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The Rise of Indian Multinationals: Perspectives on Indian Outward Foreign Direct Investment



Edited by Karl P. Sauvant and Jaya Prakash Pradhan, with Ayesha Chatterjee and Brian Harley (New York: Palgrave Macmillan, 2010).

Hitherto inward-looking, Indian firms have evolved into global players over the past decade. The effects of their expanding overseas greenfield investments and acquisitions are being felt across all regions and sectors of the global market, from knowledge-based industries such as information technology, pharmaceuticals, chemicals, and automobiles to the oil and natural gas industries. Yet little is known about these emerging multinationals, their characteristics and competitive strategies, or the implications of their emergence for host countries, both developed and developing.

The studies in this volume provide new perspectives on the rise of Indian multinationals, capturing the evolutionary dimensions of their emergence and presenting analyses of their outward foreign direct investments. The Vale Columbia Center on Sustainable International Investment and the Institute for Studies in Industrial Development have brought together leading experts to shed light on this major development. The contributors provide current perspectives from different countries and disciplines such as economics, political science, management, and policy practice to illuminate the characteristics and strategies of emerging Indian multinationals and their impact on world markets.

Edited by

Karl P. Sauvant and Jaya Prakash Pradhan,

with

Ayesha Chatterjee and Brian Harley

(New York: Palgrave Macmillan, 2010)













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To Howard V. Perlmutter, who sparked my interest in foreign direct investment and multinational enterprises

-Karl P. Sauvant

To my dear teacher, Swami Somabeshji; to my parents, Rama Chandra Pradhan and Tapaswini Pradhan; to Sradhalaxmi Sahoo, my wife; and to my daughter: Gargi Pradhan

—Jaya Prakash Pradhan

To Kaushik and Sumita Chatterjee, for inspiring me to reach higher

—Ayesha Chatterjee

To Matthew and Pauline Harley

-Brian Harley





Vale Columbia Center on Sustainable International Investment—The Vale Columbia Center on Sustainable International Investment (VCC) seeks to be a leader on issues related to foreign direct investment (FDI) in the global economy, paying special attention to the sustainability dimension of this investment. It focuses on the analysis and teaching of the implications of FDI for public policy and international investment law. Its objectives are to analyze important topical policy-oriented issues related to FDI, develop and disseminate practical approaches and solutions, and provide students with a challenging learning environment. For more information, please see http://www.vcc.columbia.edu.

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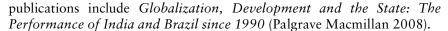
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Foreword

Ravi Ramamurti

The surge in outward foreign direct investment (FDI) by Indian firms in the past ten to fifteen years raises a host of interesting questions. This edited volume by Karl P. Sauvant and Jaya Prakash Pradhan takes us several steps closer to finding answers to those intriguing questions. It will be a valuable resource for all scholars interested in India's emerging multinational enterprises.

One such question is why a poor country like India is the source of outward FDI. According to standard economic theory, poor countries are supposed to be capital short and, therefore, importers of capital. According to international business theory, outward FDI is supposed to rise only after per capita income exceeds \$5,000 or \$10,000, whereas India's was only \$1,000 in 2008. India is one of the few low-income countries that appear in the top-ten list of outward investors in the developing world. As Pradhan and Sauvant note in their introduction, India ranked eighth in outward FDI in 2000–2007 among Asia's emerging economies. With the exception of China, all other outward investing countries in Asia have significantly higher per capita incomes than India: Hong Kong (Special Administrative Region of China), the Republic of Korea, Malaysia, the Philippines, Singapore, and Taiwan, Province of China. So what accounts for the premature and surprisingly high outward FDI of Indian (and Chinese) firms?

The answer to this puzzle, it would appear, is that being a large and diverse country, India has pockets—regions and industries—in which its firms are quite sophisticated, in terms of technology, operations, and management. In what they do, these firms are capable of competing with the best in the world, be it software services or engineered goods. The contrast in economic development between parts of Bihar, on the one hand, and parts of Maharashtra or Tamil Nadu, on the other hand, is striking. In other words, the level of economic development and per capita income in India's more developed parts are comparable to those of middle-income developing countries that are major outward investors. If Mumbai or Bengaluru were city-states like Singapore, their per capita incomes would be several times India's average. Viewed this way, the puzzle we began with is readily









resolved. The lesson one takes away is that large developing countries like India are properly viewed as collections of highly developed and highly underdeveloped parts, and it should be no surprise if the former regions spawn global firms. With this correction, India does not present a challenge to conventional theory.

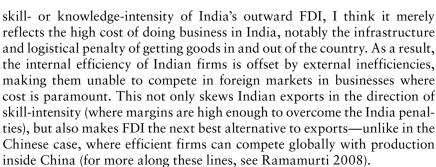
But there is a deeper puzzle in the Indian case, which is why total outward FDI by India is almost as large as total inward FDI into India. It is not just that some firms are net overseas investors, but that India as a whole is close to being a net outward investor. In this regard, India is significantly different even from China, which received about \$500 billion in inward FDI before its firms began to make outward investments. Even as late as 2007, China's inward FDI was five times its outward FDI, whereas in India's case, both inward FDI and outward FDI began to surge at about the same time—around 2005; in 2007, the two flows may have been nearly equal, if measured by deal value (official statistics define FDI inflows and outflows somewhat narrowly, but total deal value looks at the size of cross-border investments, regardless of how they are financed).

In the recent past, this has also been true of the other BRIC countries, but the puzzle in India's case is more intriguing for two reasons. In China, state-owned enterprises have been at the forefront of outward FDI; given China's exchange rate policy and the resulting foreign exchange reserves, it is easier to understand why the country's state-owned firms may be on a shopping spree abroad. In the case of Russia and Brazil, a large part of the outward FDI is in the natural resource sector, consisting of either downstream integration (Russia) or upstream integration (China). Indian outward FDI is neither state-led nor predominantly in natural resource industries, but rather in knowledge-intensive industries, as Pradhan and Sauvant note in their introductory chapter. How is one to explain the volume and industry composition of Indian outward FDI?

I suspect the answer has two parts, one of which has to do with the capabilities of India's private sector, while the other stems from weaknesses in the Indian business environment, as we have argued in an earlier work (Ramamurti and Singh 2009). On the positive side, India's outward FDI is led by highly entrepreneurial private firms that have capabilities in design, production, branding, and distribution, and are innovative at providing products and services of "good enough" quality at ultra-low prices (Govindarajan and Ramamurti 2010). These capabilities transfer well to foreign markets, including other emerging markets. It is often noted that India's economic reforms lagged China's by more than a decade; but what is often overlooked is that India's private sector is a decade or two ahead of China's. I am inclined to agree with Yasheng Huang's view that China's large inward FDI flows reflect the weaknesses of its private sector, while India's low inward FDI flows (until very recently) reflect the strengths of its private sector (2003). It is for this reason that Indian firms are showing more dynamism internationally than Chinese firms do. As for the higher







A final puzzle in the Indian case is why so much of the outward FDI is directed at rich countries. As Pradhan and Sauvant note in their introduction, during 1961-1989, 82% of Indian outward FDI went to other developing countries; but in 1990-2007, almost 62% went to developed countries. Why is a poor country like India investing such a large proportion of its outward FDI in rich countries? Several answers have been provided for this puzzle, including the view that Indian firms are seeking Western technology and brands in areas in which they are weak. But one does not see the same concentration on rich host countries in Chinese outward FDI. I think this again reflects the greater willingness of Indian private firms to venture into advanced countries in search of ideas, technologies, and markets. Not being state-owned is a double advantage for Indian firms compared to Chinese firms, because it allows them to move more boldly and swiftly (Vernon 1979), and it raises fewer red flags among Western policy makers and the public than when state-owned firms from a Communist country are the acquirers.

I hope the above discussion illustrates the many intriguing issues raised by the Indian case for scholars interested in how and why firms internationalize. The analysis assembled so ably in this volume by Sauvant and Pradhan, and grounded so well in evidence rather than conjecture, sheds light on several such puzzling questions. It will surely provoke many more fruitful studies of Indian multinational enterprises, including comparative studies with similar firms from other major emerging markets.

Apr. 6, 2010

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Foreword

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Acknowledgments

The geography of global outward foreign direct investment is changing as firms from such emerging markets as India, China, Russia, and Brazil are increasingly venturing abroad. Indian multinational enterprises contribute to the growing importance of emerging markets' outward foreign direct investment. Many Indian firms, which were hitherto national players, have become international players in recent years by increasingly investing abroad.

The present volume is intended to provide new perspectives on the rise of Indian multinational enterprises. The *Vale Columbia Center* on Sustainable International Investment and the Institute for Studies in Industrial Development, both having considerable expertise and research interests in the areas of foreign direct investment and public policy, have drawn together leading experts working on issues related to Indian foreign direct investment to shed light on this development.

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Introduction: The Rise of Indian Multinational Enterprises: Revisiting Key Issues

Jaya Prakash Pradhan and Karl P. Sauvant*

Introduction

The internationalization of firms from emerging markets by means of foreign direct investment (FDI) has undergone a rapid transformation in recent years. Starting from humble beginnings around the 1960s, a number of emerging markets¹ have become leading outward investors during the first decade of the twenty-first century. Average outward FDI (OFDI) flows from these new sources of direct investment have grown from just US\$348 million in the 1970s to over US\$170 billion in the first decade of the twentyfirst century; in 2008, OFDI flows from emerging markets reached US\$350 billion (United Nations Conference on Trade and Development 2009). The OFDI growth rates of emerging markets are not just high (although starting from a low base); they have even outpaced the OFDI growth rates of developed countries in each consecutive decade since the 1980s. Emerging markets recorded a 57% growth rate of OFDI flows in the period 2000-2008, which is about double the OFDI growth rate of developed countries, as set out in Table 1.1.2 This constitutes a sharp increase in the growth gap of OFDI between emerging markets and developed countries beginning in the 1990s, when the growth rate of emerging markets was merely 1.2 times the growth rate of developed countries, compared to two times the growth rate during the 2000s.

This expansion of OFDI from emerging markets is driven by the rise of firms from Asian developing economies. During the 1970s, when FDI outflows from emerging markets were modest, Latin American³ and African⁴ firms were ahead of their Asian counterparts in terms of average OFDI values and their percentage share of total outflows from emerging markets (Table 1.1). The subsequent decades saw a substantial rise in OFDI by Asian







Table 1.1 Average OFDI flows from selected emerging markets (1970-2008), in US\$ millions and percents

Region and Economy	Average OFDI flows ^a					Compound growth rate ^b	
	1970/79	1980/89	1990/99	2000/08	1990/99	9 2000/08	
Emerging economies	348 (100)	5,912 (100)	45,904 (100)	170,325 (100)	58	57	
Africa	120 (34.4)	493 (8.3)	1,952 (4.3)	3,497 (2.1)	32	137	
Latin America	143 (41.2)	1,112 (18.8)	9,878 (21.5)	40,224 (23.6)	127	25	
Asia	84 (24.2)	4,305 (72.8)	32,891 (71.7)		49	61	
CIS and South- east Europe	N/A	N/A	1,452 (2.5)	20,381 (12.0)	38	151	
Oceania	1 (0.2)	3 (0.1)	21 (0.0)	45 (0.0)	53	69	
Selected emergin	g economies						
Argentina	-9 (-2.0)	-6 (-0.1)	1,377 (3.0)	943 (0.6)	168	57	
Brazil	86 (24.9)	224 (3.8)	925 (2.0)	7,867 (4.6)	51	123	
Chile	2 (0.6)	13 (0.2)	926 (2.0)	2,659 (1.6)	201	39	
China	N/A	453 (6.1)	2,323 (5.1)	14,079 (8.3)	15	165	
Egypt	3 (0.9)	12 (0.2)	45 (0.1)	344 (0.2)	34	232	
Hong Kong, China SAR	N/A	1173 (19.8)	16,497 (35.9)	36,954 (21.7)	70	39	
India	N/A	4 (0.1)	70 (0.2)	6,659 (3.9)	144	176	
Korea, Republic of	11 (2.8)	398 (6.7)	2,911 (6.3)	6,551 (3.8)	55	58	
Malaysia	N/A	237 (4.0)	1,503 (3.3)	4,648 (2.7)	108	133	
Mexico	0 (0.1)	82 (1.4)	614 (1.3)	3,613 (2.1)	49	46	
Philippines	1 (0.0)	38 (0.6)	154 (0.3)	555 (0.3)	45	65	
Russian Federation	N/A	0 (0.0)	1,382 (2.4)	18,553 (10.9)	36	151	
Singapore	53 (15.1)	215 (3.6)	4,641 (10.1)	11,068 (6.5)	68	32	
South Africa	71 (20.3)	221 (3.7)	1,296 (2.8)	559 (0.3)	121	152	
Taiwan Province of China	3 (0.7)	1,215 (20.5)	3,484 (7.6)	7,191 (4.2)	13	20	
United Arab Emirates	N/A	7 (0.1)	144 (0.3)	5,476 (3.2)	138	281	
World	28,276	93,018	417,630	1,141,025	48	32	
Developed economies	27,928	87,106	371,727	970,701	47	28	
As a percent of global OFDI	98.8	93.6	89.0	84.8	_	_	

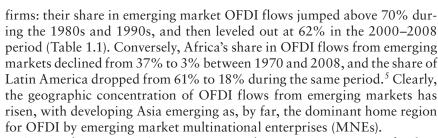
Source: Based on the United Nations Conference on Trade and Development's online database, available at http://stats.unctad.org/fdi/.





^aPercentage shares are in parentheses.

^bThe growth rate is the annual compound growth rate obtained from a semi-log regression model. ^cThe classification of countries as "developing" and "CIS and South-East Europe" is as per (United Nations Conference on Trade and Development 2009).



Among the emerging Asian economies, the overseas expansion of Indian firms has been quite noticeable. Although firms from China, Hong Kong (Special Administrative Region of China), the Republic of Korea, Malaysia, the Philippines, Singapore, and Taiwan, Province of China, continue to lead in terms of OFDI flows from emerging Asia, the growth of OFDI from India has been the third highest after the United Arab Emirates and Egypt during 2000–2008 (Table 1.1). In terms of the absolute annual value of outflows, India ranked among the top ten outward-investing Asian emerging economies during 2000–2008, and was the seventh-largest outward-investing Asian emerging economy in 2008. In terms of OFDI stock, India, with US\$62 billion of accumulated investment at the end of 2008,⁶ was the tenth-largest outward-investing economy among all emerging markets, as shown in Figure 1.1. Despite having a much smaller OFDI stock, India outperformed China in OFDI intensity (defined as OFDI stock normalized by the size of the home country economy) in 2008.

This growth in the volume of OFDI flows has been accompanied by a rapid increase in the number of Indian firms undertaking OFDI. Between 1991 and 2003, the growth rate in the number of outward-investing firms in India was 809%—higher than the corresponding growth in countries like China (805%), the Republic of Korea (611%), Brazil (116%), and Hong Kong (90%) over comparable periods (United Nations Conference on Trade and Development 2006: 122, Table III.13). Recently, a number of Indian firms were catapulted into listings of top global firms as a result of their large-scale overseas acquisitions. In the history of the overseas expansion of Indian MNEs, the current volume of OFDI and the number of firms undertaking OFDI are entirely unprecedented.

The new global presence of Indian firms has justifiably emerged as the subject matter of a growing international literature (Ramamurti and Singh 2009; Pedersen 2008; Taylor 2008; Jonsson 2008; Tiwari and Mani 2008; Pradhan 2004, 2008a, 2008b; Hansen 2007; Palit 2007; Pradhan and Abraham 2005; Sauvant 2005; Sauvant et. al. 2008, 2010; United Nations Conference on Trade and Development 2004, 2005, 2006). This research has addressed a number of issues covering the changes in industrial, regional and ownership characteristics of Indian overseas investment over time, the motivations of Indian firms for investing abroad, the nature of their sources of competitiveness for outward investment, and the influence of the home country policy regime. While these issues are considered in the literature, our understanding of them is still incomplete and evolving.





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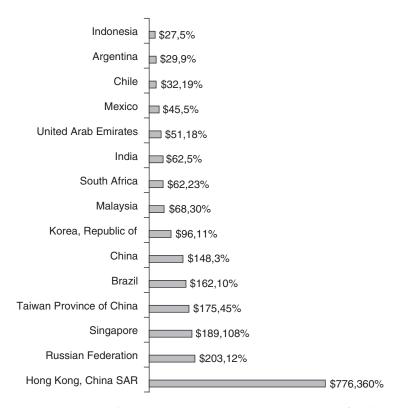


Figure 1.1 OFDI stock of the top 15 emerging markets (2008), in US\$ billions and percents.

Source: Based on the United Nations Conference on Trade and Development's online database, available at http://stats.unctad.org/fdi/.

Moreover, many aspects of Indian OFDI have yet to be investigated and incorporated into the literature.

The present volume seeks to make a contribution to the literature by offering new insights into the rise of Indian OFDI and by analyzing its evolving features. The perspectives of economists, political scientists, researchers, and policy makers on the rise of Indian OFDI will hopefully help to unravel the broader analytical dynamics of emerging market MNEs. Before presenting an overview of this volume and outlining its contribution, we briefly summarize the growth path of Indian OFDI and discuss certain issues that are specific to it but have yet to be critically addressed in the literature.

A. Origin and Growth: A Brief History

The emergence of Indian firms investing abroad can be traced back to the early 1960s. The setting up of a textile factory by the Birla Group in Addis





^a OFDI stocks in percentages of gross domestic product are in parentheses.



Ababa, Ethiopia, in 1960, as well as a wholly owned trading subsidiary by the Tata Group in Zug, Switzerland, in 1961, marked the beginning of OFDI from India. Other industrial houses like Thapar, JK Singhania, Maftlala, and Godrej joined in later. Indian firms were pioneers among developing countries in undertaking OFDI, with essentially a small group of family-owned business groups engaging in modest investments in selected developing countries from the 1960s to the 1980s. Public-sector companies largely remained outside the process of OFDI in this period, except in a small number of cases.⁷

Host developing countries—led by Southeast Asia, East Africa, the Commonwealth of Independent States (CIS), and West Africa—accounted for about 82% of cumulative Indian OFDI flows during the period 1960–1989. The number of outward-investing Indian firms rose from 11 in the 1960s to 146 in the 1980s, as set out in Figure 1.2. During this phase, public policy, development levels, geopolitical alliances, and evolving corporate strategies shaped and determined the nature of Indian OFDI (Pradhan 2008c, United Nations Conference on Trade and Development 2007, Aggarwal and Weekly 1982).

State regulation of the growth of large industrial houses motivated, for the most part, the OFDI decisions of Indian firms. These business groups had enjoyed rapid expansion at home. The scope for further growth was

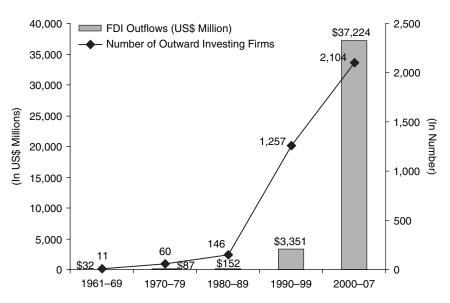


Figure 1.2 Indian OFDI flows (1961–2007), in US\$ millions and numbers.

Source: Data on OFDI flows for 2001, 2002, and 2007 are from the United Nations Conference on Trade and Development (2008), available at http://stats.unctad.org/fdi/; the remaining information is based on a dataset compiled from unpublished remittance information from the Reserve Bank of India, published reports of the Indian Investment Centre, and unpublished firm-level information from the Ministry of Commerce.





limited due to the slow expansion of the domestic market and the existence of restrictive regulatory measures like the Monopolies and Restrictive Trade Practices Act, 1969 (MRTPA), the Foreign Exchange Regulation Act, 1973 (FERA), and industrial licensing. Indian policy makers, acknowledging the potential of OFDI for promoting national exports and for strengthening development cooperation with other developing countries, selectively allowed overseas operations of Indian firms. Inadequate foreign exchange reserves, together with the weak expertise and knowledge of Indian firms, led to an OFDI policy regime that permitted overseas investments only through exports of Indian-made machinery, and through know-how against cash transfers (and in the shape of ownership control through joint ventures [JVs]). Developing regions that had cultural, geographical, and ethnic proximity to India became the primary destinations for outward investment for Indian firms that intended to capitalize their limited knowledge and simple ownership advantages, as shown in Table 1.2. The manufacturing sector, mostly confined to a few select industries like chemicals, paper, and textiles, dominated the sectoral distribution of Indian OFDI during 1961–1989, as set out in Table 1.3.

Indian OFDI flows have grown dramatically since the 1990s (Figure 1.2). The volume of OFDI flows increased from just US\$152 million in the period 1980–1989 to US\$3.4 billion in the period 1990–1999, and further to US\$37 billion between 2000 and 2007. The corporate picture of Indian OFDI became more complex, with the number of outward-investing Indian MNEs jumping from 146 in the period 1980–1989 to 1,257 and 2,104, respectively, in the periods 1990–1999 and 2000–2007. Unlike in the past, a large number of Indian MNEs are not traditional Indian business houses, and many are small- and medium-sized enterprises. The rapid growth of Indian OFDI flows during the 1990s and the first decade of the twenty-first century has been associated with a broadening of the industry and the geographical profile of investments. Current OFDI flows from India reflect a broad industry composition, including the rise of new players from industries as diverse as gas and petroleum, software, and pharmaceuticals, as shown in Table 1.3.

The phase during which Indian OFDI was concentrated within the developing world is now over; developed countries received more than 60% of Indian OFDI flows during 2000–2007, as shown in Table 1.2. Developed countries like the United Kingdom, the United States, and the Netherlands claimed around 33%, 10%, and 6%, respectively, of total outflows during this period. Indian OFDI has also become more geographically diversified, with the number of host countries totaling 117 in the period 1990–2007 (see Table 1.2). Another striking change is that the wholly owned subsidiary form of OFDI has become, by far, the dominant mode of Indian equity participation abroad (Table 1.4).

The surge in Indian OFDI since the 1990s, and its various new features, appear to be a result of the interactions among changes in national policy, corporate behavior, and international developments in trade and







Host region/economy	1961–1	989	1990-20	No. of	
	OFDI flows (US\$ millions)	Percent	OFDI flows (US\$ millions)	Percent	outward- investing firms
Developed economies	49	18.2	17,112	61.6	1,866
Europe	32	11.7	13,264	47.7	887
European Union	23	8.6	13,081	47.1	857
Other developed Europe	8	3.1	183	0.7	49
North America	18	6.5	3,203	11.5	1,156
Other developed countries	0	0.0	645	2.3	104
Emerging Markets	221	81.8	10,678	38.4	1,674
Africa	74	27.2	3,285	11.8	398
North Africa	1	0.4	549	2.0	23
West Africa	26	9.8	232	0.8	49
Central Africa	0	0.0	63	0.2	2
East Africa	46	17.0	2,396	8.6	295
South Africa	0	0.0	45	0.2	50
Latin America and	0.18	0.1	1,179	4.2	61
Caribbean					
South America	0	0.0	533	1.9	27
Central America	0.2	0.1	95	0.3	22
Caribbean	0	0.0	551	2.0	18
Asia and Oceania	116	42.7	4,852	17.5	1,298
West Asia	9	3.3	1,223	4.4	413
East Asia	0.1	0.0	1,018	3.7	181
South Asia	20	7.2	322	1.2	297
Southeast Asia	87	32.1	2,287	8.2	563
Oceania	0.2	0.1	3	0.0	2
Southeast Europe and CIS	32	11.8	1,362	4.9	112
Southeast Europe	2	0.9	11	0.0	8
CIS	29	10.9	1,351	4.9	105
World	271	100	27,791	100	3,149
No. of host countries	41		117		

Source: Calculation based on a dataset compiled from unpublished remittance information from the Reserve Bank of India, published reports of the Indian Investment Centre and from unpublished firm-level information from the Ministry of Commerce.

^aData for 2001 are only from January to March, data for 2002 are from October to December, and data for 2007 are from January to March.

investment. The removal of the restrictive measures on the growth of firms (like FERA), the removal of the licensing regime, the dismantling of product reservation systems for public-owned and small- and medium-sized enterprises, facilitative measures for foreign firms, and a massive reduction in import duties all led to intense competition in Indian markets. Most of the large Indian firms were seriously affected by growing competition, and were restructured to emphasize product specialization, increase productivity, and improve product quality. These domestic firms had inherited reasonable but inefficient industrial expertise, skills, and traditions from an







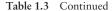
 $\label{thm:composition} \textbf{Table 1.3} \quad \text{Sector and industry composition of Indian OFDI flows (1961-1989, 1990-2007),} \\ \text{in US\$ millions and percents}$

Sector and industry	1961	-89	1990-2	No. of	
	OFDI flows (US\$ millions)	Percent	OFDI flows (US\$ millions) ^b	Percent	outward- investing firms
Primary	4	1.6	5,282	22.51	135
Agriculture and allied products	1	0.2	73	0.31	71
Ores and minerals	4	1.4	222	0.95	21
Gas, petroleum, and related products	0	0	4,988	21.25	44
Secondary (manufacturing)	170	62.7	9,870	42.06	1,620
Food, beverages, and tobacco	10	3.7	625	2.66	161
Textiles and wearing apparel	27	9.8	365	1.55	273
Paper and paper products	32	11.7	51	0.22	24
Printing and publication	0	0	28	0.12	36
Gems and jewelry	0	0	237	1.01	105
Leather and related products	0	0.1	78	0.33	61
Rubber and plastic products	1	0.3	375	1.60	104
Nonmetallic mineral products	7	2.8	144	0.61	76
Basic metals and fabricated metal products	12	4.3	904	3.85	148
Machinery and equipment	5	1.9	348	1.48	136
Electrical machinery and equipment	5	1.7	431	1.84	136
Transport equipment	6	2.1	812	3.46	89
Computer, electronic, medical, precision	0	0.1	842	3.59	129
Chemicals	55	20.2	1,699	7.24	212
Pharmaceuticals	4	1.5	2,874	12.25	158
Other manufacturing	7	2.5	59	0.25	51
Tertiary (services)	95	35	8,255	35.18	1,546
Construction and engineering services	15	5.5	480	2.05	121
Trading	14	5.1	47	0.20	93
Advertising and market research	0	0	30	0.13	44
Consultancy and business advisory service	1	0.2	63	0.27	106
Event management	0	0	2	0.01	7
Film, entertainment, and broadcasting	0	0	1,048	4.47	58
Hospitality and tourism	16	6	250	1.07	90
Hospital and health services	0	0	191	0.81	34
Financial and insurance services	32	11.8	1301	5.55	144
Telecommunication services	0	0	689	2.94	22

Continued







Sector and industry	1961	1990-2	No. of		
	OFDI flows (US\$ millions)	Percent	OFDI flows (US\$ millions) ^b	Percent	outward- investing firms
Transportation services	3	0.9	359	1.53	88
Software development, packages, and ITES	5	1.9	3633	15.48	848
Other services	10	3.6	162	0.69	45
Others	2	0.7	60	0.26	76
Total	271	100	23,467	100	3,149

Source: Calculation based on a dataset compiled from unpublished remittance information from the Reserve Bank of India, published reports of the Indian Investment Centre, and from unpublished firm-level information from the Ministry of Commerce.

inward-looking policy regime that encouraged localization of production and import substitution. By implementing new corporate measures—to beat the competition in the 1990s—Indian firms appear to have improved their competitive strength, leading to improved bottom lines and higher levels of liquidity. In anticipation of the introduction of stricter protection of intellectual property, many Indian firms gravitated toward higher in-house research and development (R&D) activities in the late 1990s, and toward external acquisitions of technologies in the first decade of the twenty-first century. Other new developments in global markets, such as the liberalization of trade and investment regimes in overseas markets, attracted Indian firms to global markets. Favorable liquidity positions in-house, combined with the adoption of a favorable OFDI policy regime, provided the crucial push for Indian OFDI. Overseas investment became the preferred strategy for Indian firms to survive in the new global economic environment by accessing new markets, skills, and technologies, and by enlarging the global scale and scope of their operations.

B. Why Do Indian Firms Go it Alone Now?

For many years, starting in the early 1960s, outward-investing Indian firms had overwhelmingly chosen strategic alliances and JVs over wholly owned subsidiaries in their overseas expansion. Initially, the policy regime of India, as a home country, required Indian firms to only have minority ownership participation in their overseas projects, but preference for JVs continued even after this policy was relaxed in the late 1970s and throughout





^aData for 2001 are only from January to March, data for 2002 are from October to December, and data for 2007 are from January to March.

^bThe US \$4,323 million investment undertaken by Cairn India Ltd. for oil exploration in the Channel Islands has not been included as this is a round-tripping investment made by a U.K.-based parent company, Cairn Energy Group, through its Indian subsidiary.

the 1980s. In fact, the share of JVs in the total number of OFDI projects increased, from almost 62% in the 1960s to 70% in the 1980s, as shown in Table 1.4. Presumably, JV participation was a sensible strategy for minimizing the risks and uncertainty of global business for Indian firms that had little experience in cross-border investments at that time. Indian parent companies shared their modest level of adaptive and incremental technological advantages with local partners in return for access to the latter's local resources, information, and networks.

Wholly owned subsidiaries have been the clear preference of Indian MNEs since the 1990s. Their share in the total number of OFDI projects increased to 54% in the 1990s, and then to 70% in the first decade of the twenty-first century. Clearly, subsidiaries have emerged as the new paradigm of ownership control by Indian firms in their overseas investments.

What explains this change in the ownership preference of Indian firms? Did early internationalization experiences from the 1960s to the 1980s lead Indian firms to be more confident in undertaking overseas investments alone? In the stage theory of internationalization, such as the Uppsala model (Johanson and Wiedersheim-Paul 1975, Johanson and Vahlne 1977), firms learn from their internationalization process and eventually accumulate sufficient expertise and knowledge, so that they feel confident in making their overseas moves independently. However, this reasoning applies only to a small group of Indian companies that undertook OFDI between the 1960s and the 1980s, not to the majority of Indian firms that only began to undertake international investments more recently.

Most importantly, it would be a mistake to assume that the choice of wholly owned subsidiaries by Indian firms is a result of their investment in low technology industries. Evidence shows that Indian companies that originate in different industries and that focus on different technological classifications, including in the services sector, have opted for wholly

Table 1.4 The ownership structure of Indian OFDI projects (1961–1969, 2000–2007), in numbers and percents

Period	Developed region		Developing region		World			
	JV	WOSa	JV	WOS	JV	WOS	Total	JV as a percent of total
1961-69	1	5	7	0	8	5	13	61.5
1970-79	5	6	58	3	63	9	72	87.5
1980-89	2.5	27	80	18	105	45	150	70.0
1990-99	309	635	579	404	888	1,039	1,927	46.1
2000-07	838	2,985	809	2,110	1,647	5,095	6,742	24.4
All years	1,178	3,658	1,533	2,535	2,711	6,193	8,904	30.4

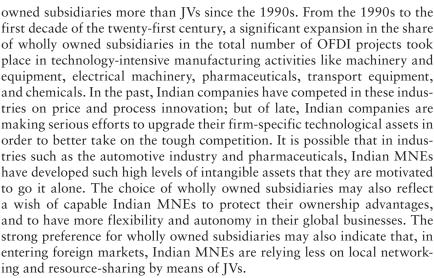
Source: Calculation based on a dataset compiled from unpublished remittance information from the Reserve Bank of India, published reports of the Indian Investment Centre, and from unpublished firm-level information from the Ministry of Commerce.







^a WOS, wholly-owned subsidiaries.



The relative attraction of wholly owned subsidiaries for Indian MNEs is a distinct regional feature. From the 1960s to the first decade of the twenty-first century, Indian firms overwhelmingly preferred wholly owned subsidiaries over JVs when entering into developed markets. The average share of wholly owned subsidiaries in OFDI projects directed at developed regions was as high as 76% in the period 1961–2007. This stands in contrast to Indian OFDI flows to developing regions, where JVs were generally preferred as a means of market entry by investing Indian firms over wholly owned subsidiaries. Such subsidiaries accounted for a mere 18% of Indian OFDI projects in developing regions in the 1980s. This share grew to 41% in the 1990s, and then to 72% in the first decade of the twenty-first century.

The preference of Indian firms for market entry by means of JVs in developing countries, and by means of wholly owned subsidiaries in developed countries, is intriguing, given the modest ownership advantages and limited experience with international investments of the MNEs concerned. Further inquiry shows that this preference is rooted primarily in the differences in economic activities undertaken by Indian MNEs in developed and developing regions. Early Indian OFDI projects in developed regions were largely service activities like trading, consultancy, and engineering services, rather than manufacturing, whereas projects in developing regions were mostly concerned with manufacturing activities (Pradhan 2008d). Most of these service activities, such as trading, require relatively few resources (their capital intensity is relatively low), unlike manufacturing operations, and this is a persuasive factor behind the preference of Indian parent companies for full ownership of their overseas ventures in developed region.

It is not just the declining tendency of Indian firms to opt for overseas JVs that needs analysis; the very nature of these alliances is also rather curious. What are the characteristics of the JVs undertaken by Indian firms





in the past, compared to those undertaken more recently? The old JV paradigm, in the majority of cases, involved equity participation by Indian parent firms in order to secure access to local markets. In most of these cases, equity participation was through Indian firms transferring technical knowledge abroad and the foreign partner sharing the financial burden of establishing production units. Clearly, this type of JV arrangement serves the limited purpose of accessing the host country market. Of late, the nature of the strategic alliances of Indian companies, as reflected in strategic acquisitions of stakes in foreign companies, has undergone noticeable changes. Strategic alliances by Indian firms are no longer merely aimed at securing access to new markets, but are increasingly aimed at accessing new products, gaining marketing and distribution channels, and acquiring other intangible skills. This issue begs further exploration.

C. Why Do Indian Firms Acquire Overseas Companies?

Since the early 2000s, Indian MNEs seem to have increasingly chosen acquisitions as a mode of international expansion. A total of 437 Indian MNEs are estimated to have spent more than US\$70 billion on 976 acquisitions from 2000 to June 2009 (Table 1.5). The number of overseas acquisitions, as well as the number of acquiring Indian firms, has been rising consistently throughout the period 2002–2009. Recent research on Indian overseas acquisitions (Pradhan and Abraham 2005; Pradhan 2008b; Buckley,

Table 1.5 Overseas acquisitions by Indian firms (2000–2009), in US\$ millions and numbers

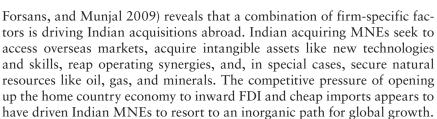
Year	Overseas acquisition		No. of acquiring Indian
	Value	No. of deals	parent firms
2000	908	39	29
2001	194	22	21
2002	2,602	27	16
2003	616	41	37
2004	3,011	60	48
2005	3,577	143	97
2006	7,712	189	139
2007	35,827	192	150
2008	12,954	235	164
2009 ^a	2,814	28	24
All above years	70,215	976	437

Source: Based on dataset constructed from different reports from newspapers, magazines, and financial consulting firms including Hindu Business Line, Economic Times, Financial Express, Business World, Grant Thornton India, and ISI Emerging Market.





^a Data for 2009 are through June.



An important feature of Indian acquisitions that needs explanation is their concentration in developed regions. Nearly 83% of the value of Indian acquisitions during the period 2000–June 2009 went to acquisitions in developed countries. Emerging markets attracted just 17% of the total value of Indian overseas acquisitions in this period. While the large size of the markets in developed regions is likely to be an important factor, the desire of Indian firms to access new technologies and skills, and to enhance their firm-specific competitive advantages may be an equally important consideration. The perceived importance of building after-sales distribution and service centers in highly competitive markets of developed countries may also be a factor in the regional concentration of Indian OFDI in developed countries. In contrast, Indian acquisitions in emerging markets tend to focus more on gaining access to natural resources like oil, gas, and minerals.

As overseas acquisitions are a recent phenomenon for Indian MNEs, several aspects of this issue are yet to be investigated. For example, an empirical evaluation of the economic success of Indian MNEs' acquisitions abroad would be particularly helpful. To what extent are Indian acquiring firms successful in achieving their acquisition objectives, and at what cost? After the completion of an acquisition, the challenge is to minimize the time spent integrating the acquired enterprise. Several questions need to be examined, for example: what has been the pre- and postacquisition preparedness of Indian MNEs, and what are the issues faced by Indian firms in the actual process of implementing overseas mergers and acquisitions? Are Indian firms, given their relative inexperience of international acquisitions, underestimating the political, legal, and cultural complexities of the processes involved?

D. What Explains the Distinct Regional Specialization of Indian Firms?

The evolution of Indian OFDI has been accompanied by a mostly unnoticed but interesting regional specialization of Indian firms. A group of 1,283 Indian firms exclusively confined their OFDI presence to emerging markets in the period 1961–2007, whereas another group of 1,475 Indian firms operated entirely in developed countries. These two groups of Indian firms can be termed "emerging market-specific Indian MNEs" and "developed region-specific Indian MNEs," respectively, together representing







"region-specific Indian MNEs." In addition to these region-specific, outward-investing Indian MNEs, another group of 391 Indian firms has undertaken OFDI activities in both developed and emerging markets. Since these Indian MNEs do not confine their OFDI activities to any one region, but are rather present in both developed and emerging markets, they will be labeled "region-free Indian MNEs."

The fact that different groups of Indian MNEs reveal different regional preferences in undertaking OFDI is, in itself, an interesting issue worthy of investigation. Why do national firms of a particular home country, facing a uniform macro environment (including industrial and technological policies), exhibit a distinct regional specialization in their OFDI operations?

One possible reason for such a distinct regional specialization could be the differences in the nature and content of monopolistic advantages of region-specific and region-free outward-investing Indian MNEs. One would expect developed region-specific and region-free Indian MNEs to possess higher and more sophisticated levels of ownership advantages, as compared to developing region-specific Indian MNEs. The reason is that regions with higher stages of development play host to firms that are based on powerful and broad-based monopolistic advantages originating from Schumpeterian frontier innovation, sophisticated product differentiation, and specialized management and managerial skills. There appears to be a sectoral dimension to this geographic specialization. As Indian MNEs' entry into developed regions is spearheaded by the services sector, while their entry into developing regions is led by the manufacturing sector, the probability of an Indian firm being a developed region-specific Indian MNE is higher if it is from the services sector. In the case of the software and information technology (IT) industry, Indian MNEs are overwhelmingly developed-region specific, because developed countries are the primary source of demand for these services. This issue could also gain from a rigorous empirical analysis that the existing literature on Indian MNEs is still lacking.

E. Why do Knowledge-based Industries Dominate Indian Outward Foreign Direct Investment?

Over the years, Indian OFDI has become diversified over different industries, and is increasingly being led by knowledge-based industries in the manufacturing and service sectors. For a developing country with a labor surplus, to have a greater share of its OFDI in technology- and skill-intensive industries is a truly interesting phenomenon that deserves to be further investigated: is this recent surge in knowledge-intensive OFDI reflective of some competitive advantage of India in the industries concerned?

India has been successful in promoting an indigenous capability through strategic, industrial, and technology policies in industries such as pharmaceuticals, the automotive industry, and IT. There exists ample documentation to show how the Indian government has used an active industrial policy





and a liberal patent system to encourage domestic investments in pharmaceuticals (Pradhan and Alakshendra 2006, Athreye and Godley 2009), and in the automotive industry (Pradhan and Singh 2009). The growth of the Indian IT industry has been explained by the creation of the required domestic skills, initial demand from the public sector, and a liberal policy regime for inward foreign investment (Pradhan 2010). The depth and competitiveness of Indian firms in these industries increased substantially, with India moving away from a protected regime to economic openness in the 1990s. This improved competitiveness may be partly responsible for facilitating the knowledge-based OFDI of the last decade. Growing competitive pressures, due to openness to trade and inward FDI, may also be causing Indian firms to seek complementary intangible assets abroad (Pradhan 2008b; Athreye and Godley 2009; Buckley, Forsans, and Munjal 2009; Balasubramanyam and Forsans 2009). More research on the factors leading to knowledge-based OFDI from India is, of course, central to improving our understanding of this issue.

F. This Volume and Its Contribution

As indicated previously, the rise of Indian MNEs is a recent phenomenon, and various aspects of their growth are yet to be properly understood. There are a number of features that have characterized Indian MNEs in recent years: they are active in both emerging markets and in developed countries, but increasingly prefer the latter; they are inclined to have complete ownership control of their overseas ventures, undertaking acquisitions more than greenfield investments; and they are emerging in a number of industries, including service industries. It has yet to be resolved whether these evolutionary features of Indian OFDI are in some sense unique to India, or whether they are the result of the generic process of firms' internationalization. The existing academic and popular debate on Indian FDI will remain incomplete unless we situate our analysis in this broader context.

I. Analytical Perspectives on the Rise of Indian MNEs

Indian OFDI, in its evolutionary process, has passed from an essentially slow and incremental phase of expansion during the 1960s-the 1990s, to a phase of sudden and rapid growth since 2000. This recent, sudden, and rapid growth includes features that break with past practice. The abrupt jump in OFDI flows and emerging patterns (such as an increasing shift toward developed host countries, a distinct preference for complete control of overseas units, and a significant surge of OFDI in knowledge-based industries) offers an opportunity to evaluate alternative theories of FDI that are concerned with explaining the rise of emerging market MNEs. Chapter 2, by Michael W. Hansen, summarizes the different distinct patterns of Indian OFDI across regions, industries, and types of motivations.







He lucidly analyzes these patterns against conventional, as well as current, theoretical frameworks.

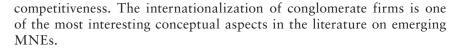
Hansen's comprehensive analysis of the rise of Indian MNEs and their recent idiosyncratic features suggests that there is something distinct in Indian OFDI growth. Indian OFDI has grown along a unique path, with the initial and incremental phases of growth (from the 1960s –the 1990s) reflecting the predictions of traditional theories of FDI (such as the investment development path). The current phase of growth (post-1999) is marked by the speed and suddenness of changes in the quantity and quality of OFDI. This, in turn, supports the arguments of latecomer theories. The ingredients of the India Inc. model are discernible throughout the history of Indian overseas investment. Consequently, it seems fair to state that, in order to understand the long-term development of MNEs from India, various FDI theories are required.

Scholars have exhibited less appreciation for the role of the state and of political factors (compared to other factors) in the internationalization of firms from emerging markets in general. While this issue has been the topic of extensive study in the case of China, it remains underexplored in other emerging markets like India. Chapter 3, by Jørgen Dige Pedersen, provides insights into the significance of political factors that influence the trend and direction of Indian OFDI. The growth of Indian OFDI flows is found to be closely integrated with state policies on the growth of large business groups and shifting policy attitudes toward OFDI. The rise in recent years of Indian OFDI in the energy sector appears to be, in part, a result of a growing direct engagement of the Indian state. This direct involvement should be seen as distinct from the effort to promote overseas investment in other industries by means of creating favorable institutional mechanisms, including access to finance and risk-mitigation tools. The importance of the role of the state in understanding the changing forms of OFDI from emerging markets like India should be understood in this context.

As the leading Indian MNEs are essentially conglomerate business groups, it is interesting for both academics and policy makers to understand the role of conglomerate business structures in India's OFDI flows. The evolution of Indian global business houses and their internationalization strategies need to be understood in the context of the varieties of market-oriented systems that have developed over the past decades of policy making and development experience. In Chapter 4, Joël Ruet traces the growth of conglomerate Indian MNEs that survived and flourished under the India-specific, state-created restrictive policy regime in the past. These firms are now reinventing themselves under a liberalized policy regime, showing, since the 1990s, a strong inclination to globalize in order to gain access to global markets and additional intangible assets. The message conveyed by Ruet is that rising conglomerate firms from India reflect the growth of a new business model of industrial globalization, by way of catching up through low-cost innovation, and the rapid use of capital to acquire new overseas units to enhance their global







2. Industry Analysis of Indian Outward FDI

The 1990s and the first decade of the twenty-first century saw the remarkable diversification of Indian investment abroad, with a significant participation of the three economic sectors. Developments in these sectors are significantly driven by sector-specific industrial factors and public policy. A better understanding of these drivers has great relevance and significance for theories of, and policy making on, emerging market OFDI.

While industry diversification is an established trend in the internationalization of Indian firms, the kinds of ownership advantages that drive emerging MNEs, their ability to benefit from forging external linkages, and the additional leverage they create (including acquired additional resources) have yet to be identified and analyzed. Chapter 5, by Giovanni Balcet and Silvia Bruschieri, is based on case studies of selected Indian MNEs from the automotive and pharmaceutical industries, and it highlights these issues effectively. The authors stress that the growth of selected Indian MNEs is critically linked to the previous era of domestic capability formation, promoted by public policy. The domestic capability formation was mainly achieved through the creative assimilation and adaptation of imported technologies and alliances with western MNEs (in the pharmaceutical industry) and Japanese MNEs (in the automotive industry). In the period since 2000, Indian MNEs have progressed to another development stage, learning from and leveraging acquisitions in order to grow rapidly in global markets. However, these firm-specific trajectories of internationalization are by no means uniform across firms, and they vary considerably in terms of heterogeneity in corporate practices, competitive asset bundling, and in terms of the strength of their linkages and leverage. Consequently, the authors recognize that the wide diversity that exists among emerging MNEs, even from within the same home country, are often obscured in the literature by general characterizations of emerging market OFDI.

In Chapter 6, Vinish Kathuria suggests that the drivers of OFDI from India's two most prominent knowledge-based industries, the pharmaceutical and software industries, could be different. This difference could be due to the disparity of economic activities (i.e., manufacturing versus services), the different industry histories (old versus new), and the uneven focus of public policy and firm-specific diversity. The descriptive analysis of a sample of outward-investing Indian pharmaceutical and software companies shows that the former are relatively older, hold a larger asset base, and foster higher-cost R&D than the latter. These results tend to confirm the historical realities of the Indian OFDI path, since the Indian pharmaceutical industry is much older than the software industry, and has pioneered Indian OFDI since the 1970s.





3. Regional Studies on Indian MNEs

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The rise of emerging market MNEs was associated with a high level of anxiety in developed host countries, but in developing host countries, a receptive attitude seems to prevail. Emerging Indian MNEs are not only focusing on developed country markets (now more than in the past), but are also increasingly using acquisitions significantly to expand their presence in those countries. Historically, developing countries preferred FDI from fellow developing countries, as developing country MNEs were seen to be different from developed country firms. The different contributions in this section of the current volume shed light on the analysis of Indian FDI from the perspective of the host country or region. These studies present groundbreaking research on the topic, as there are hardly any host country-specific studies on the trends, patterns, and motives of Indian OFDI.

Among developed countries, the United States has emerged as the preferred host country for Indian investment in the first decade of the twenty-first century. In Chapter 7, Nandita Dasgupta examines the growth and related patterns of Indian investment flows into the United States and analyzes different macroeconomic factors influencing them. Her comprehensive analysis shows that Indian FDI into the United States took off in the post-1999 period to assume greater significance for both the home country and host country. The majority of the Indian MNEs operating in the United States identified by Dasgupta are in knowledge-based industries like software and IT, pharmaceuticals, chemicals, and the automotive industry, and more than half of these are relatively young companies (i.e., established within the past 20 years). These companies increasingly prefer acquisitions to greenfield investments as their primary means of market entry. The list of Indian firms investing in the United States also includes a significant number of small firms, in both manufacturing and services. A liberalized OFDI policy, high domestic growth, competitive capability formation under an open-policy regime, increased corporate profitability, access to global financial markets, knowledge spillovers, and heightened competition from inward FDI are all important home country factors that drive Indian OFDI, and OFDI to the United States in particular. The large size of the U.S. market, a business-friendly policy regime (including a liberal, inward FDI policy and low taxes), a high level of physical and institutional infrastructure, and the availability of strategic resources have attracted Indian investment to the United States. It is important to note that Indian investments are not only bringing in an India-specific set of business knowledge to the host country, but are also contributing to local employment generation and capital formation.

Chapter 8, by Rajnish Tiwari and Cornelius Herstatt, deals with recent Indian investments in Germany. The growing number of Indian acquisitions in Germany has resulted in the Indian FDI stock in Germany exceeding the stock of German FDI in India. More than half of the Indian parent companies that have affiliates in Germany are in the software and IT industry. A significant number of Indian parent companies are also in pharmaceuticals





and the automotive industry. Indian MNEs tend to hold full or majority stakes in their German subsidiaries. The study suggests that the 167 Indian subsidiaries it has identified provide employment to about 20,000 people. The managerial survey of a sample of Indian subsidiaries suggests that satisfactory sales performance and, for many of them, R&D are important considerations. Major drivers of Indian investment in Germany include proximity to their customers and suppliers, direct adaptation or development of products to cater to host demand, and enhanced access to the large German market. It is interesting to note that Indian investment has been net job-creating in Germany, as job creation exceeds job offshoring to India. This net positive employment effect is particularly strong in R&D activities. This study provides useful insights into the nature of host country effects of Indian investment, which leads to a better appreciation of the consequences of hosting OFDI from emerging market MNEs.

The OFDI operations of developing country firms, including Indian MNEs, in other developing regions have attracted academic interests in recent years (Aykut and Rath 2004; Aykut and Goldstein 2007; United Nations Conference on Trade and Development 2006; Pradhan 2008c, 2009). In the literature, South-South FDI (i.e., developing country firms investing in fellow developing countries) is often characterized as contributing more to the development of host countries than North-South FDI (investments by developed country firms in developing countries). Chapter 9, by Parthapratim Pal, examines Indian investment in developing Africa as a case of South-South cooperation, while also addressing recent trends such as increased involvement in energy and mineral industries. The author shows that Indian MNEs significantly lag behind their Chinese counterparts in terms of scale of investment. Chinese investments have been more coordinated and promoted by proactive Chinese state policies, while Indian investments remain largely private initiatives—until recently. The most distinctive feature of Indian FDI in Africa is its sectoral diversification, especially as compared to the concentration of Chinese investment in the primary sector. However, growing investments from Indian stateowned oil and gas companies have become an established trend. Indian and Chinese investments in Africa are rapidly building an increased presence in natural resource-based activities, which are essentially low technology and have few linkages with the host country economy. However, African countries appear to have leveraged these investments in order to achieve more rapid development than they could have achieved by simply relying on natural resource-seeking investments from developed countries.

Conclusions

The present volume provides a systematic analysis of the rise of Indian OFDI. In doing so, it presents several new perspectives on Indian MNEs. The changing trends and patterns of Indian OFDI cannot be understood by isolating traditional theories from new approaches. What is needed is





the joint use of the two generations of theories to understand the entire, long-term, path of Indian OFDI. In particular, the prominence of business groups in the process of OFDI, reflecting the typical nature of Indian entrepreneurship and business practices, calls for the modification and expansion of the existing theoretical framework of emerging market MNEs. One should also be mindful of the central role of political factors in explaining the rise of such MNEs.

The growth of Indian OFDI from knowledge-based industries ultimately reflects the rapidly improving competitive capabilities of firms in these industries. Indian firms in the automotive and pharmaceutical industries have, in the past, leveraged linkages with foreign firms as a means of gaining technology. Given the current liberal environment, Indian companies are turning to acquisitions to upgrade on the path of technological advancement. However, among emerging Indian MNEs, there exists interindustry differences in the nature of their firm-specific characteristics. The need to access overseas natural resources has also been one prominent driver of India's OFDI path in recent years.

These reflections on the important question of how Indian FDI is faring and how it is affecting host countries deliver new insights that are worthy of further analysis. Indian investment in both the United States and Germany shows a growing bias toward knowledge-intensive industries like software, pharmaceuticals, and the automotive industry. These are the industries in which India has succeeded in building unique capabilities, sometimes pursuing a strategy of low-cost innovation. Indian OFDI could potentially lead to a more competitive market structure, and to inflows of additional innovative assets. Indian MNEs are increasingly contributing to local R&D (e.g., in the case of Germany), supported by developed countries' strong innovatory infrastructure and skills. Overall, Indian MNEs are net positive contributors to local employment and to development in general.

Notes

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- "Emerging markets" are all economies that are not members of the European Union and the Organization of Economic Cooperation and Development plus Chile, Mexico, the Republic of Korea, Turkey. "Developing countries" are all emerging markets that do not belong to the Commonwealth of Independent States (CIS) and Southeast Europe. For the individual members of each group, see United Nations Conference on Trade and Development (2009).
- See United Nations Conference on Trade and Development's online database available at http://stats.unctad.org/fdi/.
- Latin American firms mainly from Brazil, Panama, and Colombia were active in investing abroad during this period.







- 4. Outward-investing African firms in this period were based in South Africa, Libyan Arab Jamahiriya, Gabon, and Algeria.
- See United Nations Conference on Trade and Development's online database available at http://stats.unctad.org/fdi/.
- 6. Given that Indian OFDI values haves been grossly underestimated for a number of reasons (Pradhan 2008), this reported figure may not be capturing the full depth of the foreign operations of Indian firms.
- 7. Public-sector companies like the Indian Railway Construction Co., LIC, GIC, Mecon (India), Telecommunications Consultants India, and India Tourism Development Corp., undertook small OFDI projects.

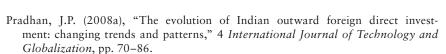
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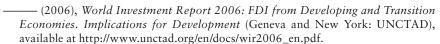
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