity (%)	2.8864	4.8338	0.1863***	-0.1226***	0.1969***	0.0803**	-0.0601*	0.0966**	0.0147	1.000					
R & D Intensity (%)	0.9080	2.0458	0.2582***	-0.1738***	0.0264	-0.0082	0.0493	0.1314***	-0.0426	0.2321***	1.000				
Firm age <sup>a</sup>	3.4235	0.6816	-0.1012**	0.2390***	-0.1844***	0.1097**	0.0129	-0.0176	0.0154	-0.1718***	0.0396	1.000			
Firm sales <sup>b</sup>	9.7779	1.4950	-0.0679*	0.1268***	-0.1494***	0.2261***	0.1031**	-0.2010***	0.0422	-0.3600***	-0.1156**	0.1446***	1.000		
Export Intensity (%)	26.9080	27.5901	0.1305***	-0.1676***	-0.1217***	-0.1480***	0.0736**	0.2285***	-0.0308	-0.0262	0.2770***	-0.1681***	-0.0770**	1.000	
Pro-market reform	54.2824	0.3262	-0.0098	-0.0191	0.0460	-0.0067	-0.0747**	0.0300	0.0329	-0.0478	-0.0088	0.0220	0.0862**	-0.0685*	1.000

Significance level: \* p<0.10, \*\*p<0.01, \*\*\* p<0.001 (two-tailed); a, b Natural logarithm

Among our samples, approximately seventy-nine percent of the firms are family owned and from among these family firms, forty-five percent are family-controlled while the rest are family-influenced firms. Also, around eighty percent of them are affiliated to family business groups and the rest are independent. We conducted Wilcoxon signed-rank tests of the difference of medians (Khanna and Palepu, 2000) for the key variables between the sample representing family business group affiliates and independent family firms. We find that the differences in the OFDI intensity, export intensity, size, age, and diversification, between family business group affiliates and independent family firms are significant at  $p < 0.001$ . These results indicate that family business group affiliates' strategic behavior is significantly different from the independent firms, despite the latter's limited representation in our sample. Overall, our sample set shows a good balance in composition in terms of size, age, ownership, exporting behavior, overseas internationalization activities, and industry diversity. The GLS regression results, related to the impact of several explanatory variables on OFDI activities, are provided in Table 4.

From among the control variables, we find that prior profitability, leverage, firm age, and firm size have a negative relationship with OFDI. The negative relationship between prior profitability and OFDI could be because profitable firms do not face the same threats that motivate firms to increase their international investments. Moreover, firms require significant investments in their domestic operations to pursue the path of profitability and to counter competition.

Firms might also be resource-constrained in making investments in domestic and international investments simultaneously, which manifests in the negative relationship between prior profitability and OFDI. Firms with high leverage are likely to see a greater outflow of interest charges, leaving them with limited funds for investments in international operations. Older and larger firms might not have the flexibility to streamline their operations to factor in additional complexities of product and international diversification. The rigidity of their processes due to which firms cannot transfer tacit knowledge as required, is likely to result in the negative relationship between age and size and OFDI. Moreover, these results conform to those in the extant literature on foreign investments by EMNEs, which suggest that smaller and younger firms are more entrepreneurial and have less organizational inertia, and are hence, more likely to undertake OFDI (Kumar et al., 2020; Ray et al., 2018; Madhok and Keyhani, 2012). We also observe that R&D intensity has a positive and significant relationship with OFDI, suggesting that firms that invest in R&D develop significant competitive advantages. Such firms can leverage their experience in new geographies and increase their OFDI investments.

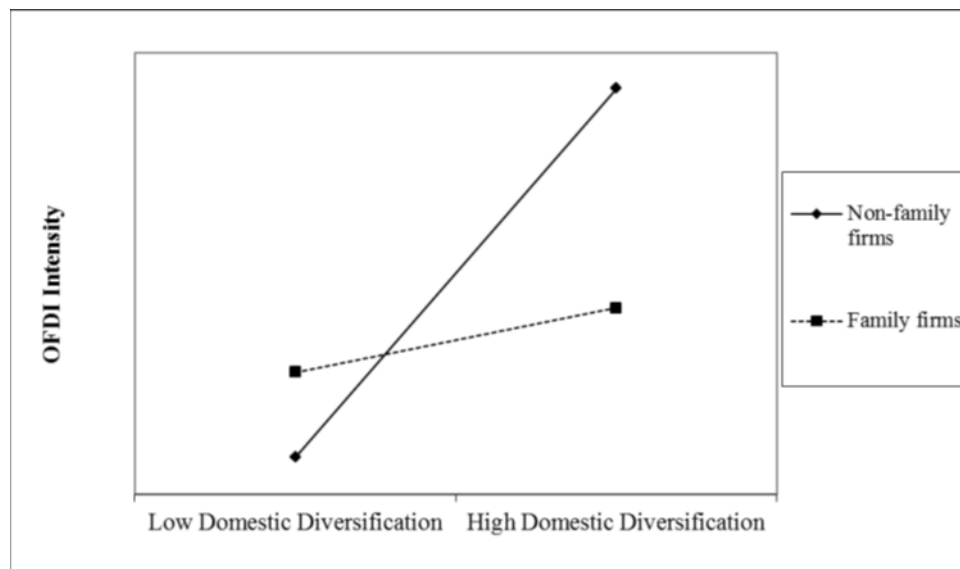
**Table 4:** Regression Analysis

	<b>Model 1</b> OFDI Intensity	<b>Model 2</b> OFDI Intensity	<b>Model 3</b> OFDI Intensity	<b>Model 4</b> OFDI Intensity	<b>Model 5</b> OFDI Intensity	<b>Model 6</b> OFDI Intensity	<b>Model 7</b> OFDI Intensity
<b>Product Diversification</b>	1.4284 ***	1.6623 ***	1.6860 ***	1.1227 ***	1.0872 ***	1.1036 ***	1.1503 ***
<b>Family Firms</b>		-0.8588 ***	-0.7691 ***				
<b>Product Diversification * Family Firms</b>			-1.2113 ***				
<b>Family-controlled firms (1, else 0)</b>				-0.5519 ***	-0.6591 ***		
<b>Product Diversification * Family-controlled firms</b>					-0.1959 *		
<b>Family Business Group Affiliates (1, else 0)</b>						0.7224 ***	0.8140 ***
<b>Product Diversification * Family Business Group Affiliates</b>							0.2633 **
<b>Prior Profitability (%)</b>	-0.0845 ***	-0.0920 ***	-0.0937 ***	-0.1151 ***	-0.1196 ***	-0.1262 ***	-0.1230 ***
<b>Current Ratio</b>	-0.0235	-0.0797	-0.0572	0.1721	0.1207	0.1679	0.1767 **
<b>Debt/Equity Ratio</b>	-0.4555 ***	-0.4995 ***	-0.4335 **	-0.5605 ***	-0.6067 ***	-0.5646 ***	-0.5544 **
<b>Marketing Intensity (%)</b>	0.1183 **	0.1582 ***	0.0872 *	0.1071 **	0.0981 **	0.0086	0.0117
<b>R&amp;D Intensity (%)</b>	1.7727 ***	1.7741 ***	1.7615 ***	1.8455 ***	1.8424 ***	1.9451 ***	1.9911 ***
<b>Firm age</b>	-1.4850 ***	-1.4992 ***	-1.2031 ***	-1.4950 ***	-1.5001 ***	-1.5933 ***	-1.5700 ***
<b>Log sales</b>	-0.6838 ***	-0.7946 ***	-0.8224 ***	-0.2637 **	-0.2658 **	-0.4771 ***	-0.5128 ***
<b>Export Intensity (%)</b>	0.0376 ***	0.0445 ***	0.0430 ***	0.0483 ***	0.0479 ***	0.0570 ***	0.0550 ***
<b>Pro-market reform</b>	0.2521	0.3069	0.4157	0.4702 *	0.4859 *	0.2279	0.2821
<b>Year dummies</b>	Included	Included	Included	Included	Included	Included	Included
<b>Industry dummies</b>	Included	Included	Included	Included	Included	Included	Included
<b>Wald Chi-square</b>	2354.87 ***	2748.66 ***	2133.55 ***	2594.71 ***	2481.93 ***	2779.12 ***	2798.49 ***
<b>No. of observations</b>	975	975	975	793	793	793	793

Significance level: \* p&lt;0.10, \*\* p&lt;0.01, \*\*\* p&lt;0.001 (two-tailed)

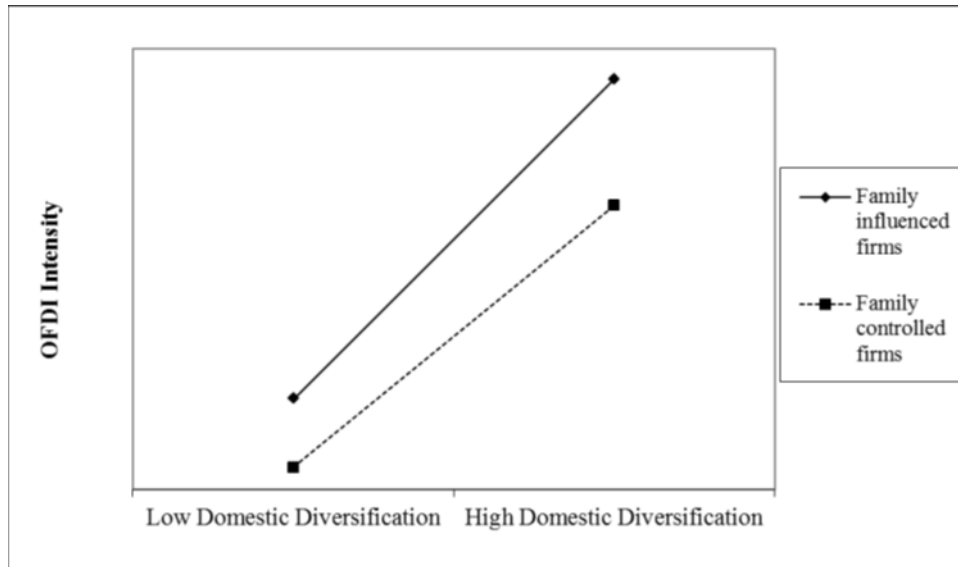
We find a positive and significant relationship between product diversification and OFDI intensity of Indian EMNEs as tested in Model 1 ( $\beta = 1.4284$ ;  $p < 0.001$ ). These results corroborate extant research of Lu et al., (2014) that prior domestic diversification experience helps firms in their higher commitment mode of internationalization through investing overseas, thereby supporting Hypothesis 1.

Hypothesis 2 suggests a negative moderating effect of family firms on the otherwise positive impact of product diversification on overseas investments. The interaction effects between family firms and product diversification are evident in Model 3. We centered the explanatory variables by their means (Aiken and West, 1991). We find the interaction term to be negative and significant ( $\beta = -1.2113$ ;  $p < 0.001$ ); indicating that the effect of product diversification on international investments will be lower for family firms, than in non-family ones. Thus, our results support the arguments of Hypothesis 2. To provide further insights into the moderating effect, we create two plots that compare the interaction effects of family firms and product diversification and that of non-family firms and product diversification on international investments. The line trend in Figure 1 indicates that the positive effect of product diversification on international investments is stronger for non-family firms than for family firms, supporting the arguments of Hypothesis 2.



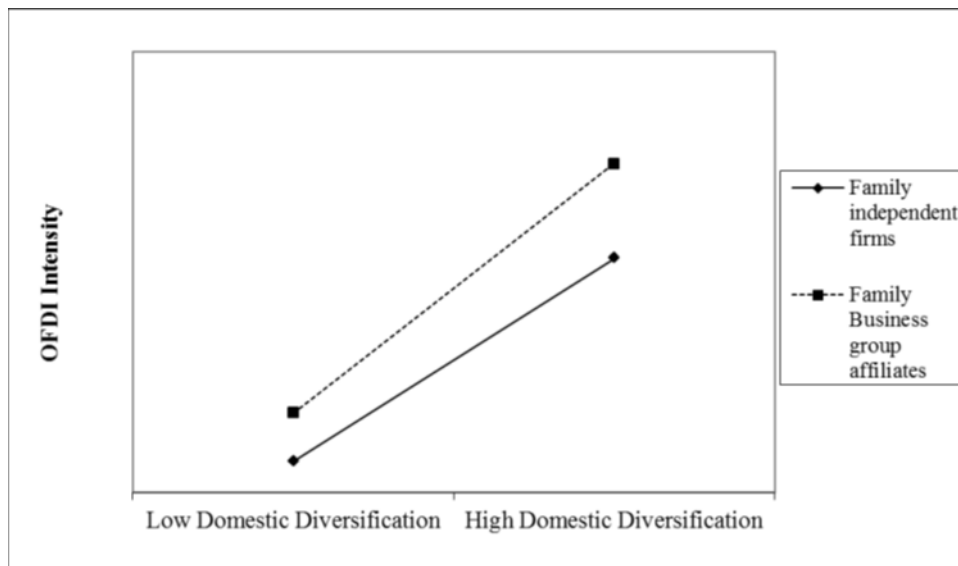
**Figure 1.** Moderation effect of family ownership on the relationship between domestic diversification and OFDI

Similarly, Hypothesis 3 suggests a negative moderating effect of family-controlled firms on the otherwise positive impact of product diversification on overseas investments. The coefficient of the interaction term is negative and significant ( $\beta = -0.1959$ ;  $p < 0.10$ ); indicating that the effect of product diversification on international investments will be lower for family-controlled firms than family-influenced ones. From the graph in Figure 2, we can see that the upward trend of product diversification on OFDI intensity of family firms is lesser for family-controlled firms by virtue of their higher levels of family ownership as compared to those with low levels of family ownership.



**Figure 2.** Moderation effect of degree of family control on the relationship between domestic diversification and OFDI

Hypothesis 4 suggests that a positive product diversification - OFDI based internationalization relationship becomes stronger when family firms are affiliated to a family business group. We test this by introducing the interaction term between family business group affiliates and product diversification. The association of the interaction term with OFDI intensity in Model 7 is positive and statistically significant ( $\beta = 0.2633$ ;  $p < 0.01$ ). In Figure 3, the line trend indicates that the positive effect of product diversification and OFDI based internationalization is greater for family business group affiliates than independent family firms, thereby supporting Hypothesis 4.



**Figure 3.** Moderation effect of family business group affiliation on the relationship between domestic diversification and OFDI

## DISCUSSION

Although the rapid emergence of EMNEs and their increasing shift from exports to OFDI activities has attracted business media attention, scholarly research of their antecedents has only recently evolved (Chittoor et al., 2015; Gubbi et al., 2015). In this study, we examine how operating in their complex and diverse domestic markets can be a vital knowledge resource and capability builder for subsequent OFDI investments. Furthermore, though family firms constitute the majority of publicly listed firms in many emerging economies (anywhere between 35% and 66% of listed companies throughout Southeast Asia) (AFBR, 2011), research on such aggressive internationalization of family EMNEs is scant and often limited to exporting activities of small and medium enterprises (De Massis et al., 2018; Pukall and Calabro, 2014; Kontinen and Ojala, 2010). Thus, our study extends the literature on the internationalization of family firms by investigating how the differences between family firms and non-family firms, and the heterogeneity within family firms differently moderate the domestic product diversification and OFDI investments relationship.

First, we demonstrate that EMNEs that have developed the capability to integrate market intelligence and comprehensive knowledge from its channel partners, suppliers, and customers across its various product offerings in the domestic market are more likely to be on aggressive OFDI based internationalization trajectories. Large and diverse countries such as India house heterogeneous populations not just across various regions, but even within cities and regions, and therefore, firms have to offer multiple products to satisfy these diverse customer segments. When firms operate in multiple product markets, they create structures to integrate and improve the efficiency of information and knowledge flows within the organization, and these organization-specific integrative capabilities are important for the development of productive capabilities (Low and Ho, 2016). Since EMNEs are 'latecomers' as compared to MNEs from developed countries, the knowledge gained through extensive domestic operations in complex and dynamic emerging economies is likely to overcome some of the disadvantages of inexperience in international operations, leading to greater OFDI undertaken by them. It is also a firm-specific advantage because this knowledge is internal and there is causal ambiguity because of which it cannot be easily imitated by other firms (Rugman and Sukpanich, 2006).

Our results corroborate the extant literature on the importance of prior learning from domestic markets in enabling internationalization (Batsakis and Mohr, 2017; Mayer et al., 2015, Lu et al., 2014), and extends these studies to elucidate the importance of product-market diversification on the international investments of Indian EMNEs. The results from our study suggest that EMNEs that had undertaken extensive product diversification are more adept at investing abroad. By studying exports, a low commitment mode, as a mode of internalization, prior studies have examined industrial diversification over product diversification (Lu et al., 2014). Hence, the research does not factor in the complexities and risks of operations in a foreign country. Moreover, Mayer et al., (2015) and Kumar (2009) examine the impact of the short-term resource constraints on growth strategies. OFDI, however, is not a short-term growth strategy of the EMNE. It requires a significant commitment of resources, managerial effort, and attention, and is difficult to reverse. Through this study, we also detail the unique ownership advantages that EMNEs from large and diverse countries such as India possess, supporting the arguments of Ramamurti (2012) and Peng (2012).

Second, based on our findings, we demonstrate that though knowledge is an important and necessary condition, its usage is contingent on many factors. We argue and provide evidence for family ownership as an important complementary condition that affects firms' ability to deploy their domestic experience in their international operations. By using SEW preservation as the frame of



reference for strategic decisions, family firm owners and managers do not link the various strategic concepts derived from the complexity of knowledge to which they are exposed (Nadkarni and Perez, 2007). Top managers' mindset influences strategic decision-making through scanning, diagnosis, and choice of alternatives (Weick, 1995). Even if family firm owners and managers scan the environment thoroughly and diagnose the challenges they are likely to face, SEW considerations restrict the choice of alternatives. They are unlikely to consider options that would require the family to cede control either in the form of ownership, or management in order to obtain additional resources (Gomez-Mejia et al., 2010). Hence, the family firms deploy a simple mindset, which reduces their ability to leverage knowledge structures from domestic to international markets.

However, heterogeneity in family firm ownership leads to variations in their capabilities to exploit knowledge (Chua et al., 2012; Fang et al., 2018; Williams et al., 2018). In family-influenced firms, the family has already ceded ownership to external parties in exchange for resources and expertise (Arregle et al., 2012), therefore, preservation of SEW is no longer the primary objective. Moreover, the resources and expertise of non-family owners supplement the knowledge base of the family firm (Ray et al., 2018). This augmented knowledge base and resources enhance the scanning and diagnostic abilities of the decision-makers. Access to resources and decrease in priority accorded to SEW considerations increases the choice of alternatives. Hence, decreasing family ownership concentration augments the ability of the family firm to exploit the knowledge to expand internationally through OFDI. We thus, extend the extant literature that has demonstrated generation differences in family firms (Fang et al., 2018), TMT characteristics (Lu et al., 2014) and international experience (Mayer et al. 2015; Kumar et al, 2012) as important complements to the ability of EMNEs to leverage their knowledge-based resources.

Third, we contribute to the literature on heterogeneity in family firms (Chua et al., 2012; Williams et al., 2018) by examining affiliation to family business groups as another source of variation in their strategic decisions. Although Purkayastha et al., (2018), and Purkayastha et al., (2017) examine the role of family ownership in business groups, their focus is on evaluating business group heterogeneity. In this paper, we extend the literature that examines the differences between the strategic decisions of family firms affiliated to a family business group and independent family firms (Choi et al., 2015) in the context of international expansion through OFDI. There is extensive literature that has documented the role of internal capital and labor markets and the support extended to affiliate firms from other firms in the business group network that impacts the firm's strategic decisions (Kumar et al., 2020; Purkayastha et al., 2018; Chittoor et al., 2009). Family firms that are part of the business group structure do not have to rely on external sources for resources, knowledge, or expertise, extensively. The shared ownership and the need to provide growth opportunities for family members motivate knowledge sharing as well as access to funding that can promote international expansion through OFDI (Gu et al., 2019; Ayyagari et al., 2015). These additional resources attenuate the risk aversion and considerations of the preservation of SEW. They also help the firm in overcoming constraints imposed by the simultaneous growth in product and international diversification. Thus, the complexity of the mindset of managers of family business group affiliates increases and amplifies the firm's ability to exploit its product diversification knowledge to expand internationally through OFDI.

## **LIMITATIONS**

While we make many contributions to literature, our study has limitations that allow for future research. Given that we have investigated only large firms of Indian origin, we advocate more research on similar lines with diverse samples that include SMEs from developed as well as emerging economies. We use measures of the family business in consonance with extant literature (Singla et al., 2014). Yet, finer grained measures of family ownership that reflect the heterogeneity of family businesses could also result in a more nuanced understanding of family-governed multinationals. We also use proxies for integrative capabilities, the complexity of domestic mindset, and SEW. Subsequent studies could measure these constructs and test the mechanism directly. We also call for greater cross-fertilization of research ideas among two streams of scholars, one focusing on EMNEs and the other on internationalization of family firms.

## **CONCLUSION**

We use a novel dataset of the large Indian family and non-family EMNEs and investigate their international expansion decisions to generate unique conceptual and empirical insights. More specifically, we investigate whether knowledge gained from home country markets abets or hinders EMNEs' international expansion through OFDI. We also examine the contingent effect of family ownership and the heterogeneity within family firms on this relationship between knowledge gained from home markets and decisions to expand internationally. We found that product-market diversification aids firms in internationalization through OFDI. We demonstrated that family firms and family firms with concentrated ownership constrain the application of knowledge gained from domestic markets to expand internationally through OFDI. However, resources gained by being a part of family business groups enhance this relationship. Future studies could extend our investigation by focusing on other aspects of family firm heterogeneity, and additional sources of advantages of operating in prominent EMNEs like those in India.

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