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Generic Strategies of India's Emerging Multinationals

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Generic Strategies of India's Emerging Multinationals

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Indian firms expanded outward in two waves, the first occurring in the 1970s and 1980s, and the second occurring after 1995, shortly after India opened up to the global economy in 1991 following economic reforms. The second wave was not only bigger in terms of the scale and speed of outward foreign direct investment (FDI), but the firms involved used a broader range of strategies. One especially interesting feature was that in the second wave 60-70% of the outward FDI went “up-market,” that is, to highly advanced countries, unlike the first wave in which almost the same proportion went “down-market,” that is, to countries less developed than India (Lall 1983). In addition, there was some evidence that in 2006 and the first half of 2007, Indian firms invested more abroad than foreign MNEs invested in India—a surprising result for a poor country, although the data underlying these claims are a bit murky (Dunning & Narula, 1996).^{2 3}

In this chapter, we try to get beneath these intriguing macro outcomes by looking at the underlying micro phenomena, i.e. at the firm level. Which Indian firms were at the

¹ We thank Yair Aharoni, Saikat Chaudhuri, Charles Dhanaraj, Devesh Kapur, Tarun Khanna, Don Lessard, and other participants at the NU-Wharton School conference for helpful comments.

² Indian inward FDI was underestimated for many years, because, for instance, reinvested earnings were not counted as inward FDI, even though this was standard international practice. (This was remedied starting in 2000-01.) According to official data, in 2005-06, inward FDI was \$7.75 billion and outward FDI was only \$2.68 billion (Reserve Bank of India, 2006, p. 96 and 100). In 2006-07, inward FDI reached \$19 billion (Economist, 2007a: 35). In calendar year 2006 outward FDI was estimated at \$9.9 billion, while in the first four months of 2007, that figure rose to \$24.4 billion, thanks to two large acquisitions by Tata Steel and Hindalco (Economist, 2007b: 2). However, a large part of the acquisition funds was raised overseas by both companies, as a result of which official outward FDI figures are likely to be lower. Data compiled by Thomson Financial on outward M&A deals by Indian companies also registered a big increase from 2005 to 2006 (Accenture 2006: p.8 and 13).

³ A newspaper report (Indian Express, 17th June 2007), quoting from a study of outbound and inbound FDI by the Federation of Indian Chambers of Commerce and Industry (FICCI) and Ernst & Young stated: “For Indian corporate sector, 2006 was a watershed year in terms of mergers and acquisitions as Indian companies went shopping across the globe. The total outbound deals, which were valued at \$4.3 billion in 2005, crossed the \$15 billion mark in the following year and it could well breach the \$35 billion level this year.” In the fiscal year 2007-2008, the estimated \$35 billion in outbound FDI deals would likely exceed the target of \$30 billion for inbound FDI.

vanguard of internationalization, and why? What international competitive advantages did they enjoy, and why? How did they internationalize? Which firms directed their investment to the advanced countries, and why? Finally, what impact were Indian firms having on the structure and dynamics of the global industries in which they participated?

It turns out that India, unsurprisingly, is a unique country. It is poor on average, but quite rich and advanced in pockets. Its technical capabilities, built over many decades before and after independence in 1947, were leveraged in unanticipated ways in the second wave of outward expansion. India's institutions, especially its capital markets, were also more sophisticated than one might usually expect for a poor country. All this, combined with a low-cost base, a strong entrepreneurial tradition, a large, booming internal market, and a seasoned managerial class, helped launch a new breed of Indian multinationals in the first decade of the 2000s.

These multinationals were not limited to a single, monolithic strategy for internationalization, as was the case in the 1970s and 1980s (see Lall, 1983; and Wells, 1977 and 1983). Instead, they took a few different paths to internationalization. We identify four such paths, or generic internationalization strategies, each based on a different set of competitive advantages, governed by a different logic, and resulting in a different choice of target markets and modes of entry. We hope that bringing these generic strategies into focus, and highlighting the organizational demands and strategic dilemmas each is likely to present, will be helpful to managers as they take their companies global.

The generic strategies identified here are not unique to India and have relevance for MNEs from other emerging markets as well. As a group, however, these generic strategies are unlikely to be pursued by firms in advanced economies because they are rooted in

conditions peculiar to emerging markets, such as low-income consumers, low-wage workers, high-growth domestic markets, and under-developed hard and soft institutions (on the latter, see Khanna & Palepu, 2006 and Khanna et al, 2005). At the same time, distinctive aspects of each emerging economy will make some generic strategies more relevant than others. In particular, India's experience was influenced by four distinctive characteristics: the large size of its economy, the country's stock of human capital (technical and managerial), its stronger institutions, at least when compared with other countries at comparable stages of development, and its historically rooted entrepreneurial traditions—none of which can be assumed to apply automatically to every emerging economy. These factors may explain why Indian firms survived quite well in the post-liberalization period and why they were more prone to up-market FDI, compared to firms in many other emerging economies.

In terms of the possibilities presented in the opening chapter, reproduced here in Figure 6.1, India provides a good setting for exploring the least studied case, i.e. Cell 4. Despite its low per-capita income (US\$ 800 per person), 60-70% of India's outward FDI in the second wave, through 2006, went to the advanced countries, contrary to predictions of the product cycle model (Vernon 1966, 1979). For discussion purposes, we call Cell 4 cases “up-market FDI,” contrasting them with “down-market FDI” (Cells 2 and 3), wherein firms invest in host countries less developed than their home countries (Indian firms still initiate down-market FDI, although that is not our main focus here). It is quite possible that in the coming decade Indian firms will not only maintain but accelerate their up-market FDI.

Fig 6.1 about here

India may also be unique in another sense: Despite being a low-income country, by some accounts, in 2005 and 2006 it had more outward FDI than inward FDI, an outcome that contradicts the predictions of the Investment Development Path model (Dunning & Narula, 1996). Although short-run trends of the sort, even if true, can be reversed by one or two giant deals going the other way, we suspect that India has a higher propensity to invest abroad and a lower propensity to attract inward FDI than countries of similar size and per-capita income, reflecting the strengths of the local private sector. A little known fact is that India exhibited the same pattern in the 1970s, when the first wave of outward FDI occurred: Through August 1980, cumulative overseas investment by Indian firms in projects completed and underway was \$115.8 million, compared to cumulative inward FDI from 1969-80 of \$70 million (Lall, 1983: 22, both at 1980 exchange rates). When a surprising result of this sort is observed not once but twice in a country's brief history, it suggests that there may be something distinctive about the Indian example.

India's First and Second Waves of Outward FDI

Lall (1983) had this to say about the first wave of outward FDI from developing countries in the 1960s and 1970s:

“In very recent years.... the number of foreign ventures by genuinely indigenous firms from a wide range of developing countries has increased dramatically. Not only this – the size of the foreign ventures has increased, their spread internationally has widened, and the sophistication of activities has greatly increased.” (Lall 1983: 1)

This same comment could have been made about the second wave of outward FDI from developing countries in the 1990s and 2000s. In many ways, the second wave of outward FDI from countries like India is merely a scaled up version of what transpired in the 1970s and 1980s. The size of Indian foreign ventures has increased since the late 1970s and early

1980s; their investments are more dispersed than before, and the sophistication of activities has greatly increased. However, in some other respects, the second wave has been quite different from the first wave, at least as far as India is concerned. Based on what we know of India's second wave and Lall's observations about the first wave in his 1983 work, several important differences stand out:

- (1) Whereas in the first wave (Lall, 1983) 80% of outward FDI went to other *developing* countries (cell 3), in the second wave almost 70% went to *developed* countries (cell 4). While Indian firms made a large number of investments in other developing countries in the second wave, the value of investments going to developed countries was much higher.
- (2) Whereas in the first wave, more than 80% of all outward FDI was in manufacturing (Lall, 1983), in the second wave only 36% was in manufacturing, while services accounted for 62%, and software alone accounted for nearly 30% (up to 2001, according to EPW Research Foundation, 2006, pp. 1-2). However, updating these numbers through 2007 is likely to increase significantly the share of manufacturing.
- (3) Whereas in the first wave greenfield investments were the norm, acquisitions played a far more important role in the second wave.
- (4) Whereas in the first wave Indian firms worked principally through joint ventures, usually with minority equity positions, as required by the Government of India, in the second wave they went in for many more majority- or wholly-owned subsidiaries.
- (5) Whereas in the first wave most of the outward FDI took the form of investments in kind (such as technology or know-how), in the second wave it more often took the form of cash or stock.
- (6) Some of the same firms—the same business groups—that were prominent investors in the 1970s were also prominent in the second wave (e.g. Birla, Tata, and Mahindra groups), but several new names also appeared in the 1990s and 2000s, including companies such as Dr. Reddy's, Infosys, Ranbaxy, Reliance, and Wipro.

The second wave was just getting under way in 2007, and there was no telling if this wave would gather further momentum over the following decade, or fizzle out if the results of the initial investments were disappointing, as they well could be. But as of 2007 there was

no question that collectively the differences listed above were substantial enough to suggest that something new was afoot. Indian firms were clearly moving abroad more aggressively, in terms of the pace of expansion, the degree of control they sought, and the kinds of markets they targeted (rich versus poor countries). They were also seizing new opportunities in services that were not available in the first wave. And they had vastly improved access to foreign exchange, not only from the Reserve Bank of India, but from private sources, such as foreign equity markets in London and New York (ADRs/GDRs), commercial banks, private equity firms, pension funds, and insurance companies, because the government gave them much greater discretion in such matters.

In hindsight, it is hardly surprising that the second wave would have different characteristics than the first wave; the context changed after the 1970s on at least three fronts. First, the domestic economic policy environment was much more open than in the 1970s. Government policy towards imports, exports, domestic regulation, inward FDI, outward FDI, exchange rates, and the role of big business, changed dramatically. As a result, firms had greater freedom to pursue strategies governed by their own goals and judgment, even as the threat of competition from foreign products and firms intensified. The policy reforms also raised India's growth rate from 3% per year in the 1970s to 8-10% per year in the 2000s, which bolstered the scale, competitiveness, and global standing of Indian firms.

Second, the international policy context also changed. Most developing countries also opened up their economies in the same way that India did. If the old economic policy relationship between India and other developing countries was closed-closed, in the 2000s it was open-open. At the same time, the Uruguay Round greatly reduced the ability of developing countries to adopt protectionist policies, and it required them to put in place

significantly stronger intellectual property laws, while the new dispute settlement mechanism made sure that countries lived up to their trade commitments. This set of changes required new strategies for internationalization by Indian firms, and it also reduced the scope for the Indian government to pursue industrial policies to promote national champions in particular industries. Thus, Indian firms globalizing in the 1990s and 2000s had to do so on the strengths of their own resources and capabilities, with less government help or subsidies than might have been available in an earlier time.

Third, technology changed significantly in the 35 years since the first wave of outward FDI, resulting in much cheaper computing and long-distance communication, while digitization of products and services, and improvements in connectivity expanded the opportunity to “slice and dice the value chain” in ways that were not possible before. The combined effect of these changes was to open up opportunities for Indian firms to export services that would have been inconceivable in the first wave.

From an evolutionary perspective, it would be surprising if such profound changes in the policy and technological environment did not transform the internationalization strategies of Indian firms.

Emerging Indian Multinationals

There are many places one can turn to identify lists of emerging multinationals in India’s second wave of outward FDI (see Table 6.1). One is the *Fortune 500* list of the world’s largest non-US firms, which in 2006 included only six Indian companies, compared to China’s 20 companies (Fortune, 2006): these were Bharat Petroleum, Hindustan Petroleum, Indian Oil Corporation (IOC), Oil and Natural Gas Corporation (ONGC),

Reliance Industries, and the State Bank of India. Firms made this list based on their worldwide sales, regardless of how much of that came from abroad. The striking feature of the Indian slate is that all but one was in the petroleum sector. All but Reliance Industries also happened to be state owned. Some of these firms (IOC, ONGC, Reliance) had made large foreign investments by 2007, but on the whole they were less internationalized, in terms of sales, assets, or employees, than many other Indian companies.

Insert Table 6.1 about here

UNCTAD's 2006 list of the world's 100 largest transnational corporations from developing countries (based on 2004 data) is similarly skewed towards large firms, this time towards firms with large *foreign* assets (UNCTAD, 2006: 283-285). In 2006, only one Indian firm (ONGC) made that list, which was dominated by firms from Hong Kong, Korea, and Singapore. China had ten companies on the same list. The *Fortune* and UNCTAD lists show that Indian firms were still not large enough to qualify in such rankings.

The most useful lists for our purposes come from a Boston Consulting Group (BCG) report on the Top-100 internationalizing firms in a dozen "rapidly developing economies," all of which are emerging economies, and from the EPW Research Foundation (EPWRF). Twenty-one Indian companies made BCG's list, compared to 44 from China. BCG's criteria, which are explained in the notes to Table 6.1, considered multiple factors, some of which were qualitative, and whose relative weights were unspecified. Most firms derived at least 10 percent of their sales from abroad. BCG's list picked up firms whose internationalization was quite visible in the India media, but also a few other early-stage internationalizers.

The EPWRF list, released in December 2006, was based on Indian companies making major overseas acquisitions, as reported in annual reports and media sources. It listed 26 firms, 16 of which were also on BCG's list (see Table 6.1). The additional ten firms on the EPWRF list were in pharmaceuticals or healthcare (5), software (1), and process industries (4).

Many of the firms on the BCG or EPWRF lists would not meet the definition of "multinational enterprise" used, for instance, in Harvard's path breaking study of American MNEs (Curran et al, 1977). Firms on the BCG list have significant international operations, often in the form of exports, with varying amounts of foreign investment and assets. Most were really in the early stages of building their international presence and becoming multinational enterprises. In 2006, even a company like Dr. Reddy's Laboratories, which made some of the largest overseas investments (until 2007), had only 22% of its property, plants and equipment abroad.⁴ (See Tables 6.2 and 6.3 for major overseas acquisitions by Indian firms through 2005, and the countries toward which their investments were directed.)

Insert Tables 6.2 and 6.3 about here

Yet another list of Indian multinationals was put together by the India Brand Equity Foundation, using unspecified criteria. As of 2006, it included 33 companies, of which 15 appeared on BCG's list.

For our purposes it is not necessary to compile a census of emerging Indian multinationals but rather to obtain a good sense of which firms, in which sectors, have become active internationally via exports and FDI. Combining data from the BCG and

⁴ Out of Rs. 9.09 billion in total property plant and equipment, only Rs. 2.02 billion was located overseas, all but 2% of it in North America and Europe (Dr. Reddy's Annual Report 2005-06, p. 201).

EPWRF lists, it appears that emerging Indian multinationals cluster into five broad groups. The first group consists of energy-related firms, particularly oil and gas, which are amongst the largest Indian firms and have made some of the largest individual foreign investments. However, these firms sell most of their output in the home market and their foreign investment, as a share of total assets, is not particularly high.

The other four clusters consist of firms in IT services, pharmaceuticals, engineered goods, and natural-resource-based manufacturing firms. These sectors account for more than half of BCG's and IBEF's lists. In terms of international revenues (i.e. exports from India plus overseas sales by foreign subsidiaries), some of them are very dependent on foreign markets, e.g., software, which probably ranks at the top, followed by pharmaceuticals, and engineered goods. In terms of the ratio of foreign assets to total assets, the ranking probably runs from pharmaceuticals to software to engineered goods, although individual firms rank higher or lower than their industry grouping. Finally, in terms of the share of employees located abroad, the ranking probably runs from IT, to pharmaceuticals, to engineered goods.

In this chapter, we focus on all but the energy-related firms. Unlike China, where more than two-thirds of the 44 firms on BCG's roster were state owned or state controlled, there was only one state-owned firm on BCG's Indian list—and that was in the natural resources category (ONGC). This sector is strategically important to the country, but analytically the other sectors are more interesting, because they are not sectors in which one would expect developing-country firms to emerge as international players. These were also the sectors in which India stood in contrast to China, despite broad similarities in the two countries' per-capita income and size.

Based on the list of emerging multinationals, India's revealed comparative advantage was not principally in natural-resource based industries, as in Brazil or Russia, nor in labor-intensive industries, as in Hong Kong (in the early years), Taiwan, or China, but in skill-intensive products and services (Kapur & Ramamurti, 2001). Even in manufacturing, the internationally competitive Indian firms made products with substantial embedded, skilled services, such as pharmaceuticals and engineered goods. Another feature of India's emerging MNEs was that they were almost all private firms, rather than state-owned enterprises, even though each of the sectors identified earlier had one or more state-owned players: in IT/software there was the Computer Maintenance Corporation, which was sold to Tata Consultancy Services; in pharmaceuticals there was the Indian Drugs & Pharmaceuticals Ltd., which subsequently went bankrupt; in engineered goods there were several prominent state-owned enterprises, including Bharat Heavy Electricals Ltd., Heavy Engineering Corporation, Bharat Heavy Plates & Vessels, and Bharat Earth Movers Ltd.; and in metal industries, such as steel and aluminum, there were state-owned firms such as the Steel Authority of India, which was not nearly as aggressive in expanding internationally as its private-sector counterparts, Tata Steel or Essar Steel.

In India, unlike China, state-owned enterprises played a peripheral role in internationalization, with the exception of the oil and gas sector. Apparently, state ownership inhibited internationalization, as Vernon (1979) predicted. The Indian government made no concerted attempt to build state-owned enterprises into global champions, even under a coalition federal government supported by two Communist parties. After more than four decades of government-led economic development, the Indian government was taking a surprisingly hands-off approach at the firm level. Indian firms were internationalizing in the

2000s largely in response to domestic and international market forces. This too stood in contrast to China, where the state was more deeply engaged at the microeconomic level.

Strategies for Internationalization

The internationalization of (state-owned) firms in oil and gas followed the path of vertical integration seen in Western firms in this industry. Given India's energy shortfall, and the booming economy, state-owned enterprises such as ONGC and IOC were scouring the world for energy supplies. The only thing different about how these firms internationalized, compared to their Western predecessors, was that as late-movers their choices were limited to countries that Western firms had avoided in the past—countries such as Kazakhstan and Sudan.

In this chapter, we focus instead on the more surprising and interesting cases of internationalization by Indian firms in sectors such as IT services, pharmaceuticals, metals, and engineered goods. In looking at these sectors, we take a different approach from the one taken by Lall (1983) or Wells (1983) in their landmark studies of Third World multinationals, which drew conclusions about the unique competitive advantages of these firms, as a group, compared to Western multinationals, and their motivations and methods of international expansion. The Lall-Wells approach yielded many useful insights that have informed subsequent research, but it did not tell us which firms had which competitive advantages, and whether particular competitive advantages were associated with particular methods of internationalization, such as the markets targeted or the modes of entry used.

It would appear from Lall's and Wells' studies that in the 1960s and 1970s MNEs from developing countries pursued minor variations of a single strategy, regardless of

country or industry. That strategy was built on competitive advantages such as low cost, small-scale production, products tailored to developing country needs, labor-intensive technologies, and the substitution of imported inputs with local inputs. These advantages were then exploited in other developing countries through exports, followed by FDI. Neither Lall (1983) nor Wells (1983) devoted much space to Cell 4 situations, even though Hong Kong was one of the five countries studied in depth in the Lall volume.⁵

Given the market-driven environment in which Indian firms operated in the 2000s, they seemed to enjoy more degrees of freedom and more routes to internationalization than similar firms in the 1970s. Consequently, in the 2000s, there was more than one way for an Indian firm to expand, and compete internationally. They were no longer limited to minor variations of the Lall-Wells strategy. Therefore, we present our findings as a menu of generic strategies for internationalization that Indian firms have recently pursued. At least three of the four generic strategies speak specifically to Cell 4 situations.

The generic strategies that follow should be viewed as Weberian ideal types. No firm may pursue them in the pure form as described, or do so to the exclusion of other generic strategies. We illustrate each generic strategy with examples of Indian companies that came closest to pursuing that strategy. A single firm can pursue more than one generic strategy, and firms in the same industry need not pursue the same internationalization strategy, which is why neither firm nor industry is an equally useful unit for organizing our findings. Many Indian firms are parts of larger business conglomerates, and it should come as no surprise that different business units of the same conglomerate often pursue different internationalization strategies, although this reality and its implications may not be fully

⁵ There is only a brief discussion in Wells (1983: 75) on Hong Kong firms that invested in industrialized countries to undertake the last stages of fabrication, to save on transport costs and tariffs, and to be closer to customers and local competitors.

recognized by the conglomerates themselves. We found in some cases that a single firm was simultaneously pursuing three generic strategies, resulting in predictable difficulties in implementation. Our hope is that by bringing the generic strategies into sharper focus, identifying the logic behind each one, and highlighting the organizational demands and strategic dilemmas each is likely to present, we will make it easier for managers to navigate the internationalization process.

The generic strategies described below apply to firms in the early stages of internationalization, when their competitive advantages are largely shaped by capabilities and assets built in the home market. Issues arising at this stage include how to leverage domestic competitive advantages in foreign markets, which stages of the value chain to focus on, which foreign markets and regions to enter, what modes of entry to use, and how rapidly to internationalize. As the firms become more international, their competitive advantages are likely to be less dependent on their home-country roots. Distinctions made here between the generic strategies are also likely to blur with increased internationalization, as these firms begin to look and act like established MNEs from the West. In due course, top management's attention will be consumed by many of the same issues that preoccupy established MNEs, such as how best to manage the multinational firm, how to transcend its national roots to become a polycentric organization, or how to balance demands for global integration and standardization with those for local responsiveness (see, for example, Rosenzweig and Singh, 1991).

The four generic strategies that follow are compared along several dimensions in Table 6.4.

Insert Table 6.4 about here

Generic Strategy #1: The Local Optimizer

This generic strategy bears the closest resemblance to the Lall-Wells type of strategy. It has three main features.

First, the ownership advantages of firms following this strategy result from optimizing products and processes for the special conditions of the Indian market. Specifically, this includes designing products that meet two unique conditions of emerging markets, namely, low-income consumers who prefer products that offer a different price-feature mix than high-income consumers in the rich countries, and under-developed hard and “soft” infrastructures that require unique product or service features. Classic examples of the latter include poor physical infrastructure, which requires products to be extra rugged, or poor after-sales-support, which requires products to be easy to maintain by relatively low-skilled technicians. In addition to optimizing products for the home market, the firm also optimizes production methods to lower costs or increase reliability in the difficult operating environment usually found in developing countries. Kobrin (1977) referred to this as “intermediate technology.” Among its other capabilities is project execution, which as Amsden (2001) and Amsden & Chu (2003) have noted allows firms to quickly and cost-effectively set up new capacity, often with technology obtained from diverse foreign sources.

Second, a firm that has successfully optimized products and processes as described above can often exploit those capabilities in other emerging markets. Therefore, it expands gradually into other emerging markets where local firms lack the requisite capabilities, using some combination of exports and local production. Western MNEs may be as capable technically as Indian firms at optimizing products and processes for the local market but rarely pursue that option fervently; they are more likely to tweak existing products and

processes for emerging markets than to optimize them for each national market. Note, however, that in decentralized MNEs it is quite possible that national subsidiaries operating in developing countries might match local firms in local optimization, one example being Unilever's subsidiary in India in the FMCG business (Prahalad, 2005: 171-239). But, on average, the best local firms are likely to "out-optimize" Western MNEs in the local market and thus build a set of capabilities and competitive advantages that can be exploited in other emerging markets with similar income levels or equally under-developed hard and soft infrastructures.

Third, a firm pursuing the local optimizer strategy is likely to be integrated across several functional areas, such as design, production and marketing/distribution., not only in the home market but also in the foreign markets it enters. It is likely to cover several stages of the value chain and to own the brands under which its products are sold. In individual foreign markets the scope of the value chain may be narrower than at home, e.g. scale-sensitive production and R&D may be concentrated at home, while final-stage production or marketing, distribution, and after-sales service are replicated in foreign markets.

This generic strategy is fundamentally similar to the Lall-Wells strategy but not identical to it, because the Indian policy environment in the 2000s was quite different from that in the 1960s and 1970s. Some of the local optimization tactics of the earlier period were much less important in the 2000s. Substituting local inputs for imported inputs was less important in an era of freer trade, for example, as was the ability to lobby government for favors and special privileges. But other types of local optimization were as relevant in the 2000s as in the 1970s, e.g. optimizing the price-to-feature ratio or making products that were rugged or easy to maintain in the emerging market environment.

Not all emerging markets have firms capable of optimizing products and processes in this manner. This requires sufficient absorptive capacity to master technologies purchased from advanced countries and a degree of innovation and production-engineering capability to optimize designs and processes. Most Indian firms built these capabilities during the era of import-substituting industrialization, often starting with licensed technology. The prominent Indian pharmaceutical firms built their capabilities in the decades when India had a weak IP regime, which made it easier for them to copy Western drugs before they came off patent in the US or Europe; similarly, most leading Indian IT firms got their start soon after IBM was encouraged to leave the country in the mid-1970s.

Before expanding abroad in the 2000s, these firms had to reinvent themselves by reengineering production methods, upgrading quality, developing new suppliers, and improving productivity—mainly to survive the anticipated onslaught of new foreign competition in the Indian market. By 2007, sixteen years after India began opening up, it was apparent that the best Indian firms were not only holding their own in the home market in the post-reform era, they had become strong enough to venture into foreign markets.

Although firms following the local optimizer strategy generally expand into other emerging markets (Cell 3 in Figure 6.1), occasionally there may also be opportunities for them to exploit their capabilities in specialized niches in the rich countries, resulting in some up-market FDI (Cell 4), though this is seldom easy. One of the appeals of this internationalization strategy is that it represents continuity in what firms were doing in the pre-reform period; one of its frustrating aspects is that firms find it difficult to extend this strategy into the much larger (and therefore more attractive) markets of advanced economies in which they could potentially leverage their low-cost Indian assets and capabilities.

Examples

Mahindra & Mahindra (M&M) is a \$3 billion diversified group whose most important products are automotive vehicles (50%) and tractors (25%). Its success in the mid-2000s with an SUV called the Scorpio illustrates the local optimizer strategy. On commencing jeep production in the early 1950s, M&M entered into technical collaborations and joint ventures with several Western European, and Korean firms for a broad range of vehicles and components (see Khanna, Lal, and Manocaran, 2005, p. 6). As these agreements expired, M&M absorbed their technologies and sold products in India under its own brand names. This accumulated capability allowed M&M in 1997 to design the Scorpio from scratch, under the leadership of a senior designer lured away from General Motors (USA). It was a stylish SUV targeted at India's middle- to upper-income urban consumer. It leveraged Mahindra's reputation for making sturdy vehicles, such as the famous Jeep, which were ideal for India's rugged roads. Yet, the petrol version was designed to the tougher Euro III emission standards rather than the Euro II standards applicable in urban India, to facilitate exports in the future. M&M kept the design costs low by farming out development work to its Indian suppliers and by leveraging its in-house low-cost engineering talent, which is estimated to have cost one-twentieth of what it would have cost in Europe or the US. It reportedly also turned more readily to low-cost, less famous Asian suppliers in countries like Korea, who were as good as but cheaper than suppliers preferred by Western auto companies. Mahindra built one-third as many prototypes as Western MNEs would have to test the Scorpio, because "there was a law of diminishing returns—we may have achieved 97-98% of their [Western MNEs'] robustness at one-third the cost" (Khanna et al 2006: 10). Mahindra's

capital outlay per unit of capacity was also 40-50 percent lower than Ford's comparable Indian plant, despite being less than half the size.

On the whole, Mahindra was able to coordinate the design of a new vehicle at substantially lower cost than Western competitors, despite operating on a much smaller scale. This capability to design and manufacture products at a fraction of the cost of doing the same in the West, despite volumes that are substantially lower is shaping up to be an important competitive advantage of many Indian firms.

When Mahindra decided to follow Scorpio's success in the home market with forays abroad, it mainly targeted other emerging markets. Initial sales were in Sri Lanka, Nepal, and Bangladesh, followed by Iran and Kuwait in the Middle East, and Uruguay in South America (because "they had road conditions that were comparable to India," according to the head of the automotive group (Khanna et al 2005: 12). In 2004, Mahindra made a big push into South Africa, which was to be the gateway to the rest of Africa, creating a subsidiary in 2004 to undertake final assembly. The company's 2005-06 Annual Report explained the export strategy as follows:

"Your company has intensified its efforts to identify niche markets for its automotive products throughout the world, *especially geographic areas that have similar sales, distribution, and marketing conditions as India.*" (M&M Annual Report 2005-06, p. 6; emphasis added)

As of 2007, Scorpio's exports appeared to be almost entirely into other emerging markets.⁶ Modest sales were recorded in Europe. In November 2006, the company announced plans to sell an upgraded Scorpio, and a pick-up version, in the US market, and

⁶ M&M's Annual Report does not report geographic breakdown of sales for each business segment. It only reports geographic breakdown of sales across all businesses, which indicated that in 2005-06 the M&M group derived 18.8% of its sales from exports. Separately, the CEO reports that the company sold 5,534 vehicles in overseas markets, or about 4.3% of total vehicle production. (M&M Annual Report 2005-06, p. 6)

by June 2007 had given an American company exclusive rights for U.S. distribution. The company hoped to sell a total of 10,000 units by 2010. (Reed, 2007). It will be instructive to follow Mahindra's experience with trying to break into the US market—and thus break out of the confines of the local-optimizer strategy. The contrast with tractors, M&M's other line of business, would also be interesting, inasmuch as M&M was the leader in that segment in India.

Mahindra's experience illustrates the competitive advantages, internationalization paths, and the strategic dilemmas faced by firms following the local-optimizer strategy. In the 2000s, that strategy entailed more outsourcing and importing of ideas than was typically the case in the 1960s and 1970s. M&M also internationalized at a much faster rate in the 2000s, compared to the earlier period; the company had entered only two foreign markets by 1982—Iran and Greece (Lall, p.43).

At its core, however, M&M's strategy was similar in both waves of outward FDI, namely, to develop products and processes optimized for the Indian market and then leverage them in other, less industrialized, emerging markets. Internationalization began with “down market” exports and FDI, following a pattern consistent with the product cycle hypothesis. Firms like M&M may discover that the market is much larger in the rich countries but find that products and processes optimized for India are not optimal for advanced economies, especially complex, differentiated products like automobiles, as contrasted with standardized, commodity-like products, such as steel or cement.

In the future, many more Indian firms will adopt the local-optimizer strategy for internationalization. Thus far, it has been more profitable for many Indian firms to focus on the booming Indian market than to pursue international opportunities, but this is bound to

change. Among firms with untapped internationalization potential are those that cater to “bottom of the pyramid” low-income consumers, such as Narayana Hridayalaya (pediatric open heart surgery), Aravind Eye Hospital (cataract operations), or Jaipur Foot (prosthetics) (Prahalad 2005). Others include firms in “cultural products,” such as Bollywood movie producers, media firms like Zee TV, entertainment content producers, such as Balaji Telefilms, or ethnic food manufacturers like Kohinoor Foods. In the latter cases, exports and FDI will be directed at countries with a cultural affinity for Indian products (South Asia, Middle East, parts of Africa and Latin America) or at the Non-Resident Indian (NRI) segment in these and other countries.

Generic Strategy #2: Low-Cost Partner

This generic strategy leverages India’s low-cost advantage, particularly in labor, to serve the needs of firms and consumers in rich countries. The most notable Indian examples are in the field of services, such as information technology (IT) support, software development, R&D outsourcing, call center operations, and many other forms of business process outsourcing (BPO) and knowledge process outsourcing (KPO). This strategy differs significantly from the local-optimizer strategy.

First, the competitive advantage of firms pursuing this strategy is not based on optimizing products or processes for the Indian market but on helping overseas customers optimize their products or processes for *their* global operations. Indian firms are better able to exploit India’s location advantages in providing these services, because their capabilities at managing in the Indian environment are superior to that of Western firms, particularly in managing human resources, handling government relations, or coping with unreliable

suppliers and under-developed hard and soft infrastructure. However, these advantages will weaken over time, as India's hard and soft infrastructure improves and as Western firms gain experience operating in India. Therefore, the more successful low-cost partners no longer depend for their competitive advantage solely on India's quirks or location advantages (which, in theory, are available equally for foreign firms to exploit), but have used their head start to build new firm-specific advantages, such as economies of scale and scope, sophisticated project management skills, and, increasingly, reputation and brands. They also leverage various forms of late-mover advantages; for instance, they started with a clean slate, organizationally speaking, compared to their foreign competitors who were saddled with legacy costs and could not easily redeploy resources or streamline organizational culture and business processes.

Second, the internationalization path of these firms is quite different from that of local-optimizers. Whereas other emerging economies are the main target markets for local optimizers, low-cost partners target their services at advanced countries. Exports to these countries are followed by FDI, to beef up onsite customer support and integration, or to move up the value curve by acquiring local firms with advanced skills or complementary assets, such as customer relations and brands.

These firms also invest in other emerging economies, but not so much to serve those markets as to broaden the number of low-cost countries from which they can serve rich-country customers.

Third, unlike local optimizers, the low-cost partner specializes in a few specific stages of the value chain. It is an OEM supplier, working behind the scenes to help its overseas

customers succeed, not a functionally integrated firm that designs, produces, sells, and distributes products under its own brands.

The last point is one of the frustrating aspects of the low-cost partner strategy. The firm is unlikely to have products carrying its own brand and must be content being a behind-the-scenes partner. On the other hand, the low-cost partner can be more profitable than its customers, who must make risky investments in R&D, branding, and distribution.

The low-cost partner strategy is similar to what many Asian firms did in the past to become multinational enterprises, e.g., Sony, Samsung, Acer, Tatung, etc. They too began as suppliers to American or European firms, focusing on few stages of the value chain in which their home country had a cost advantage. Most of those firms focused on manufacturing, whereas most Indian firms pursuing the low-cost partner strategy have typically focused on services, although this will change as India gains competitiveness in manufacturing.⁷ As costs rose at home, the Asian firms shifted some production to other low cost countries, such as Thailand, Malaysia, Indonesia, or, since the mid-1980s, to China and Vietnam. Meanwhile, they also worked to extend the value chain and move up the value curve, with some of them eventually covering enough stages to design and sell products under their own brands. A similar progression may eventually occur with Indian firms pursuing the low-cost partner strategy, and when they do, they will face the same challenges that firms like Acer faced in moving up the value curve (Mathew, 2002: 55-82).

Examples

⁷ By 2007, manufacturing firms like Sundaram Fastener and Bharat Forge were already following the low-cost partner strategy successfully, and exports of engineered goods from India grew by 29% in the first half of 2006-07, compared to the same period in the year before (Government of India, Ministry of Commerce, 2007)

India's software services companies, like Infosys and Wipro, are perhaps the best known examples of companies following the low-cost partner strategy.⁸ These two firms began with quite different goals, e.g. in the 1970s and 1980s Wipro was much more focused on computer hardware than software, and more on the home market than exports—i.e. it was a local optimizer—but gradually the export of software services became the most important business for both companies. Initially, both firms engaged in body-shopping, that is, sending low-cost Indian programmers on short stints to work in the US or Europe on customer premises—a crude form of labor market arbitrage. Both availed themselves of opportunities like the Y2K crisis and Euro-conversion to build international revenues and customer relationships. Subsequently, more and more of the work was moved to India, where costs were even lower. As costs in India rose, and competition became fiercer, Infosys and Wipro moved up the value curve, offering more sophisticated services, including a “global delivery model,” in which costs were optimized across onsite and offsite locations in India as well as third countries.

The competitive advantage of these firms began with India's low-cost programming talent, but evolved to include significant firm-specific scale and scope economies and late-mover advantages. Scale economies came from spreading fixed costs across a larger number of employees than their customers required for their limited internal needs. Scope economies arose from serving firms in many industries and countries, allowing for ups and downs to be smoothed out so that staff utilization was higher and making it affordable to house highly specialized skills.

⁸ There is a vast literature on the Indian software sector, including, notably, Arora and Gamberdella (2005), which includes an excellent chapter on India by Athreye, the original work by Heeks (1996), as well as Bagchi (1999) and Arora et al (2001)

But both firms also enjoyed late-mover advantages relative to their Western competitors, because they began with a clean slate and from the beginning could build their staff in low-cost India, whereas firms like IBM, Accenture, or EDS entered the offshoring revolutions with large staff and legacy costs in high-cost countries. N.R. Narayana Murthy, one of the founders of Infosys, estimated that some US competitors were burdened with as much as 16 percentage points of extra costs on SG&A alone (Interview with authors, April 2007). The Indian firms also created processes that ensured the highest quality and reliability of software development, earning the highest rating from Carnegie Mellon University's Software Engineering Institute on their Capability and Maturity Model (CMM). By the late 1990s, there were more CMM Level-5 (the highest CMM level) certified firms in India than in the US; apparently it was harder for established firms that were not as focused on software development as the Indian companies to meet SEI's high standards. Given India's poor image and reputation in the 1980s and 1990s, SEI certification was far more important for Indian companies as a way of signaling quality than it was for US firms with strong brands and connections to *Fortune 500* companies (Ramamurti 2004).

Infosys and Wipro also enjoyed important advantages relative to Western rivals in operating in the Indian environment. A great deal has been written about the ability of Indian software firms to attract and retain talent on a large scale, which by 2007 meant adding about 1,000 new employees every month. Accenture, EDS, and IBM only began to ramp up their Indian headcount in the 2000s, by which time the Indian firms had built a very strong brand image in the labor market. Accenture and EDS may have had stronger brands amongst US customers, but not so amongst potential Indian employees. As one senior executive heading the Indian IT subsidiary for a US company remarked, "We devote as much effort building

our brand in the [Indian] labor market as we normally do in building our brand with customers.”

Infosys and Wipro also enjoyed advantages in dealing with the government, for instance in complying with regulations or obtaining permits and approvals. They were better able to find a way around India’s decrepit infrastructure, which required firms like Infosys and Wipro to supply public services that in the West would be outsourced—services such as back-up water and power supply, overnight housing, or transportation for employees.

The second feature of the low-cost partner strategy is that most of their overseas investments by firms like Infosys and Wipro went to advanced countries or regions, such as the US and the EU. Besides opening offices in these locations (and in Japan), the firms acquired small to medium-sized firms in the West through which they sought access to higher end work, which could be progressively shifted to low-cost India. By 2007, both firms had also made some investments in other emerging economies like China and the Philippines but the motivation here was to develop additional low-cost production sites rather than to penetrate their domestic markets (with the exception of China). Also interesting is that none of the leading Indian software firms attempted to acquire or take over a leading US competitor, even though their market capitalization was high enough to make this possible. Wipro’s CEO Azim Premji dismissed this option by asking, “Why buy yesterday?”

Finally, Infosys and Wipro both focused only on particular stages of the value chain, leaving it to their customers to make final products for sale to end users under proprietary brand names. Unlike OEM suppliers in manufacturing, they supplied software “components” or back-office support to their customers, rather than tangible products or subassemblies.

CIOs and CTOs of *Fortune 1000* companies were their target market, the former for IT-related services and the latter for R&D-related services.

Many other Indian firms are internationalizing through the low-cost partner strategy, including dozens of other software firms. Beyond software, there are many firms in the BPO space, particularly in the call center business (e.g. WNS, 24-7 Customer), in back-office support services, such as accounting or legal assistance, or in document preparation (e.g., Tracmail, OfficeTiger) that play the low-cost partner game. A host of companies provide help with medical transcription (Acusis), clinical trials and pharmaceutical contract research (GVK Biosciences, Nicholas Piramal) and manufacturing (Emcure Pharmaceuticals), financial research, management consulting research (Evaluserve), and so on.

Many, though not all, of the firms following this strategy are post-1991 start-ups, often started by returning non-resident Indians or by senior executives who quit existing firms to pursue a purely cost-arbitrage strategy (GVK Biosciences). Several were “born global” firms, in the sense that they were born with a sales and marketing base in rich-country markets, usually the US, and a production base in India (e.g. Tracmail, OfficeTiger, and Cognizant, the latter being technically a US incorporated company with operations in India rather than the other way around). Others, like Infosys and Wipro, were born in the pre-liberalization era but adapted their strategies quickly and successfully to the new policy environment. Wipro, for instance, discovered it was much more profitable to be a low-cost partner to foreign firms than to serve its historical markets at home (computer hardware and software).

In each IT-enabled services (ITES) area, at the low end, smaller firms often competed largely on price; these firms were unlikely to earn high returns or to have sustainable

competitive advantages. But in every category, other firms worked hard to move up the value curve and to shift the foundation of their competitive advantage from generic India-based advantages that were available to all players to firm-specific assets and capabilities that were harder for competitors to replicate.

The more sophisticated firms in each segment, like Infosys and Wipro 1) derived the bulk of their revenues from exports rather than sales in the domestic market; 2) obtained most of their exports from customers in the advanced countries; 3) specialized in a few stages of the value chain that notably did not include branding; and 4) invested modest amounts in front-end offices or in small acquisitions in the advanced countries (Cell 4 situations) to serve customers more effectively and to move up the value curve. On all these points, the low-cost partner was almost the opposite of the local optimizer, which derived most of its revenues from domestic sales, directed most of its exports to emerging markets, covered many stages of the value chain, including branding, and invested in production and/or distribution in other emerging markets.

Generic Strategy #3: The Global (or Regional) Consolidator

The global consolidator, as the name indicates, is an Indian firm that consolidates an industry globally, often though not always beginning with the home market, followed by horizontal acquisitions in other emerging markets, and culminating in acquisitions in rich-country markets. Such a firm encompasses both Cells 3 and 4 in Figure 6.1. Some of the best examples of this strategy are non-Indian companies like Cemex (Mexico), Lenovo (China), and South African Breweries. Perhaps the best Indian example is Arcelor-Mittal, if, because of Lakshmi Mittal's national origin, one can count it as Indian. At any rate, Arcelor-Mittal

seems to have inspired Indian companies in steel and other metals industries (e.g. aluminum, copper) to embark on a similar strategy, although Mittal Steel internationalized at a slower pace, and acquired assets at lower prices, than did Indian companies in 2007.

The viability of the global consolidator strategy is shown by the high valuation of companies like Cemex and Arcelor-Mittal, but the sustainability of this strategy was an open issue in 2007 for companies like TCL, Lenovo, Hindalco, or Tata Steel that embarked on the strategy much later. Other examples of acquisitions by global consolidators included the \$12 billion purchase in May 2007 of GE's plastics business by Saudi Arabia Basic Industries Corporation (SABIC), or the \$1.2 billion acquisition of Swift & Co., an American meat processor, by Latin America's biggest meat producer, J&F Participacoes SA of Brazil, to create the world's largest beef and pork processor. But, in 2007, the global consolidator strategy was in the early stages of execution in India, unlike the first two generic strategies, and our conclusions about this strategy in the Indian context are therefore more tentative.

The global consolidator strategy builds on the fact that in some industries growth had matured in the rich countries but was booming in emerging markets like India. The competitive advantage of Indian firms arose partly from this difference in market momentum. Faster growth required the addition of new capacity, which could be undertaken with the latest technology and the largest plant-sizes then on the market. Equipment could be procured at bargain prices, because stagnant demand in the advanced countries made suppliers desperate to win business in booming emerging markets. Indian firms that built up production and project execution skills in the era of import-substituting industrialization used this period to consolidate their technical skills and production efficiencies. The threat of greater competition from foreign suppliers and competitors, which Indian firms took quite

seriously, forced them to upgrade existing plants and operations. They cut costs, improved quality, initiated Six Sigma programs, ramped up labor productivity, and paid greater attention to marketing and customer service. In the process, some firms discovered that they had in fact become quite competitive internationally. As India's economic growth accelerated to 8-9% in the middle of the first decade of the 2000s, and as world prices rose for many commodities, the profit margins and cash flow of Indian firms making steel, copper, and aluminum, among others, rose sharply. The larger firms in these businesses then had the financial muscle to shop abroad for other companies.

Two country-specific factors also helped. The first was the size of the Indian market. Even if the country was poor, its absolute demand for certain products was high, even in relation to many advanced economies, especially after growth accelerated. This gave local firms a scale advantage globally. Second, India enjoyed a low-cost advantage, because of its cheap labor and, in some industries, cheap raw materials (e.g. iron and steel). Together, these factors provided a tailwind for Indian firms internationalizing through the global consolidator strategy.

In terms of markets, the global consolidator, like the local-optimizer, is likely to find that its production and project execution capabilities, and its experience of working in the difficult Indian environment, are transferable to other emerging economies. The firm may also make upstream investments to secure raw materials to meet booming domestic demand; this too is likely to occur in emerging economies rather than advanced economies.

The global consolidator's competitive advantages as described up to this point overlap considerably with those of the local optimizer. The distinguishing feature of the global consolidator, however, is that its competitive advantages can be leveraged in both

emerging economies *and* advanced countries, resulting in the potential for up-market exports and FDI (Cell 4). Why the difference?

We believe that the answer lies largely in industry-specific factors, specifically, in the degree to which products and production processes can be standardized across countries, regardless of per-capita income, wages, or cultural differences. The local optimizer is limited by the fact that its products and services do not easily migrate from low-income to high-income countries. On the other hand, many firms pursuing the global consolidator strategy make products, e.g. aluminum, copper, and steel (or cement, chemicals, plastics, etc.), and use production processes (e.g. continuous production), that are relatively invariant across countries. Another cluster makes products that are less standardized across countries, e.g. beverages, consumer durables, auto parts, or finished automobiles; in these cases, the global consolidator strategy may be harder to pull off.

There is another part to this strategy that must be recognized, namely the plight of firms in these industries in the advanced countries. Whereas emerging economy firms were booming, expanding, modernizing, and gaining technical and financial muscle, their counterparts in the advanced economies were often staid old firms, saddled with legacy costs, old technologies, under-sized plants, excess capacity, weaker finances, and strained labor-management or union-management relations. Whereas Indian firms panicked and restructured when the country opened up, few firms in the advanced economies worried that some day they could be targeted for takeover by an upstart emerging-market firm. As a result, by the mid-2000s, the more aggressive firms in large emerging markets, such as India, were starting to acquire vulnerable firms in their industries in Europe and North America, despite the latter's advanced technological capabilities and strong home market positions. To

be sure, a farsighted Western firm could have acquired firms in its industry in emerging markets before those firms became strong enough to threaten the opposite. However, few Western firms made preemptive strikes of this sort in India. On the contrary, multinationals like Alcan divested stakes in ventures in India, thereby strengthening the hand of Indian firms in those industries. Even if these firms had tried to acquire Indian counterparts, they might have found the going difficult, because the firms in question were state-owned enterprises or family-controlled firms and therefore not easily acquired, even if they were listed on the stock exchange.

Examples

Several Indian firms, including Bharat Forge, Tata Steel, and Hindalco, an aluminum manufacturing firm belonging to the Aditya Birla Group, illustrate the global consolidator strategy. After India opened up, each of these firms established, or consolidated into, a strong position in the Indian market, then acquired or set up new facilities in other emerging markets, in Europe, or in North America, to become international players. As of mid-2007, Tata Steel's \$11 billion acquisition of the Anglo-Dutch steelmaker, Corus Group, and Hindalco's \$6 billion acquisition of Canada's Novelis, a multinational manufacturer of rolled aluminum products, were the two largest overseas acquisitions by Indian firms. Indeed, firms following the global consolidator strategy accounted for the lion's share of overseas FDI by Indian firms, and most of their overseas investments were of the Cell-4 type (see Figure 6.1).

Hindalco's evolution illustrates how the global consolidator strategy plays out. The company was the flagship enterprise in the Aditya Birla Group, whose worldwide turnover in 2006-07 of \$24 billion came largely from industrial commodities, such as aluminum, copper, and cement. The firm started as a small private aluminum maker in 1958 with one plant with

a capacity of 20,000 metric tons (MT) per year. Like many other Indian firms, its growth was lethargic until India liberalized in 1991. Then, recognizing that competition was likely to become fierce, the company sought to scale up domestic operations and get costs in line with international benchmarks through process improvements and scaled-up production. It embarked on a program of greenfield expansion, domestic acquisitions, and forward integration into rolled and fabricated products, leading eventually to international investments and acquisitions. The company expanded its original aluminum plant ten-fold in 1998, and acquired a controlling share in Indian Aluminium Company, a joint venture with Alcan, in 2000. Four years later, Indal merged with Hindalco. In 2005, a \$2.5 billion greenfield plant was launched in the bauxite-rich state of Orissa for alumina refining and smelting, using captive power generation. In 2006, another greenfield aluminum smelter project was announced in Madhya Pradesh. By 2007, Hindalco was the only company in the world that was simultaneously working on four greenfield aluminum projects that would collectively take its total capacity to over 1 million tons of aluminum per year.

The new plants used the latest technologies and one of them had a smelter capacity of 325,000 MT per year, making it one of the largest in the world. Even though Hindalco's total aluminum capacity was still only one-third or one-fourth that of giants like Alcoa or Alcan, its unit costs were reportedly in the top quartile of low-cost producers.

The firm's international competitive advantage appeared to rest on three pillars. First, Hindalco benefited from being vertically integrated, from ore to aluminum products. India had excellent bauxite resources, while abundant coal allowed for the production of captive power, which accounted for 40 percent of the cost of production. In this regard, Indian aluminum firms apparently had an edge over Chinese producers, who relied at the margin on

imported bauxite. Second, Hindalco enjoyed an international cost advantage not only because Indian labor was cheap but because its technological capabilities allowed it to minimize capital and operating expenses in ways that Western—or even Chinese—firms usually did, or could, not. Indian firms, unlike Chinese firms, financed their expansions with internal resources or private capital rather than from the government or from state-owned banks. According to Hindalco's CEO, Debu Bhattacharya, an Indian plant could be built at a capital cost that was 40-50 percent lower than similar plants in the developed world, and possibly at lower costs than plants even in China—a significant advantage in a capital-intensive industry. Similar advantages, though less pronounced, were reportedly also enjoyed in operating expenses (authors' interview, June 2007). Third, India's growing demand and large market potential gave tailwind to its expansion plans. While demand grew at 2-3 percent in the industrialized countries, it grew at 6-8 percent in India; yet, per capita consumption of aluminum in India was still only one-third of China's and one-twentieth America's, suggesting ample room for further growth. As the largest private integrated aluminum producer in Asia, not just India, Hindalco was well positioned to profit from India's growth. Between 2001-06, Hindalco's sales and profits grew at more than 30 percent per year. By 2003-04, the Aditya Birla group was generating free cash flow of \$600-700 million per year, and had reportedly built a substantial war chest for future acquisitions and investments (Surendar, 2007).

It was against this background that, in 2007, Hindalco acquired Novelis, a downstream unit spun off from Alcan in 2005 that made rolled aluminum products, such as aluminum foil and cans. Novelis had sales of \$9.8 billion, almost 13,000 employees, and 33 facilities in 11 countries, including Canada, the US, Germany, and Brazil. It had a 19 percent

worldwide share in aluminum rolled products and supplied cans to blue-chip companies like Coca-Cola on four continents. In its lines of business, Novelis was #1 in Europe, Asia, and South America, and #2 in North America (Novelis, 2007). The acquisition was met with skepticism by financial analysts, because Novelis was losing money at the time, Hindalco had paid a premium of 49.1 percent relative to Novelis's stock price before takeover rumors surfaced, and Hindalco had been forced to borrow to finance its largest-ever acquisition (Reuters, 2007). The company's stock fell almost 14 percent when the acquisition was announced. Company officials viewed Novelis' losses as temporary, because unprofitable fixed-price contracts signed before the spin-off were set to expire by 2010. Further, some synergies were anticipated, because Hindalco would be able to supply low-cost aluminum to Novelis, and Novelis' expertise in aluminum can manufacturing could be transferred profitably to India, where the packaging industry was still in its infancy. Hindalco might also be able to improve Novelis' operations and streamline its costs, but Hindalco played down these prospects, possibly to assuage fears that the takeover might result in job losses.

The acquisition put Hindalco among the top 10-12 firms in the industry worldwide, just as the Corus acquisition put Tata Steel among the world's top-5 steel companies. In May 2007, Hindalco was rumored to be bidding for Alcan, when the latter was facing a hostile takeover attempt by Alcoa. Eventually, Alcoa was acquired by Rio Tinto of Australia.

The logic of the global consolidator strategy is also illustrated by a Chinese paper company, privately-owned Nine Dragons Paper, which grew from almost nothing into the world's third most valuable paper company in just 12 years (*Economist*, June 9, 2007, p. 76). Although Nine Dragons had not internationalized like the Indian steel or aluminum companies, it illustrates perfectly how a potential global-consolidator gathers momentum by

aggressively consolidating and expanding capacity to meet the insatiable demand for products in China's large, booming home market. By 2008, Nine Dragons' capacity was expected to exceed International Paper's, making it the world's largest paper company. Moreover, with a net profit margin of 20%, possibly the highest in the world, Nine Dragons was perfectly placed to gobble up floundering paper companies around the world, if and when demand leveled off in China and the firm turned its attention to international expansion.

Generic Strategy #4: The Global First-Mover

The global first-mover, as the name suggests, is a firm that creates a global business in a new industry or segment. Its first-mover status could result from spotting a new business opportunity before other firms, or from pursuing a novel business model in an existing industry, or even from technological innovation. The firm adopting this strategy is innovative either in what it does, or how it does it, relative to competitors both at home and abroad.

At first glance, it may be hard to picture firms from emerging economies as global first-movers. Yet, such examples do exist, one of which is described below. Although we cannot say how common this case is compared to other generic strategies, it is qualitatively different from those strategies and is potentially a lucrative route to internationalization. Once again, this strategy entails FDI by emerging market firms in advanced countries (Cell 4 in Figure 6.1) rather than just other emerging economies (Cell 3). We anticipate that in the future more firms from emerging markets, especially from large economies like China and India, will internationalize as global first-movers.

The global first-mover strategy is founded on three country-specific strengths: 1) a large and rapidly growing home market in the relevant industry, which serves as a springboard for internationalization; 2) the technical capability to absorb, acquire, integrate, and improve borrowed technologies, which allows the firm to assemble the essential business elements globally; and 3) India's low-cost advantage in selected operations, which gives its firms a leg-up against foreign competitors whose value chain may be concentrated in high-cost countries. While the global-consolidator strategy is also founded on some of these same country-specific advantages and industry-specific advantages, such as globally standardized products and production processes, the key difference is that in this case the industry is growing in *both* developed and emerging markets, not just in the latter. Here, the focal firm is not a late-mover somehow making good (as in the case of the generic strategies discussed earlier) but among the first-movers in an emerging global business.

The end result in this case, as in the global consolidator case, is a firm with a global footprint, a functionally integrated but globally dispersed value chain, and its own global brands and distribution.

Example

Suzlon Energy, an Indian wind-power company, was created by Tulsi Tanti, a textile manufacturer who invested in a wind-turbine generator in 1990 to augment the unreliable electricity supplied by the state-owned utility. He was so impressed with wind power's potential that he divested the textile business and put all his resources into starting a wind-power company in 1995, figuring it must have a bright future in India. Based on his own experience, he also decided that Suzlon should offer Indian customers a "total solution," i.e.,

take care of everything from site evaluation, equipment supply, installation, and commissioning, to operations and maintenance, and project financing. He licensed technology for producing 0.35MW wind-turbine generators (WTGs) from a German company (Sudwind) and set up a manufacturing operation in Pune, India.

By its fourth year, Suzlon had absorbed Sudwind's technology and obtained rights to sell that product all over Asia. Subsequently, Suzlon developed its own designs for larger WTGs up to 2MW in capacity. In 2001, it set up an R&D unit in the Netherlands and a year later bought Sudwind, which was in financial distress, to create an R&D base in Germany. By this time, the company seems to have become well established within India, and was looking for orders abroad. A private equity placement in 2004, followed by a very successful IPO in India in 2005, fueled its internationalization. A string of larger acquisitions followed: in 2006, Suzlon bought Belgian gear-box manufacturer Hansen for 465 million euros, and in May 2007, after an extended bidding war, Suzlon acquired the German company, REPower, for 1.34 billion euros, which gave it a stronger position in Europe and access to technology for 5MW WTGs, including offshore wind-power generation. In 2007, Suzlon was setting up a rotor blade manufacturing operation in the US, an integrated manufacturing operation in China, and three more component manufacturing plants in India. Suzlon shifted its global management headquarters to Amsterdam, and Tanti hired an American executive from GE to serve as Global CEO.

In 2006, Suzlon sales were \$867 million, net income was \$172 million (19.8% of sales), return on net worth was 42%, and its market capitalization was about \$8 billion. Tanti, whose family owned 70% of Suzlon, was instantly catapulted onto *Forbes'* list of the world's billionaires (Forbes, 2007). Suzlon's global market share of 9% (including REPower) was

much lower than industry leader Vestas' (Denmark) share of 28%, but only four percentage points lower than the #2 firm, General Electric. The other two firms in the Top-5 were from Germany and Spain. (Vestas was only eight years older than Suzlon.) Shortly after the REPower acquisition, Tanti told a reporter Suzlon could well become the #1 firm in the industry by 2010 or 2011 (Moneycontrol.com, 2007).

Whether or not Tanti is eventually proved right, in just one decade, Suzlon had come from nowhere to become the world's #4 firm in the global wind-energy business, with the distinct possibility of rising further in the rankings. Should we be surprised by this story?

One thing we should *not* be surprised by is the fact that an Indian firm went after the wind energy business; Suzlon's entry was stimulated by local demand for wind power—indeed by Tanti's own need for, and experience with, using it. The Suzlon story is entirely consistent with the view that entrepreneurs innovate in response to problems and opportunities in their immediate surroundings.

Also, it should not surprise us that Suzlon benefited enormously from India's large market for wind power: in 2006, India was the third largest market in the world, with annual demand of 1,840 MW, compared to 2,454 MW in the largest market (USA), 2,194 MW in the second largest market (Germany), and 1,145 MW in China (YES Bank, 2007: 8). Given India's chronic power shortages, high electricity prices for industrial users, and vast areas without public electricity supply, wind energy had understandable appeal. The country's over-reliance on domestic coal and imported oil and gas prompted the government to subsidize wind energy, and several state governments stipulated targets for renewable-energy use by their electricity companies. For all these reasons, Suzlon was able to build in India the world's largest wind farm (1000 MW capacity). Furthermore, Suzlon was the #1 firm in

India for eight years in a row, with a 50% market share and high profit margins. Winning within India was the critical first step in Suzlon's evolution. The other leading wind energy firms were also from countries with large home demand, such as Denmark, which met 20% of its energy needs from wind power (compared to the global average of 1%), as well as Germany, Spain, and the United States.

Both India and China were among the top five markets for wind power. It should no longer surprise us that for certain products, large emerging economies, particularly China and India, have domestic demand that rivals the domestic demand of advanced countries. This was true in the 2000s in low-tech products, such as cement, steel, oil, and coal; it was also true of some high-tech products, such as cell phones, telecommunications gear, and power plant equipment. The Suzlon experience shows how demand on that scale can propel emerging-market firms on to the global stage.

But should we be surprised that Suzlon has built such a strong position in a technology-intensive industry? Not quite, because the industry is in fact not very high-tech, as evidenced by Vestas' R&D spending of only 3% of sales (Vestas Financial Report, May 2007: 11) and Suzlon's even lower R&D spending (Suzlon Annual Report 2005-06: 88). Suzlon made no claim of having developed in India state-of-the-art technology for any subsystem of the WTG, be it rotors, turbines, generators, gear boxes, or controls. What it *had* done successfully was get hold of state-of-the-art technologies in these areas through acquisitions and occasional greenfield R&D centers in Western Europe. Suzlon did not invent anything new, but it combined existing technologies and capabilities in creative ways to serve an emerging global market. Within India, it seems to have developed larger WTGs (up to 2 MW capacity) after only four years of making much smaller WTGs based on

imported designs. This is quite remarkable—but it is in keeping with a capability other Indian companies have demonstrated, namely, a strong capacity for absorbing, adapting, and extending imported technology through internal efforts (seen also, for instance, in the local-optimizer and global consolidator strategies). In the longer term, it is quite possible that Suzlon may develop improved designs based on European know-how and lower-cost Indian scientific and engineering talent.

One of more surprising elements of the Suzlon case is Tanti's audacity in thinking that a tiny Indian firm could become a global leader in wind power, and then achieving that goal by aggressively acquiring foreign technologies and customers. In the process he created a company that optimized the global value chain in ways that its Western counterparts did not: Suzlon leveraged the technological know-how of leading European nations, coupled with low-cost manufacturing and engineering in China and India; it targeted all the major markets of the world, including Europe, the US, China, and India; and it leveraged the Indian stock market, Indian private equity, and foreign banks to finance growth.

In that regard, Suzlon was ahead of competitors like Vestas and Gamesa (Spain), which were more Europe-centric in their outlook. Europe, after all, was where the industry originated, and it represented 50 percent of the world market even after the spike in energy prices raised demand for wind energy in other parts of the world. In 2007, about 7,000 of Suzlon's 9,000 employees were located in low-cost India, whereas the vast majority of Vestas' employees and manufacturing operations were in high-cost Europe, and 85% of Gamesa's staff were in Europe and the US (Gamesa Annual Report 2006: 9). In 2005, Vestas launched a 3-year strategic plan entitled "The Will to Win"—a surprising title for the plan of a company that was the industry leader and had twice the global market share of its nearest

rival (Vestas 2005). In fact, the title signaled Vestas' vulnerability as a high-cost player that had lost money for two previous years, following a major acquisition. It therefore set out to downsize headcount in Europe, cut costs and overhead, and improve customer service, which by its own admission was in bad shape (Vestas 2006). Two years later, the company's after-tax profit margin was still only 2 percent (2007), compared to Suzlon's 20 percent (2006), and its market capitalization was only \$12.9 billion, compared to Suzlon's \$9.2 billion (June 4, 2007), despite being five times as large. Gamesa too reported after-tax margins of only 8 percent (2006).

In other words, Suzlon's business model combining a low-cost Indian base with European technology and global marketing seemed to be yielding higher returns than the Europe-centric models of its larger rivals. More than three-quarters of Suzlon's \$746 million capital expenditure budgeted for 2007 was for adding or expanding facilities in India. Suzlon's western rivals may have underestimated not only the market opportunity in India, but also the cost advantage of locating parts of the value chain in low-cost countries like China and India.

As in the case of global consolidators, the global first-mover strategy worked in Suzlon's case because, once again, the product was standardized across countries. Some countries may have preferred smaller capacity WTGs than others, or offshore solutions over onshore solutions, but for any given product, its design and production were globally standardized. Wind was wind, everywhere, and so was the output, electricity. If demand were less standardized across emerging and advanced economies, Suzlon's India experience might have been transferable only to other emerging economies, in which case its

internationalization would have been limited to Cell 3 (Figure 6.1), and Suzlon might have missed out on the three-quarters of world demand for wind power in advanced economies.

A second important enabling factor was the availability of finance. In the 1970s, a firm like Suzlon would not have been able to raise money from venture capitalists, private equity firms, the local stock market, or foreign banks, to launch the firm or bankroll acquisitions in advanced countries. Even if private capital had been forthcoming, which would have been unlikely, the Government of India would have barred access to it. The new environment of the 2000s, with more open markets and greater access to capital by emerging-market firms, made the global first-mover strategy possible.

The point is often made that firms in developing countries are unlikely to come up with innovations on the technological frontier, because of their technological backwardness, even if they take on technical challenges that are Herculean by local standards (e.g. Amsden 2003). The Suzlon experience was consistent with this view, but it did show that Indian firms were capable of combining existing technologies and knowledge to create new businesses—even if the underlying technologies were created elsewhere. While the capacity to develop new frontier technologies is valuable for emerging markets, many jobs and considerable shareholder wealth can also be created by firms like Suzlon that help commercialize cutting-edge technologies developed elsewhere.

India may be unique in having the wages of a low income country but the technical skills of a middle-income country like Israel or Taiwan, coupled with a strong entrepreneurial tradition. If true, India ought to spawn more global first-movers like Suzlon Energy in the future. The passage of time should provide a test of this assertion.

Combining or Morphing Across Generic Strategies

The generic strategies described above are not mutually exclusive, and we make no claim that they are collectively exhaustive. (For instance, one additional generic strategy we have deliberately not dwelt on, as noted in the beginning, is international vertical integration by natural-resource based firms seeking either upstream resources or downstream markets.) Firms may also pursue more than one generic strategy at the same time. In the diversified Tata group, for instance, we believe Tata Consultancy Services (TCS) employed the low-cost partner strategy, Tata Motors, with its small-car project, employed the local-optimizer strategy, and Tata Steel and Tata Tea employed the global-consolidator strategy. Similar statements could be made about the Mahindra & Mahindra group or the Aditya Birla group.

A single company may also pursue multiple generic strategies in parallel, possibly to preserve options for future growth and internationalization. Good examples are to be found in the pharmaceutical industry. For instance, one part of Dr. Reddy's Laboratories focused on reverse engineering drugs for sale under its own brand in India and other emerging economies (local-optimizer strategy); another part provided R&D services or bulk drugs to foreign drug firms as a low-cost partner; and a third part challenged the patents of leading pharmaceutical firms in the US in the hopes of securing a 180-day exclusivity period for selling generic equivalents, or on discovering new molecules for sale under its own brand globally (global first-mover strategy) (see Jha & Chakravarthy, 2004, and the company website). Ranbaxy also employed these three strategies simultaneously, but with a less formal internal division of labor (Ranbaxy Annual Report, and company interviews, 2006). In contrast, GVK Biosciences, started by an ex-Ranbaxy CEO, focused single-mindedly on the low-cost partner strategy. Ranbaxy and Dr. Reddy's were led by owner-managers

committed to making their firms, as Ranbaxy put it, “a research-based international pharmaceutical company.” This led them to make large R&D investments on molecule discovery or new drug-delivery methods; yet the local-optimizer strategy dovetailed more smoothly with their historical strategy of reverse-engineering drugs for the local market (generics), and the low-cost partner strategy was probably more profitable than the other two strategies, at least in the short run.

Firms pursuing different generic strategies simultaneously may have difficulty focusing the organization on a clear set of goals, resulting in internal confusion and flip-flopping, especially if contradictions between the different strategies are not explicitly recognized and carefully managed, both internally and externally (as for example, with the investor community).

The low-cost partner strategy, for example, might require the drug firm to court Western firms to win offshore R&D work or to manufacture bulk drugs for them in India, while the global first-mover strategy might require fighting them tooth and nail to nullify their patents or to beat them in introducing new, branded drugs in the advanced economies. Another potential contradiction was between the need to make long-term, risky investments for molecule discovery or new drug-delivery methods, while satisfying the quarterly expectations of investors, who preferred the higher and surer margins of the low-cost partner strategy. Given that the leading pharmaceutical firms were publicly listed in India (and Dr. Reddy’s, for instance, was also listed on NYSE), investor pressures for steady profit growth were a constant damper on their grandiose ambitions.

The difficulties of pursuing multiple strategies simultaneously are illustrated by the following remarks by the CEO of Dr. Reddy’s:

“How can we be an imitator [in the generics business], *and* an innovator [in the drug discovery business] at the same time? We have to maintain a fine balance between producing profits today and investing in future growth. The company just cannot invest in specialty and drug-discovery and then wait for returns. . . it has to deliver year-on-year results. We need to take care of our legacy businesses. But then, how can we forge out-licensing alliances with large pharmaceuticals [in the drug discovery business] *and* at the same time challenge their patents around the world [in the specialty and generics businesses]?”

“Some may argue that we really cannot manage imitation and innovation under one roof, that the two business models are different, and we should separate bulk activities and generics business from the specialty and new drug discovery business. My challenge is to prove them wrong.” (quoted in Jha & Chakravarthy, 2004, p. 11. Emphasis in original)

Pathways for Strategy Migration

Pursuing multiple generic strategies *simultaneously* may be difficult, but sometimes it can yield positive synergies, provided the contradictions among the strategies are recognized and managed carefully. However, pursuing multiple generic strategies *sequentially* can be both feasible and desirable. We know from the literature that a firm’s strategy evolves as it acquires new capabilities, partly as it adapts to environmental changes. We illustrate this point here by suggesting a few dynamic paths through which one generic strategy can morph into another.

Consider, for instance, the two internationalization strategies emerging-market firms are most likely to begin with: the local-optimizer strategy or the low-cost partner strategy. A firm could pursue one of these and discover that the capabilities thus created provide a gateway for pursuing the other.

To illustrate: a firm might adapt imported technology to cater to the home market and in so doing build scale, quality, or expertise in particular stages of the value chain that can later be used to become a low-cost subcontractor to a US or European firm. The firm could thus morph from a pure local optimizer into one that is internationalizing also as a low-cost

partner. This is in fact what many Indian firms founded in the pre-liberalization era did in the post-liberalization era, including IT/software firms like Wipro and HCL, pharmaceutical firms like Dr. Reddy's and Cipla, and auto component firms like Sundaram Motors and Bharat Forge. The Taiwanese firm, Acer, evolved in a similar fashion, from making low-end PCs for the Taiwanese market to becoming a low-cost assembler for PC giants like IBM and HP. This kind of strategic evolution is feasible because the emerging market firm and the Western firm do not compete head-on for the same customers: typically, the Western firm targets end-users in the advanced countries, while the emerging-market firm targets end-users at home or in neighboring emerging markets.

Conversely, a firm that started out as a subcontractor to a foreign firm (low-cost partner) is likely to expand its value addition along two dimensions (see Figure 6.2): on the one hand, it is likely to broaden the stages of the value-chain that it performs in-house for foreign customers (OEMs), so as to strengthen its strategic relationship with them, build new capabilities, and improve margins; on the other hand, it is likely to move up the value-curve, to take on activities that are more sophisticated, and therefore more profitable, especially if margins are under pressure as home country wages and costs rise over time. These two tendencies have quite different strategic consequences in the long run.

Figure 6.2 about here

The first tendency—performing more stages of the value chain in-house—is likely to enable the emerging market firm to launch branded products for sale to end-users in the domestic market. At some point, the firm will decide that this is worth doing because of the additional revenues and profits it can generate, not to mention reducing over-dependence on

Western OEM customers. Strategic morphing of this sort occurred with Taiwanese firms like Yue Yuen, which expanded from making footwear for Nike, Reebok and other Western brands, to setting up 600 retail stores in China for selling sporting goods, including its own brand of footwear (van Agtmael, 2007: 117).

The other tendency—moving up the value curve—allows the low-cost partner to gain bargaining power over OEM customers, to the point that it sometimes gains the upper hand in the relationship, especially if it invests in R&D and retains ownership of the intellectual property. This has certainly been the case with Indian companies like Infosys, Wipro, and TCS, and non-Indian companies like Flextronics (Singapore) and Li & Fung (Hong Kong), whose profit margins and market capitalization have been more impressive than those of many of their customers (on Li & Fung, see Hagel & Brown, 2005: 25-26).

Some companies, like Taiwan Semiconductor Manufacturing Corporation (TSMC) moved up the value curve without integrating across the value chain—in order to reassure customers credibly that it had no intention of ever turning into a competitor. However, firms like Acer moved along both axes (see Figure 6.2) with the intent of becoming a global first-mover.

As discussed earlier, the local optimizer can also morph into the global consolidator if products and production processes are globally standardized and the industry is mature in developed countries but growing in emerging markets. This is what Indian companies like Tata Steel, Tata Tea, and Hindalco were starting to do in the mid-2000s. The key skills such firms leveraged internationally were operational excellence and restructuring capabilities, both of which were more easily transferred across borders if products and processes were globally standardized. However, transferring these capabilities internationally is hardly an

easy task, because of differences in institutional contexts, especially between emerging and developed economies. Yet, companies like Cemex and Mittal Steel seem to have pulled that off successfully, although more research is needed to understand how they did so.

Non-Indian Examples

The generic strategies identified in the Indian context have relevance for other emerging economies inasmuch as all emerging economies share certain characteristics (or “country-specific advantages”), such as rapid economic growth; low- to moderate-income consumers; low to medium wages; and under-developed hard and soft infrastructures. The initial international competitive advantage of emerging-market MNEs are likely to be shaped by these distinctive characteristics. At the same time, because emerging economies differ among themselves in important ways, some strategies are more likely in some settings than in others. For instance, countries well endowed with natural resources are unlikely to develop MNEs of the kind described in this chapter and more likely to spawn large, vertically-integrated, natural-resource MNEs (e.g. see Russia chapter in this volume). Similarly, large countries are more likely to spawn global consolidators than smaller countries, and low-income countries are more likely to spawn low-cost partners than middle-income countries (e.g. Brazil or Israel produce few low-cost players; see chapters on those countries in this volume).

We have already alluded to several non-Indian examples of the generic strategies discussed. To cite more examples, Embraer of Brazil is an interesting case of a local-optimizer that slowly expanded beyond Cell 3 to niche markets in advanced countries (Cell 4), until it eventually captured almost 50% of the global market for regional aircraft. By

2007, it was at the technological frontier of designing regional jets, on par with the its only global rival, Canada-based Bombardier, and had graduated to become a global first-mover in that segment.

Several firms in Hong Kong and Taiwan internationalized using the low-cost partner strategy, and some developed an international footprint of supply locations for Western firms (e.g. Flextronics of Singapore, or Wistron of Taiwan). Most of these firms had moved beyond the low-cost partner stage to become high-value-adding entities; they hold valuable lessons for Indian firms following the same path two or three decades later. (Acer's experience, for instance, illustrated the difficulties of transitioning from low-cost partner to becoming an independent, branded, global player.)

The larger emerging economies have spawned global or regional consolidators in several mature industries, including cement (Cemex), steel (Arcelor-Mittal), beverages (SAB-Miller, AmBev), PCs (Lenovo), white goods (Haier), microwaves (Galanz), consumer electronics (TCL) and meat products (JBS S.A. of Brazil). Finally, in the global first-mover category, Williamson and Zeng (China chapter in this volume) suggest several examples from China, including telecommunications equipment maker Huawei that was on its way to introducing a new generation of 3G equipment based on a Chinese standard.

Summary and Some Future Directions

Several broad themes emerge from our study of the Indian case. One is that Indian firms internationalized in the 2000s using more than one strategy, each of which had its own antecedents and consequences. It is an over-simplification to depict all Indian firms

as using the same approach to internationalization, even when the firms belong to the same industry.⁹

Table 6.4 sums up our main ideas about India's emerging MNEs. It shows four generic strategies for internationalization, the main competitive advantages on which each is based, the national roots of those advantages, their implications for the boundaries of the firm (i.e. which stages of the value-chain are internalized), and their implications for how the firm will internationalize. Further, it identifies two industry variables—degree of standardization of products and processes across countries, and industry life-cycle stage—that influence the likelihood that firms can morph from the local-optimizer or the low-cost partner strategy to one of the other strategies. We have offered some thoughts on how this morphing might occur, but the question deserves more research, because, among other things, it can add to our understanding of internationalization processes in general. We also believe that the generic strategies described here are relevant to other emerging economies, particularly large ones, such as the BRICs.

A second theme is that the competitive advantages of Indian MNEs centered on low-cost production and design capabilities, process excellence, and restructuring capabilities. None of these competitive advantages is usually regarded as the firm-specific advantages leveraged by Western firms to become MNEs. In turn, those advantages were rooted in India's technological absorptive capacity, built over several prior decades, its cheap brainpower, its seasoned managerial class, and a historically rooted entrepreneurial tradition.

⁹ This kind of over-simplification is sometimes applied to all firms in an industry (e.g. "Indian software firms have these competitive advantages and internationalize in this way...") and, occasionally, to all firms in all emerging economies, as in van Agtmael (2007), where the author advances a single model for why 25 firms from several emerging markets turned out to be world-class players. Likewise, Bartlett and Ghoshal (2000) propose a common set of principles for all late globalizers, and Mathew (2002) speaks of "a new model for global growth" that explains the success of his sample of emerging market firms.

Completing the picture in the 2000s was India's large and booming economy that lent momentum to Indian firms, and unprecedented access to capital that fueled their growth. These are the competitive foundations of India's emerging MNEs, and they explain why Indian firms engaged in so much up-market FDI (Cell 4 in Figure 6.1).

A third theme, related to the last point, is that in the 2000s emerging market firms faced international opportunities and constraints that were different from those faced in the 1970s and 1980s, and different from those faced by Korean or Japanese firms when they internationalized decades earlier. For instance, the role of government was quite different in contemporary India than it was in Japan or Korea when the latter created home-grown multinationals; in the 2000s Indian firms internationalized under the watchful eye of private investors, rather than government bureaucrats. The domestic and international regulatory environment was also quite different in the 2000s. Indian firms had to craft original, internationalization strategies, tailored to the times, because history offered no role models—at least not suitable ones.¹⁰

From a theory standpoint, we have tried to integrate several IB concepts and insights into a coherent whole around the notion of generic internationalization strategies. Each generic strategy combines in distinctive ways IB concepts such as ownership advantage, location advantage, motivations for internationalization (market-seeking vs. resource-seeking), target market selection, speed of internationalization, and modes of entry. Many IB studies look at these variables piecemeal, but we believe it is more useful to look at them in an integrated, strategic way. Not only does that make IB research more accessible and useful to practitioners, it also helps develop IB theories at a level where the literature is quite thin,

¹⁰ This did not stop Indian firms from periodically viewing Western MNEs, or Japanese and Korean firms, or even contemporary Chinese firms as role models for their own globalization.

i.e. between the highly abstract level, where we ask questions such as why multinationals exist, and the highly tactical level, where we ask questions such as which entry mode is best for a particular country or how overseas operations should be staffed.

Finally, we would like to place the above discussion of the generic strategies of Indian multinationals in the broader theoretical context of an evolutionary perspective on organizations (Singh, 1990; Burgelman, 1991; Baum and Singh, 1994; Bryce and Singh, 2001; Moldoveanu and Singh, 2003; Singh, 2006). We believe that there is considerable untapped potential in asking what insights an evolutionary perspective can provide regarding the strategies of Indian multinationals. It is not our purpose here to provide a complete, or for that matter even partial, answer to this question. However, we want briefly to highlight some of the directions in which such an inquiry may lead us.

Bryce and Singh (2001: 163-165) summarized some key features of an evolutionary perspective: that it involves dynamic change over time; the evolving entities are subject to selection pressures broadly in inverse proportion to their fitness to the selection environment; the evolutionary trajectory is history or path dependent, i.e., future steps depend on previous states attained; the selection processes involve the interplay of ecological and genealogical entities (Baum and Singh, 1994); and selection processes involve multiple nested levels of analysis such that different nested entities are simultaneously subject to selective influence.

We believe that some new and productive lines of inquiry will be opened up by asking related questions in the context of Indian multinationals. Thus, how are the strategies of Indian multinationals changing dynamically over time? What is the nature of the selection environment of Indian multinationals and how has that changed over time? Clearly, even as the internal Indian context changed dramatically starting in the early 1990's, the firms that

have gone international are competing on a different landscape than more domestically oriented firms. What strategic transitions are *more* likely to occur, given that an evolutionary approach suggests that not all transitions are equally likely? Indeed, some will *not* occur. What are some of the ecological and genealogical processes involved in the evolution of these strategies? And, finally, what are some of the complex interplays of selection forces operating both on entire firms as units and within firms?

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Figure 6.1
Source and Destination of FDI

| | | Destination of FDI | |
|---------------|--------------------|---|--|
| | | Developed Country | Developing Country |
| Source of FDI | Developed Country | Cell 1 North-to-North FDI | Cell 2 North-to-South FDI <i>(Down-market FDI)</i> |
| | Developing Country | Cell 4 South-to-North FDI <i>(Up-market FDI)</i> | Cell 3 South-to-South FDI <i>(Mostly down-market FDI)</i> |

Note: Down-market FDI refers to investment from a more developed to a less developed country, and up-market FDI refers to the opposite

Figure 6.2
Capability Building by Local Optimizers and Low-cost Partners

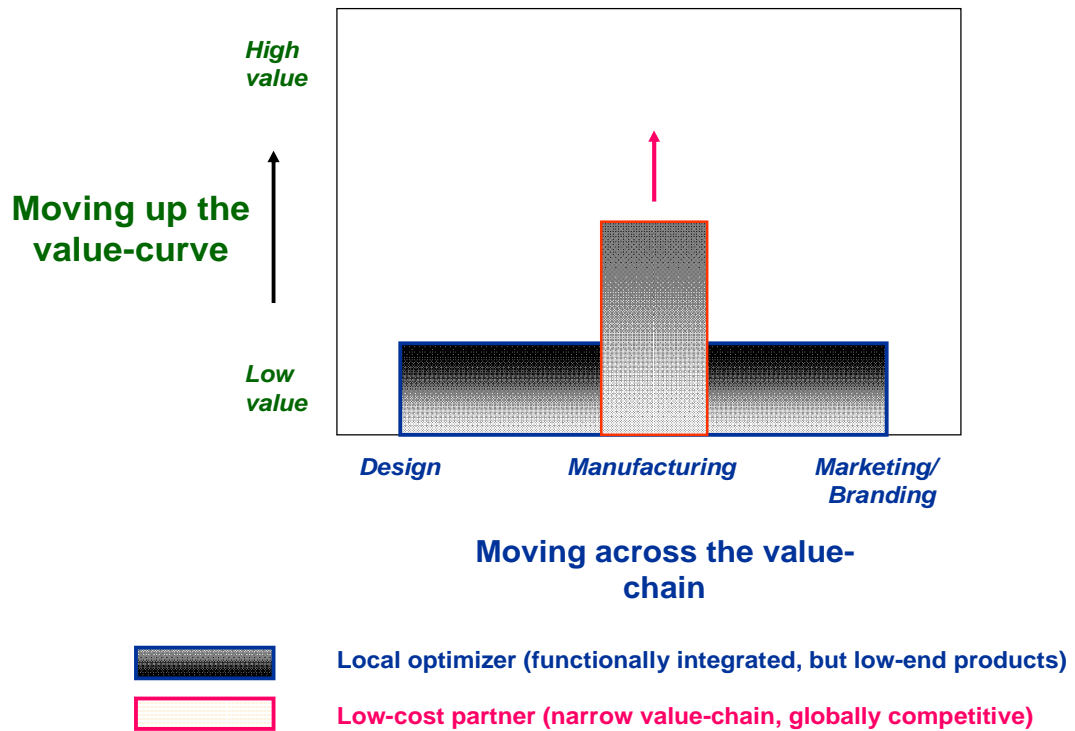


Table 6.1
India's Emerging Multinationals, Per Various Sources

| Enterprise | Industry | Fortune 500 (2006) | Boston Consulting Group (2006) | EPW Research Foundation (Dec 2006) | India Brand Equity Foundation |
|---|----------------------|-------------------------------|---|---|--|
| Indian Oil Corporation (IOC) [#] | Oil | X | | | |
| Reliance Industries | Chemicals | X | X | X | |
| Bharat Petroleum [#] | Oil | X | | | |
| Hindustan Petroleum [#] | Oil | X | | X | |
| Oil & Natural Gas Corporation (ONGC) [#] | Oil | X | X | X | |
| State Bank of India [#] | Banking | X | | | |
| Bajaj Auto | Auto. Eqpt. | | X | | |
| Bharat Forge | Auto. Eqpt. | | X | X | X |
| Mahindra & Mahindra | Auto. Eqpt. | | X | X | X |
| Tata Motors Ltd | Auto. Eqpt. | | X | X | X |
| TVS Motor Co. | Auto. Eqpt. | | X | | X |
| Crompton Greaves | Engineered products | | X | | |
| Larsen & Toubro | Eng. services | | X | | X |
| Infosys | IT | | X | X | X |
| Satyam Computer Services | IT | | X | X | X |
| Tata Consultancy Services | IT | | X | X | X |
| Wipro | IT | | X | X | X |
| Cipla | Pharmaceuticals | | X | | |
| Dr. Reddy's Laboratories | Pharmaceuticals | | X | X | X |
| Ranbaxy Pharmaceuticals | Pharmaceuticals | | X | X | X |
| Hindalco | Nonferrous metals | | X | X | |
| Tata Steel | Steel | | X | X | X |
| Tata Tea | Food/beverage | | X | X | X |
| Videocon | Consumer electronics | | X | X | X |
| VSNL [®] | Telecom | | X | X | |

Notes to Table 6.1

Fortune's ranking is based on total worldwide sales, regardless of how much of that comes from outside the home country (Fortune, 2006).

BCG's list was compiled by starting with 1) the largest companies in each country. In India, for instance, they relied on *Businessworld's* list of the 500 top companies (BCG, 2006, p8). 2) Of these, only firms with annual revenue of at least \$1B in 2004 were considered, but in the end "twenty companies that did not meet this revenue threshold were nonetheless included." Then, 3) they excluded firms whose international business presence [not defined] amounted to less than 10 percent of revenue" but "made an exception for companies that were close to 10 percent and whose international business activity had grown swiftly in the recent past." Finally, 4) firms that passed criteria 1-3, had their globalization credentials evaluated along five dimensions:

"the international presence of the company, as indicated by its owned and operated subsidiaries, sales networks, manufacturing facilities, and R&D centers; major international investments it had pursued in the last 5 years, including M&A; its access to capital for financing international expansion, whether through free cash flows, stock markets or other sources; breadth and depth of its technological and intellectual property portfolio; and the international appeal of its existing offerings and value propositions."

Thus, *BCG's* list included an imprecise combination of size, international presence and activity (as judged by foreign sales and FDI), a requirement that the firm have at least some foreign subsidiaries, along with some vague notions of technical or IP ownership (i.e. "intangible assets"). No financial firms appear on the list, presumably they were not considered, although this is not stated explicitly. But several service firms (in IT, construction, and telecommunications, engineering services) did make the list.

The EPWRF list, included in a December 2006 report (EPW Research Foundation, 2006) is based on Indian companies that had made major overseas acquisitions, as reported in "company annual reports and media sources." Its start and end dates are not specified.

India Brand Equity Foundation's list comes from a report (IBEF, 2006) titled *Going Global: Indian Multinational*. It, too, seems to use the criterion that selected firms should have made significant overseas acquisitions, but its other criteria, if any, are unstated. Surprisingly, it does not include four companies on *BCG's* list that have made significant overseas investments: Reliance, ONGC, Hindalco, and VSNL. However, it includes the following 22 companies not on *BCG's* list: Amtek Auto, Arvind Mills, Ashok Leyland, Asian Paints, Aurobindo Pharmaceuticals, Dabur India, Glenmark Pharmaceuticals, Gokuldas Exports, ITC, Marico Industries Ltd., Motherson Sumi Systems, Nicholas Piramal, Rico Auto Industries, Sterlite Industries, Sundaram Fasteners, Indian Hotels, Thermax Ltd., Titan Industries, United Phosphorus, Voltas, Wockhardt Ltd., and Zee Telefilms.

UNCTAD's 2006 list (not included above) had only one Indian firm, ONGC among the Top-100 non-financial transnational corporations from developing countries. *UNCTAD's* sole criterion is a firm's foreign assets in 2004. The smallest firm to qualify had \$699 million in foreign assets.

Majority or largely state-owned enterprise.

@ Formerly state-owned, since privatized and acquired by the Tata group.

Table 6.2
Major Acquisitions by Indian Companies, 2001-2005 (approx.)

| Acquirer | Industry | Acquired company | Country | Deal Value (US\$ M) |
|---------------------------------|-----------------|---|--------------------------------|---------------------|
| Dr. Reddy's | Pharmaceuticals | Betapharm | Germany | 570 |
| Ranbaxy | Pharmaceuticals | Terapia SA RPG (Aventis) | Romania France | 324 |
| Aurobindo Pharmaceuticals | Pharmaceuticals | Milpharm | U.K. | N.A. |
| Matrix Laboratories | Pharmaceuticals | Docpharma NV | Belgium | 263 |
| Nicholas Piramal | Pharmaceuticals | Rhodia's IA Avecia | U.K. U.K. | 14* |
| Wockhardt | Pharmaceuticals | CP Pharmaceuticals | U.K. | 18 |
| Cadila Health | Pharmaceuticals | Alpharma SAS | France | 5.7 |
| Mahindra & Mahindra | Automotive | Jiangling Tractor | China | 8* |
| Tata Motors | Automotive | Daewoo Comm. Vehicle Hispano Carrocera | S. Korea | 118 |
| Bharat Forge | Auto parts | Carl Dan Peddinghaus | Germany | 49* |
| Subex Systems | IT | Azure Solution | UK | 140 |
| Tata Consultancy Services (TCS) | IT | Comicrom FNS | Chile Australia | 23* 26* |
| Satyam Computer | IT | Citisoft | UK | 23.2* |
| Infosys | IT | Expert Information | Australia | 3.1 |
| Wipro | IT | Nerve Wire Inc. | USA | 18.5 |
| Videocon | Electronics | Thomson SA | Framce | 290 |
| VSNL | Telecom | Teleglobe Tyco | Canada -- | 240 130 |
| Reliance Industries | Chemicals | Flag Telecom Bermuda Trevira | Bermuda Germany | 212 95 |
| Tata Chemicals | Chemicals | Brunner Mond | UK | 177 |
| ONGC Videsh | Oil & Gas | Brazilian oilfields from Shell Oil | Brazil | 1,400 |
| HPCL | Oil & Gas | Kenya Petroleum Refinery | Kenya | 500 |
| Tata Tea | FMCG | Tetley Good Earth JEMCA Energy Brands--Glaceau | U.K. USA Czech R. USA | 407 50 12.5 |
| Hindalco | Metals | Straits Ply | Australia | 58.4 |
| Aditya Birla | | Dashiqiao Chem | China | 8.5 |
| United Phosphorus | Fertilizers | Oryzalin Herbicide | USA | 21.3 |

Source: EPW Research Foundation, 2006 and authors' estimates from press reports of deal values in some cases (*marked with asterisk)

Table 6.3
Country-wise Approvals Issued, April 1995-March 2005

| Country | No. of Approvals | Equity | Loan | Guarantee | TOTAL |
|-------------------|-------------------------|---------------|-------------|------------------|--------------|
| USA | 2268 | 1762 | 163 | 234 | 2159 |
| U.K. | 633 | 584 | 101 | 92 | 777 |
| British Virgin Is | 87 | 769 | 19 | 136 | 924 |
| Bermuda | 34 | 503 | 5 | 181 | 689 |
| Hong Kong | 126 | 102 | 98 | 345 | 544 |
| Russia | 32 | 1757 | 5 | 1 | 1763 |
| Mauritius | 388 | 682 | 182 | 174 | 1038 |
| Sudan | 5 | 964 | - | - | 964 |

Source: EPW Research Foundation, 2006, Table 4.

Table 6.4
Comparing Generic Internationalization Strategies

| Strategy → Dimension ↓ | Local Optimizer | Low-Cost Partner | Global Consolidator | Global First-Mover |
|---|---|--|---|---|
| International competitive advantage (firm-specific advantage) | <ul style="list-style-type: none"> ● Products and processes optimized for emerging markets | <ul style="list-style-type: none"> ● Factor cost arbitrage ● Process excellence ● Project management | <ul style="list-style-type: none"> ● Operational excellence ● Restructuring/ turnaround capabilities | <ul style="list-style-type: none"> ● Global innovator, leveraging low-cost home base and large home demand ● Global sourcing |
| National roots of competitive advantage (country-specific advantages) | <ul style="list-style-type: none"> ● Technological absorptive capacity, developed in prior decades (during import-substituting industrialization) ● Cheap brainpower ● Entrepreneurial tradition | | | |
| | <ul style="list-style-type: none"> ● Low-income consumers ● Underdeveloped hard and soft infrastructures ● Low-cost production | <ul style="list-style-type: none"> ● Low wages ● Skill supply | <ul style="list-style-type: none"> ● Large, high-growth home market in “mature industry” ● Access to capital ● Barriers to acquisition of local firms by foreign firms | <ul style="list-style-type: none"> ● Large, high-growth home market in emerging industry ● Low-cost production and research base ● Access to capital |
| Industry conditions | <ul style="list-style-type: none"> ● Mature industries ● Products not standardized across income, culture, etc | <ul style="list-style-type: none"> ● Mostly mature industries, but possible also in emerging industries | <ul style="list-style-type: none"> ● Mature industries ● Relatively standard products and processes across income, cultures, etc. | <ul style="list-style-type: none"> ● Emerging industry (globally) ● Relatively standard products and processes across income, culture, etc. |
| Value-chain scope | <ul style="list-style-type: none"> ● Functionally integrated | <ul style="list-style-type: none"> ● Narrow and specialized | <ul style="list-style-type: none"> ● Functionally Integrated ● International horizontal and vertical integration | <ul style="list-style-type: none"> ● Functionally integrated ● Globally-dispersed value chain |
| Target foreign markets | <ul style="list-style-type: none"> ● Other emerging economies | <ul style="list-style-type: none"> ● Developed countries | <ul style="list-style-type: none"> ● Global | <ul style="list-style-type: none"> ● Global |
| Modes of international expansion | <ul style="list-style-type: none"> ● M&A and JVs for downstream operations in other emerging markets | <ul style="list-style-type: none"> ● Supply-base diversification into other low-cost countries ● Downstream M&A in developed countries for moving up the value-curve | <ul style="list-style-type: none"> ● Large M&A in advanced economies, likely themselves to be MNEs ● Upstream M&A and JVs for raw materials and other inputs | <ul style="list-style-type: none"> ● Strategic-asset seeking M&A in developed countries ● Greenfield capacity addition in other low-cost countries |