Internationalization and technological catching up of emerging multinationals: a comparative case study of China's Haier group

Geert Duysters, Jojo Jacob, Charmianne Lemmens and Yu Jintian

A number of firms from China and India have in recent years been demonstrating their ability to face up to the challenges of globalization by internationalizing their operations. In this article we carry out a case study of China's Haier Group followed by a comparison of its growth and internationalization with those of India's Tata Group. We examine several aspects of their internationalization, such as the mode of internationalization and the choice of overseas destinations. The study further explores the importance of, among others, conglomerate structure, prior experience, the state, and entrepreneurship in the internationalization of the two groups.

1. Introduction

The past two decades have witnessed the emergence of a growing number of multinational companies (MNCs) from many of today's newly industrializing countries such as China, India, Mexico, Malaysia, and Russia. They operate in an increasingly integrated global economy, which is quite unlike the world economy during the "late" industrialization episodes in Taiwan and South Korea (Korea hereafter) during the 1960s and 1970s. The latter countries followed a combination of strategies of import substituting industrialization (ISI) and export oriented industrialization. Such a policy framework established a "carrot and stick" incentive structure in which enterprises experienced both the luxury of domestic protection and the pressure to succeed in competitive foreign markets. Domestic protection, together with state support, also helped them access foreign technology on favorable terms (Amsden, 1989).

In contrast, many of today's less-developed countries (LDCs) such as China and India for several years followed an extreme form of ISI, in which not just imports, but exports too were discouraged. Firms thus faced very limited competition and

there was little pressure to upgrade technology or improve quality. However, since the early 1980s, many of these economies have been moving away from ISI strategies. The resulting reductions in tariffs and foreign investment barriers have increased domestic competition and brought down profit margins in local markets. Furthermore, unlike the past, globalization has reduced governments' ability to control technology transfer through not only trade policy but also "contract bargaining" with foreign firms on behalf of domestic firms. This means that emerging MNCs today need to devise novel strategies to learn "dynamically" through continuous access of foreign technology (as opposed to a one-off import of technology), as well as markets (Radosevic, 1999). Many firms in these countries have responded well to the pressure of new competition as well as to the opportunities of globalization—by internationalizing their operations. From Asia to Latin America, we see evidence of a growing shift toward internationalization of business [see, for example, Cuervo-Cazurra (2008) and Chittoor *et al.* (2008)].

In this article, we examine the growth, internationalization, and technology strategies of the Haier Group (Haier, hereafter) of China in comparison with those of India's Tata Group (hereafter Tata). Both are large conglomerates which dominate their respective domestic markets. Both have in the past operated in protected domestic markets, although in Haier's case this lasted no more than a few years. In the recent years, both have been following a strategy of aggressive internationalization. Tata has decades of operational experience in its home market as well as prior experience in overseas operations, in the 1970s and 1980s, in other LDCs. Haier on the other hand has been in existence only since the mid-1980s and its internationalization coincided with the emergence of globalization. While both are diversified groups, Tata has over the years moved away from its traditional areas of focus, concentrating instead on newer, dynamic sectors. Haier began as a single product firm in the appliance sector, in which it has branched out into a number of related sectors. A comparison of Haier and Tata, therefore, should help us find answers to some important questions in regard to the emergence of MNCs from LDCs. What are the modes of internationalization (e.g. joint ventures vs. acquisitions), and the choice of overseas destinations, and what are the factors shaping these? How important have been the roles of conglomerate structure, product diversification, prior experience, large domestic market, and state support on the growth and internationalization of the two groups? We hope to offer some preliminary answers to these questions.

2. Toward understanding the internationalization strategies of emerging MNCs

Outward Foreign Direct Investment (OFDI) from LDCs is not a new phenomenon. For example, in the 1970s, many large firms from countries like India and Argentina

went abroad to other LDCs. As Lall (1983) points out their home markets were stagnant and cyclical, and domestic economic policies discriminated against efficient export activity. In India, for example, large firms faced a host of restrictions aimed at curbing their market power. At the same time, these firms possessed considerable unused assets, such as managerial capacity, engineering skills, access to raw materials, production and knowledge networks, and financial resources. As Caves (1982) points out possession of excess capacity of assets can motivate firms to diversify their product portfolio, in order to reap the economies of scope. Indeed, large Indian firms were also highly diversified. Product diversification also helped LDC firms compensate for the institutional voids in their home countries (Ghemawat and Khanna, 1998). For example, a diversified group can far more easily secure external financing, as well as foreign technology, for new ventures than an enterprise with a more narrow focus. This is because diversification allows the enterprise group as a whole to leverage the reputations built up through honest dealings in the past. They can also point to their track record and returns to foreign investors (Khanna and Palepu, 1997). Rapid diversification and enterprise expansion (for example into multi-product business groups, like Chaebols in Korea) offer these late comers certain advantages in their internationalization process—such as an internal pool of talent, capital, and technological and managerial assets.

Internationalization, into other less-developed markets, could be seen as an extension of domestic product diversification. Lall (1983) found that Indian firms that went abroad in the 1970s tended to be the largest in their home markets. Going abroad was thus a means for large firms to diversify away from the stagnant domestic market. Their going abroad derived also from import-substituting policies in host countries (other LDCs like Indonesia, Malaysia, and Thailand as well as more advanced economies such as Greece) and the fiscal incentives these countries offered.

OFDI from LDCs in the era of globalization. A few of today's (non-Chinese) emerging MNCs had prior internationalization experience. Some of these firms, like India's Tata, continue to diversify into more modern industries, while at the same time shutting down some other businesses, like textiles (Goldstein, 2008). Chinese firms, unlike firms from many other LDCs, are new in the internationalization game. If in the past the regulated policy framework, noted earlier, reduced the scope of profitability in domestic markets, in recent years increased competition resulting from globalization has been creating a similar scenario in India and China. We would therefore expect, for reasons outlined before, a process of "double diversification" in China as well: product diversification going hand in hand with international diversification.

In the globalized era, as in the past, one would expect that the early rounds of OFDI from emerging MNCs were directed to other LDCs. This is because firms from LDCs possess certain advantages in entering similar markets due to years of operation in home countries where both markets and institutions were underdeveloped (see introduction to this special issue).

Recent years have witnessed the focus of internationalization being shifted increasingly toward advanced country destinations. This is a significant break from the past and needs further explanations. What are the motivations behind and the benefits from entering advanced country markets and what are the obstacles and the associated costs of going abroad? We recognize that emerging MNCs today are a heterogeneous group, just as emerging MNCs in the past were. So without making a case for generalization we try to answer, through our Haier case study, and a comparison of Haier with India's Tata, the questions and issues raised so far. Where possible we will relate our findings to some of the theories of internationalization and globalization.

3. Growth and internationalization of the Haier Group

The Haier Group is the single largest maker of comprehensive household appliances in China. In 1984 Qingdao Refrigerator plant, which was renamed Haier group in 1992, was close to bankruptcy. The company's turn around began with the appointment in the same year of Zhang Ruimin, who currently is the CEO of Haier, as the plant director (Liu and Li, 2002). At that time, its sales were a mere RMB 3.48 million and it faced a debt of RMB 1.47 million. By 2007, however, Haier's global sales had reached RMB 118 billion and it employed about 50,000 people worldwide.

At first, Haier produced only one specific kind of household refrigerator—the BCD-212. Today, it manufactures a very broad range of household appliances: 15,100 product varieties in 96 product lines. In 2003, the Haier brand topped all Chinese trademarks in a nationwide survey. In 2004, Haier was recognized as one of the World's 100 Most Recognizable Brands in a global name brand list edited by the World Brand Laboratory. According to 2006 Euromonitor statistics on company sales, Haier has the largest world market brand share for refrigerators, and it is the fourth largest among the global white goods manufacturers. In 2008, Haier ranked 13th on *Forbe*s' Reputation Institute Global 200 list. Also in the same year, Haier ranked first among Chinese enterprises on the Financial Times list of the most respected global companies.

These figures and rankings indicate that over a period of two decades, Haier has grown from being a small, almost bankrupt enterprise to being one of the leading household appliances makers in the world.

3.1. Early years: the quest for quality

Globalization and the increasing interconnectedness of the world economy since the late 1980s marked a watershed in the history of Haier. The company foresaw the looming competitive threat from foreign firms in a hitherto (largely) insulated domestic market. Haier thus envisioned a strategic shift in focus from the Chinese

market to foreign markets. The top management of Haier quickly realized that under the new rules of the game, the company could no longer remain competitive based solely on cost considerations and that it needed to be competitive based on quality, hitherto not a focal point for companies in the protected Chinese market. The destruction of 76 defective refrigerators on Zhang Ruimin's order, aimed at bringing awareness of product quality to workers, was symbolic of the changes Haier went through since. Haier launched a drive to improving not only quality, but service, design, and technological capability. Inspired by Japanese TQC management and Frederick W. Taylor's scientific management, Haier introduced the OEC (Overall every control and clear) model.¹

For some time, Japanese household appliances were considered to be amongst the highest quality products in the world. Haier however decided to set even higher quality standards than the stringent Japanese Industrial Standards (JIS)—the quality standards applied in Japan.

Side by side with its innovative management practices, Haier focused on producing technologically advanced products. A major component of this was acquiring available technologies from abroad through direct purchases from or strategic alliances with leading global firms. The first step in this direction was taken in 1984 when Haier decided to acquire from abroad a new refrigerator technology. After a careful evaluation of 32 potential cooperative partners, Haier decided to establish an alliance with the Liebherr Company of Germany. This move enabled Haier to import Liebherr's four-star refrigerator production technology and equipment to China. Liebherr had 70 years of experience in producing high quality refrigerators. Its refrigerators were generally regarded as the leading ones in the world. Compared to Liebherr's refrigerators with four-star technology, Chinese products featured the very old-fashioned two-star technologies with a freezing capability of -12° C. The freezing capability of a four-star refrigerator was -18° C. By acquiring four-star refrigerator technology, Haier became the only Chinese company that was able to offer this modern refrigerator in China.

Haier followed up the licensing of Liebherr's four-star technology with an active learning and R&D strategy. It established a sophisticated R&D department and sent more than 40 of its top engineers and managers to Liebherr for training. Liebherr proved to be a very successful training institute for Haier's top R&D talents. They studied the development of four-star refrigerators and eventually mastered the key technological skills required for developing advanced refrigerators. In 1985, a year after it licensed Liebherr's technology, Haier was able to introduce its first four-star

¹The OEC model implies that everything should be controlled and cleared within the specific time frame that was set. Today's tasks must be finished today and the problems showing up during the work process must be dealt with immediately and improved at once, after finding out the reasons and responsibility.

refrigerator in the Chinese market. This product instantly established Haier as the leading refrigerator producer in China.

3.2. Growth strategies

Domestic diversification². By the late 1980s, Haier established itself as a leading national brand in the refrigerator market. Until 1991, however, Haier remained a single product company focused entirely on refrigerators. From then on, Haier started to diversify into new product markets ranging from freezers to air-conditioners. It took Haier about 3 years to successfully establish itself in these two industries. By 1994, Haier's sales had grown to RMB 2.56 billion and its profits to RMB 200 million. Subsequently, Haier successfully developed, among others, washers, microwave ovens, and water-heaters. In August 1997, Haier made its entry into the black household appliances sector; until then Haier's products were primarily white household appliances.

A major component of Haier's diversification into other sectors in the appliances industry was the strategy of acquiring and reviving the so call "stunned fish"—companies with good products, facilities, equipment, and distribution channels but with poor management. Thus, in 1991, Haier acquired Qingdao Air conditioner Factory and Qingdao Freezer Factory—both in financial trouble and experiencing falling sales. After every acquisition, Haier transmits its own management practices to the acquired company and its workers; the Haier brand name is given to the products of the acquired company only after they have met Haier quality standards. By the early 1990s, the company had three profit centers: refrigerators, air—conditioners, and freezers.

Throughout the 1990s, Haier rode on a wave of domestic acquisitions to expand its capacity, especially in newer product lines (see Table 1, which also shows the major factors contributing to Haier's diversification). This was a period when the domestic appliances market experienced intense competition thanks to the large scale entry of foreign corporations into the Chinese market. Many Chinese firms experienced dwindling sales and heavy losses. Several such firms were "allocated" by the local governments to successful Chinese companies, primarily to protect workers from losing their jobs. The fact that Haier established itself as a successful company in China contributed to its being offered, or approached in regard to acquiring, a number of loss-making, indebted companies. Two notable acquisitions are those of Red Star Electric Appliance Company (Red Star hereafter) and Hefei Yellow Mountain Television Company (Hefei hereafter).

Red star, like Haier, was also a collective (owned by workers) and was among the top three washing machine manufacturers in China. Despite its leading position in

²Information about Haier described from now on draws on Yi and Ye (2003), except for the sources mentioned in the text.

Table 1 The process of Haier's diversification

Stage	Period	Additional operational area	Method
1	1984 to December 1991	Refrigerators	Imported refrigerator technology from Liebherr Company of Germany
2	December 1991 to July 1995	Freezers Air-conditioners	Acquired Qingdao Freezer General Plant and Qingdao Air-conditioner Plant
3	July 1995 to August 1995	Washing machines	Acquired Red Star Electric Appliance Factory.
		Microwave ovens	Established a joint venture with Laiyang of Shandong Household Appliance General Plant
		Water heaters	
4	September 1997	Black household appliances	Established a joint venture with West Lake of Hangzhou Electric Group
5	1998	Knowledge sectors	Formed technology cooperation with many external organizations

Source: Sun, 2002; Yan and Hu, 2001; www.3rd56.com.

the washing machine market and the popularity of the Red Star brand, the company in 1994 had an accumulated debt of RMB 132 mill. The Municipal government approached Haier to buy the debt-ridden company and offered it "free of charge." In return, Haier would pay off Red Star's debt (equaling Haier's net profit in 1993) and kept all its employees. In June 1995, Haier acquired Red star electric appliance company along with five other companies affiliated with it for free. The newly acquired company became profitable already by the end of 1995. In 1996, the company was rechristened Haier Washing Machine Company. A similar set of events preceded and followed the acquisition of Hefei Yellow Mountain Television Company. Unlike Red Star, however, Hefei was a state-owned enterprise. The company was founded in 1950, and in 1997 it employed 2,700 workers, sold 47,000 TV sets, and had sales of RMB 90 million. However, like Red Star, the company had been accumulating losses and had a debt of 50 million RMB. From the point of view of Haier, Hefei produced good products and possessed advanced technology, and the city government was "open minded," meaning that it was supportive of firms. Haier acquired Hefei in 1998 and kept all its employees. The turn around of the newly acquired company was quick and remarkable. In the following year, the company sold 400,000 TV sets (almost 10 times the previous year).

Figure 1 captures the diversification of Haier's technological competence base, which underlie its rapid product diversification, in terms of the number of patent

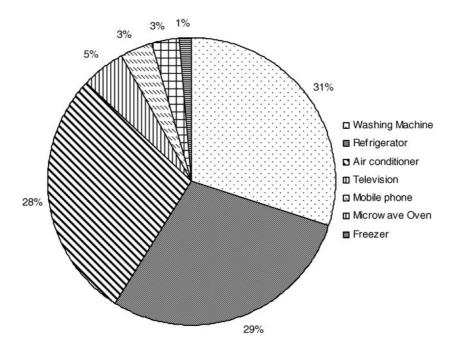


Figure 1 Industry-wide distribution of Haier's patent applications in China: 1992–2007. *Source:* http://ensearch.sipo.gov.cn.

applications in China in different product fields.³ Washing machine, refrigerator, and air-conditioner account for the bulk of Haier's patent applications in China.

Regional expansion and exports. In 1992, Haier became a qualified international supplier when Haier products passed ISO9001. Since then, it has been exporting its products, starting with the Indonesian market, under original equipment manufacturer (OEM) contracts. Haier products were noted for their quality and design and manufacturers in other East Asian countries began to be interested in joint production ventures with Haier. The first such venture was in 1996 with the Sapporo group of Indonesia. The joint venture produces refrigerators, washing machines, air-conditioners, microwave ovens, and hot bathing equipments. By 2000, Haier freezers had a share of 28% of the Indonesian market. Joint ventures with local companies continued to be Haier's preferred means of establishing production units across most of the less developed world. By the early 2000s Haier established joint ventures with local partners in Philippines, Dubai, Iran, Algeria, Jordan, Pakistan, and Bangladesh.

³The graph is based on a sample of 1623 patents of a total of 2120 patents Haier has applied in China until 2007.

Haier's entry into the developed world. Like in Asia, Haier first entered the Western markets as an OEM exporter. Since the early 1990s, Haier was exporting to Europe (first to UK and Germany, then to France and Italy). Haier's first manufacturing plant in Europe was in Yugoslavia resulting from a joint venture with a local company. The joint venture produced multitasking air-conditioners with the Haier brand name. In the year 2000, Haier Europe was established in Varese, Italy, to coordinate sales and marketing efforts of Haier products across 13 European countries. In addition, there are eight country offices. The main products are refrigerators, freezers, washing machines, dishwashers, microwave ovens, and small appliances designed specifically for the European market. In 2001, Haier made its first European acquisition when it acquired a refrigerator plant in Italy from Maneghetti Equipment in Padova. As in its Chinese acquisitions, Haier aimed to use the new production facility to expand its product range and production capacity. Additionally, it planned to purchase and sell in China Maneghetti-produced oven and hobs. In the United States, until 1994, Haier sold its products under OEM arrangements. American import companies were interested in only getting Haier products at low prices; none of them were willing to allow Haier brand on the products. However, in 1994, for the first time, Haier sold its products in the US market under its own brand name through a joint venture with Michael Jemal. The joint venture sold 165,000 compact Haier brand refrigerators in the United States in 1994. In 1999, Haier built a factory in Camden, South Carolina, with a view to produce bigger-sized products in the United States itself. The new plant has a production capacity of 500,000 refrigerators per year.

Haier's internationalization efforts are now primarily focused on the United States. In the US market, Haier initially sold its products through Wal-Mart, but soon wanted to sell higher-end products, which command superior profit margins, through major retailers such as Sears and Lowe's. To do that Haier needed to produce them because these were typically larger size appliances that could not be as easily brought in from China. In addition to its manufacturing facility in Camden, Haier also built a design center in Los Angeles and a trade center in New York. Currently, with the US economy going through a recession, Haier has even started exporting its higher-end products made in the United States to China, targeting affluent consumers. Haier thus has demonstrated its flexibility and adaptability when faced with newer challenges of globalization.

Overall, Haier has so far established three overseas industrial parks (in the United States, Pakistan, and Jordan) and 30 overseas factories. The company has 58,800 sales agents worldwide and exports its products to more than 160 countries in Europe, North America, Middle East, and Asia.

Targeting niches. Haier's success lies not so much in selling its products at the lowest price as much as in the careful positioning of its products. This involves a combination of identifying its niche markets and following that up with making products that accommodate local specificities. As for the former, an example is

Haier's focus on the compact refrigerator market in the United States. With major players like GE and Whirlpool engaged in head-to-head competition in the more profitable side-by-side refrigerator market, the compact market is left to less formidable players like Avanti and Danby. Haier's strategy appears similar in Japan where Haier products are sold through the Haier-Sanyo joint venture. In France and Italy, Haier first sold its air-conditioners; the strategic reason for this was that air conditioner market being relatively new brand image was not important. After establishing its brand, Haier introduced its other product lines such as refrigerators and washing machines.

Examples abound when it comes to Haier's emphasis on making products that accommodate the characteristics of the local market. In China, Haier developed a washing machine model that serves the purpose of not just washing clothes but also washing vegetables. This model, targeting rural areas, was the result of Haier repairmen reporting back to the company that people in rural China use their washing machines for cleaning vegetables as well. In Indonesia, on account of the country's power shortages and voltage fluctuations, Haier introduced energy saving, flexible-voltage appliances. In the United States, Haier developed a refrigerator model with a fold-out table aimed at students; this was after product designers who visited cramped dormitory rooms discovered that students put boards across two refrigerators to create a make-shift desk (Financial Times, September, 24, 2004).⁴ Haier introduces new categories of products as well. An example is the wine cellar it developed for the American market. Initially, Haier faced stiff challenges in convincing its potential customers about the usefulness of such a product. Currently, however, Haier has a full line of wine cellars—the Premier Edition has an amber tinted, double-paned, contoured glass door.

Alliances, acquisitions, and the reorganization of internal R&D. Haier combined product diversification, product upgrading, and internationalization with a technology acquisition strategy. Since its earlier technology cooperation with Liebherr and after gaining its leadership status in the refrigerator market, Haier extended its cooperative efforts with leading global firms in other fields. Table 2 shows some of Haier's major international technology cooperative partners. These partnerships were instrumental in Haier's being able to deliver better quality products or new products after acquiring domestic firms in fields such as air-conditioners and washing machines, which were at the time outside its core expertise. For example, after acquiring Red Star Electric Appliance Company in 1995, Haier introduced more

⁴Another niche product from Haier for the US market is the two-compartment Access Plus chest freezer, which is "the world's only chest freezer that has a pullout drawer." Unlike conventional chest freezer Access Plus has two compartments—a top half and a bottom half. While the top half can be accessed through a conventional top-opening lid, the lower half is a pullout drawer, which makes accessing any frozen item much easier.

Year	Partner	Cooperative target
1993	Merlonic Company (Italy)	Produces automatic roll-washers
1993	Mitsubishi Heavy Industry, LTD (Japan)	Produced air-conditioners
1994	GK Design Company (Japan)	Engaged in the cooperative design of new products
1997	Philips (NL) and Metz (Germany)	Produced color TV set
1998	Beihang University (China) and C-Mold (USA)	Software development
1999	Toshiba (Japan)	Produced MRV inverter series of commercial air-conditioners
2001	Ericsson	Produced internet-ready (using Bluetooth technology) appliances
2002	Sanyo (Japan) and SAMPO (Taiwan)	R&D, marketing agreements

Table 2 Selection of Haier's most important technology alliances

Source: Ouyang, 2003; and Zeng and Zhong, 2003; www.haier.com.

advanced washing machines using Red Star's facilities drawing on the technology cooperation agreement it had signed with Italy's Merlonic in 1993.

Haier has established a global network of design, manufacture, distribution, and after-sales services. By 1996, Haier became a technology exporter. Leveraging its technological base and product range, Haier has entered into *cooperative research programs* with leading foreign companies. Haier's international technology co-operations span Tokyo, Los Angeles, Montreal, Lyons, Seoul, Sydney, and Amsterdam. Its cooperative partners include Toshiba, Mitsubishi, ESS, Philips, Metz, and Lucent. These alliances provide Haier with information about global trends in technology development. In addition, teaming up with these globally leading innovative companies serves Haier a *radar function* that has allowed it to scan and evaluate new and emerging technologies around the globe. Alliances with leading companies like Liebherr, Philips, Mitsubishi, and Toshiba provided important knowledge and experience for the catch up process. External learning however was not sufficient for Haier to attain the strong market position it currently occupies.

External learning was supported by internal capability development in R&D and design and the development of general management capability. Haier repeatedly adjusted its R&D organizational structure and increased its R&D spending so that its new products could be brought to the market quicker. The development of the R&D organization after its establishment 1985 underlines this: in 1990, it was split in three; in 1995, the Technology Research Center was established, which was split in 1999. Haier has also established several overseas *design and R&D centers*. These design centers (totaling 15 to date) are in charge of developing a broad variety of household appliances that satisfy consumer needs in a number of countries world wide.

Haier's organizational structure too has been undergoing changes, geared toward innovation. According to its CEO Zhang Ruimin, Haier follows an increasingly flat organizational structure, which is intended to make "everyone a source of innovation" (Ruimin, 2006). It changed its U-type organization form into an M-type organization (Yan and Hu, 2001). Currently Haier's organization structure contains four administration levels, the top level is the group headquarter, the headquarters consists of four centers (center research academy, project development center, capital center, and human resource center), the subsequent level is the department (business unit), the departments are divided into department branches (plants) (Yan and Hu, 2001).

Haier carries out its globalization strategy according to a "three one-third" principle that is one-third of its products are produced and sold in its own country, one-third of the products are produced in its own country and sold overseas, and one-third of the products are produced and sold overseas.

How does the growth trajectory of Haier compare to that of other firms from LDCs that have also begun to emerge on the international stage. How unique or similar are Haier's path to internationalization? To find some preliminary answers, we compare Haier with another major corporation from Asia, the Tata Group of India. We first provide a brief description of Tata, based on existing studies, and then compare and contrast some major dimensions of their growth and internationalization processes.

4. Tata group: an overview

Tata is India's largest business group and one of the oldest.⁵ The group's origin dates back to 1874 when Jamsetji Tata founded a textile mill. In 2006–2007, it employed 330,000 people and its total revenue was equivalent to 2.6% of India's GDP at \$28.8 billion. Close to 40% of that revenue derived from exports and foreign production. Over the years, Tata became highly diversified. In 1938, the group had 14 companies and the number of companies reached its peak of 150 in 1969. Tata underwent a major transformation during the early 1990s, after Ratan Tata became the chairman of the group. Thus, in 1998, the group, in consultation with McKinsey & Co., trimmed its lines of businesses from 25 to 12 and group-affiliated companies from 80 to 30. It exited from old industries such as textiles and entered new industries such as telecom. Perhaps the most celebrated diversification of the group in several years was its entry into the automobile sector. The first car from Tata was built in 1990. However, the 1990s was a period when many global auto giants entered the Indian market, and the company (Tata motors) suffered heavy losses (for example,

⁵The case study of Tata draws on Goldstein (2008), unless otherwise mentioned.

	2000– 2001	2001– 2002	2002– 2003	2003– 2004	2004– 2005	2005– 2006	2006– 2007
Materials	23	19	21	22	21	23	22
Engineering	28	25	25	29	31	32	30
Energy	9	8	9	8	8	7	6
Consumer goods	11	8	7	7	6	5	5
Chemicals	6	5	5	5	5	4	5
ICT	12	26	23	22	19	20	26
Services	11	9	10	9	10	9	7
Total	100	100	100	100	100	100	100
3 largest	53	60	69	73	71	75	78
5 largest	75	77	88	90	89	91	91

Table 3 Evolution of Tata's main business segments since 2000: share in total revenue

Source: Goldstein (2008: 45).

\$110 mill in 2000). Tata motors responded by revamping its production and diversifying into exports, which enabled it to return to profit.

Currently the group's three core areas of business are engineering (including automobiles), materials (especially steel), and ICT services. Table 3 reveals a recent pattern of a rapid shift away from diversification. The three core businesses noted above have emerged as the main sources of the group's total revenue; their combined share in total revenue has increased from just over 50% in 2000–2001 to close to 80% by 2006–2007.

Tata has a long history in internationalization. Already in 1907 the group set up its first overseas representative office (Tata Ltd), in London. After WW-II, it sets up a representative office in New York. However, only since the 1970s has the group started to establish overseas production units. Early internationalization, of the 1970s and1980s, was directed toward countries less developed than India (Lall, 1983). Internationalization then, as we noted in Section 2, was a way to diversify away from the domestic market, into similar markets—the domestic market remained the primary market. However, in light of globalization and the attendant competition, the group has been taking active steps to establish itself as a global conglomerate. Internationalization has been central to this strategy. Unlike in the past, in the recent years, the bulk of the group's overseas investments are destined to advanced economies (Table 4). Off the 29 destinations of foreign investment reported in

⁶In a strict sense of the term the Tata group is diversifying, as it has entered into many newer sectors, like automobiles. However, given Tata's exit from a host of "old" industries the overall mix of the industries in which it operates has narrowed considerably.

 Table 4 Internationalization through acquisitions: the 2000s

Tata company	Acquired company	Location	Stake acquired	Value	Date
Indian Hotels	Starwood Group (W Hotel)	Sydney, Australia	100	USD 29 million	December 2005
	The Pierre	New York, USA	Lease of property	USD 9 million	July 2005
	Ritz-Carlton	Boston, USA	100	USD 170 million	January 2007
	The Campton Place	San Francisco, USA	100	USD 58 million	April 2007
	Orient-Express Hotels		10	USD 211 million	September 2007
Tata autocomp systems	Wündsch Weidinger	Germany		USD 9 million	September 2005
Tata chemicals	Brunner Mond	UK	63.5	USD 111 million	December 2005
			36.5	USD 64 million	March 2006
	Indo Maroc Phosphore (IMACID)	Morocco	50	USD 38 million	March 2005
Tata Coffee	Eight'O Clock Coffee Company	USA	100	USD 220 million	June 2006
Tata consulting services	Comicrom	Chile	100	USD 23 million	November 2005
	Pearl Group	UK	75	USD 96 million	October 2005
	Financial Network Services	Australia	100	USD 26 million	October 2005
Tata industries	Indigene Pharmaceuticals	USA	26 < x < 30	Not disclosed	July 2005
Tata interactive	Tertia Edusoft Gmbh	Germany	90	Not disclosed	January 2006
	Tertia Edusoft AG	Switzerland	90.38		
Tata Metalics	Usha Ispat, Redi Unit	India	100	USD 25 million	January 2006
Tata motors	Hispano Carrocera	Spain	21	USD 16 million	February 2005

	Daewoo Commercial Vehicle Company	Korea	100	USD 102 million	March 2004
Tata Steel	Millenium Steel	Thailand	67.11	USD 167 million	April 2006
	NatSteel Asia	Singapore	100	USD 286 million	February 2005
	Corus	UK/Netherlands	22.84	USD 12 billion	April 2007
Tata Sons through	Energy Brands Inc	USA	30	USD 677 million	October 2006
Tata Tea and Tata Sons	Tetley Group	UK	100	USD 434 million	February 2000
Tata Tea through Tata Tea (GB)	Good Earth Corporation & FMali Herb Inc	USA	100	USD 31 million	October 2005
	JEMCA	Czech Republic	100	USD 22 million	May 2006
	Joekels Tea Packers	South Africa	33.3*	USD 2 million	September 2006
Tata Tech	INCAT International	UK	100	USD 90 million	August 2005
VSNL	Gemplex	USA	Assets and network	Not disclosed	July 2003
	Tyco Global Network	USA	100	USD 130 million	November 2004
	Teleglobe International	USA	100	USD 239 million	July 25

Source: Goldstein (2008: 42).

Table 4, only six were developing economies. The US and UK were the targets in 16 cases. These investments have spanned a wide range of industries, from hotels, tea, chemicals and metals to consulting, auto components, and automobiles. As Goldstein (2008) notes, based on the nature of the business, these investments have been aimed at accomplishing a number of objectives: accessing new markets (BPO, steel, cars, trucks); integrating value chain (steel); brand control (tea, cars); and technology acquisition (steel, cars, trucks).

Another difference from the past is that overseas investments are largely taking the form of acquisitions (Table 4); joint ventures were the preferred mode in the 1970s and 1980s. Such acquisitions have certain advantages. For example, the companies acquired are generally leading firms in their industries. As a result, the acquirer inherits the company's strategic assets (managerial, technological, and marketing resources), without having to build them from scratch as would be the case when setting up overseas operations through Greenfield investment. Increasingly, acquiring strategic assets have become a motivation for OFDI from emerging economies (Dunning *et al.*, 2007). Such acquisitions have their challenges, however, such as integrating the acquisitions with the existing structure of the group and managing operations in diverse locations. This will be discussed later. In the following section, we compare Haier and Tata, with a focus on their internationalization and the factors governing it. We will also elaborate on aspects of internationalization not discussed so far, especially in regard to the Tata group.

5. Haier and Tata: a comparison

Both Tata and Haier are conglomerates that had their origins in their sheltered home markets. While Tata has a much longer history, dating back to the 19th century, Haier is a relative newcomer. Tata also has had a long international experience, but mainly in less-developed markets in the 1970s and 1980s. As already discussed, the underlying motivation for this was diversification, out of a stagnant and cyclical home market. Becoming a leading global firm required greater ambition and efforts that was not forthcoming until much later. With the onset of globalization, Tata has undergone rapid transformation. The group companies, which hitherto have had more or less independent visions about their business strategies, have since been brought under more direct control of the group. Prior to their internationalization, both Haier and Tata had established themselves well in their respective domestic markets. Below we compare and contrast several dimensions of their growth and internationalization. We hope to gain some insights into the dynamics of the emergence of MNCs from these two LDCs whose policy structures have had many commonalities in the past and who have embraced globalization for some years now.

Destination of foreign investment: Haier's internationalization began with less-developed markets, but in the span of a few years it entered other less-developed

markets and developed markets. Tata's internationalization followed a clear, gradual sequence: less-developed markets first and developed markets much later. Tata has had several decades of experience in LDCs before it entered developed country markets. Compared to Haier, Tata's entry into developed country markets came late, in the early 2000s. But in a short span of a few years, Tata made a series of acquisitions in a variety of industries.

As outlined in Section 2, extensive operational experience in less-developed home markets offers firms, like Haier and Tata, certain country-specific advantages. The accumulated capabilities, developed to compensate for country-specific disadvantages, have helped them extend their operations into other emerging economies. This helped assuage the pressures of domestic competition by, among others, allowing them maintain efficient scales of operation and achieve the economies of scope from international diversification (e.g. Caves, 1982). Internationalization into emerging markets has therefore cushioned their internationalization pursuits in more advanced markets. The pattern (entry into less-developed markets first and developed markets later) of internationalization of Tata and Haier appears to provide some support to the Uppsala view that predicts diversification of investment by firms into countries with progressively higher psychic distance (that is, transaction cost of doing business).

Mode of internationalization: As already discussed, to enter LDCs both Haier and Tata preferred joint ventures. As regards their entry into advanced markets, acquisitions and, to some extent, joint ventures were central to Tata's, but not so much to Haier's, overseas investments. In the US market, an important focus region for Haier, the group has so far not been successful in acquiring any leading brands. However, Haier took the tough route to overseas production when it set up a factory in South Carolina, in the United States. Tata was perhaps fortunate enough to have found several leading enterprises up for sale, such as Corus, the commercial truck operation of Daewoo, and Tetley tea. The acquisition of these well-known brands has enabled Tata to enter new markets (and in many cases move up the value chain) and acquire strategic assets such as technology and management skills. In fact, mergers and acquisitions (M&A) was a route through which many of today's large, especially American, conglomerates emerged. In the recent waves of M&As companies from LDCs, especially China and India, are playing a much bigger role than in the past (e.g. Duysters et al., 2008). The acquisitions of more advanced firms by today's emerging-country firms, like Tata, could thus be seen as a relatively easy route to becoming a globally established enterprise—a privilege newcomer firms from LDCs seldom possessed in the past. Haier's acquisitions in advanced countries however have been limited to a few minor ones in Europe, so far.

State support: Both Tata and Haier have had close ties with their respective home governments. But the nature and manifestations of governmental connections have been quite different for the two groups. In post-independence India, connections with the government were vital for securing production licenses and

government contracts. In addition, Tata, like other large Indian conglomerates, also gets political support from the Indian government, especially for high-profile acquisitions. For example, prior to Tata's acquisition of the Anglo-Dutch Corus, the then finance minister of India offered government's financing support for the deal.

Haier too has benefited from government support, especially during its domestic expansion. As noted in our earlier discussions, the group owing to its superior showing in the domestic market has been a favorite with local governments who "offered" Haier a number of financially ailing companies. In at least a few of these transactions, the companies under consideration were offered for free—with the conditions that Haier inherited their debt and retained their workers. These acquisitions were an important component of Haier's diversification into other areas of the home appliances industry. The central government's ("grasping the large while letting go of the small") strategy of establishing big businesses also contributed to Haier's expansion. However, there is at least one incident, which demonstrates that the group was not "hand in glove" with the government. In 1993, to control real-estate speculation, the central government tightened credit. As a result, Chinese banks refused funding for the Haier Industrial Park, for which Haier had already acquired 5, 000 acres of land the previous year in the High-Tech Zone in Qingdao. Haier responded by listing a group company in the Shanghai stock exchange to raise money for the construction of the Industrial Park. However, in recent years, especially after the Chinese government launched the strategies of "go global"; large corporations like Haier have been getting backing from the state. Thus, new institutions such as China Investment Corp and China Development Bank offer a variety of support to Chinese companies, especially for their overseas acquisitions. Other benefits Haier receives from the Chinese government include assistance for R&D, being introduced to foreign customers, and cheaper input costs due to supply from subsidized state-owned firms in upstream industries. The latter is especially important in the technologically mature white goods sector where cost competitiveness is paramount.

In sum, it appears fair to argue that state support, in Haier's case, stemmed from success in the domestic market—resulting from the group's own effort; where many companies (including those owned by the state) failed, Haier succeeded, and that success made it a favorite for subsequent state support. Thus state support contributed to Haier's further expansion and internationalization. The nature and extent of state support for Tata was different, but as in the case of Haier, state support has helped both its domestic expansion as well as internationalization.

Niche markets/products. Haier and Tata have been successful in creating new markets/products. We already noted how Haier entered Western and Japanese markets by selling small appliances. The strategy has been to gain brand recognition before introducing larger appliances, which carry higher profit margins. Our earlier discussion also highlighted Haier's emphasis on producing niche products that take into account local specificities, in not just Western markets, but other markets,

including China, Indonesia, and the Middle East. Tata is known for identifying niche markets in its home country. The well-known example is the small car (Nano) that the company plans to launch in the near future, with an expected price tag of \$2,500. The low-priced Tata Nano is targeted at India's sizeable motorcycling population, for many of whom the available car models are beyond reach. Nano, if found successful in the domestic market, is expected to be launched in similar markets abroad. Interestingly, other companies too have been following the Tata lead, in spite of their initial skepticisms about the feasibility of producing such a cheap car.

Entrepreneurship: Perhaps the greatest driving force in the emergence of both business groups has been their leadership whose vision and the entrepreneurial dynamism made their companies stand out domestically, if not globally. The top management of the groups exhibited dynamic capabilities, keeping with the changes in business environment. Both groups recognized the need for internationalizing their operations and becoming truly global, in order to be successful in the age of globalization. They have taken several steps toward achieving that goal. In the case of Tata, the group Chairman Ratan Tata was instrumental in taking the group in a new direction since the early 1990s. Under his leadership, Tata entered several new and growing sectors, such as automobiles. While Tata's entry into the automobile sector raised several eyebrows, perhaps justifiably so given the fact that Tata had no prior experience in that field, Tata Motors today is one of the most profitable, and growing businesses of the group. Another key component of Tata's growth strategy under Ratan Tata was internationalization. As in regard to the group's domestic diversification, especially the introduction of niche products such as the Nano, initially many of Tata's overseas acquisitions too did not make a lot of business sense, at least gauging by the response of the stock market.

The leadership of Haier too possesses a similar entrepreneurial dynamism. In fact Haier's entry into developed country markets began much before Tata's. Tata, despite having set up a trade center in the UK in the early 20th century, entered the European market only in the 2000s. Haier, on the other hand, quite early on realized the importance of establishing itself as a global enterprise, and throughout the 1990s entered a number of markets worldwide almost simultaneously-in both lessdeveloped and developed regions. Like Tata's Ratan Tata, Haier CEO Zhang Ruimin has been a transformational leader for the group. Unlike, Ratan Tata who became the Chairman of the group at a later stage of the long evolution of the group, Ruimin has been at the top from the time when Haier was a single product, debt ridden company, to the large conglomerate that it is today. Zhang Ruimin's vision for the company's future can be perhaps be captured from one incident. In the early 1990s, when Haier was still diversifying into newer fields in the appliances sector and when the domestic competition was beginning to intensify, Whirlpool offered to buy Haier. This was also a time when many Chinese companies were being merged with larger companies. However, Ruimin refused that offer, and today Haier is a major competitor of Whirlpool. This is reminiscent of what the cofounder of Sony Corporation did in 1955: even though Sony was at the time an unknown entity to US consumers, Akio Morita tuned down an offer from Bulova to sell Sony radios in the United States under Bulova brand name (Yi and Ye, 2003).

Brand image and its protection: Both groups have been taking steps to improve their brand image in order to establish their footprints in global markets, especially Western markets. However, changing Western consumers' perception requires years of marketing efforts (Liu and Li, 2002). So both groups have been exploring ways to quickly improving their brand awareness. One easy way is acquisition of well-known brands. It appears that Tata has been more successful in this regard—having acquired several popular western brands, such as Tetley tea, Corus steel, and more recently Jaguar and Land Rover. The acquisition route has not worked very well for Haier, however. In the US Haier made a bid for appliance maker Maytag, only to withdrew its bid later (Whirlpool bought Maytag in 2006 to create the world's biggest appliance maker). Currently, however, Haier is "assessing the possibility of acquiring" General Electric's appliance arm. Haier has been more successful in establishing joint ventures with leading firms, leveraging its dominant position in the home market. For example, in 2006, Haier acquired 60% stake in the householdrefrigerator business of Sanyo-Electric Company to form a joint venture named Haier-Sanyo-Electric. Haier has also established long-term relationships with OECD-based brand-building specialists.

In addition, both groups follow a similar approach to protecting their brand image as their businesses expand. As we have already discussed, Haier grants the products of newly acquired companies the Haier brand name only after they have met the Haier quality standards. Tata took a major step in this direction in 1996 when under "brand equity and business promotion agreement" all companies wishing to use the Tata name and brand needed to sign an agreement agreeing to: pay an annual royalty, adhere to Tata Code of conduct, and adopt the Tata Business Excellence Model (TBEM).

6. Lessons and conclusions

In many ways, internationalization appears to be a symptom of the new dynamism exhibited by firms in their response to globalization. Internationalizing firms, as both the Haier and Tata case studies reveal, have a global focus. This is a big departure from the past. For example, when Tata entered foreign markets in the 1970s and 1980s, the Indian market remained their core focus. Although India remains the main market for the group, its assets are being increasingly dispersed globally. For Haier, unlike Tata, internationalization has been a completely new game. Only during the last 20 years has the firm established itself even in the Chinese market. Just over two decades ago, while China was looking for ways to vitalize its state-enterprises dominated industrial sector, Haier was waging its own battle for survival.

Today, as with the Chinese industry, Haier has finally arrived on the world stage. Similarly, the transformation of Tata has somewhat been in tandem with the changes that the Indian economy has been going through. What are the challenges these firms have overcome and what remain to be tackled?

The biggest challenge for Haier and Tata has been improving the quality of their products—something that was not a major consideration in the past. Haier's focus on quality began quite early on under its new director Zhang Ruimin. Even prior to its internationalization, and when its sole product was refrigerator, Haier developed and implemented an innovative management practice that went after quality. The new management model, having proven its worth, has become the cornerstone of all of Haier's operations, in China and abroad. Haier expanded in scale and diversified into newer sectors riding on a wave of acquisitions of financially troubled companies in China. Haier's quality standards were quickly imparted to newly acquired companies, and even new product lines were launched from their factories.

How has Haier managed to continually improve its products and introduce newer products? Just as Haier established itself in the domestic refrigerator market, it entered into a series of strategic alliances with established global firms. Concurrently Haier revamped its own in house R&D efforts and set up a global network of R&D and information centers. Haier is also taking other routes such as partnership with foreign firms to cut into advanced markets. The strategy of Tata in this regard appears to center on acquisitions of well-known foreign brands, which also offer it other strategic assets, such as technology and distribution networks (Table 4).⁷

Firms that make investment overseas have to weigh the costs of internationalization. For example, for a Chinese company like Haier operating in foreign markets, especially the US market, means having to deal with differences in culture, language, tax laws, etc. Second, there are the direct costs of doing business in Western markets. In Haier's Camden plant in the United States, workers are paid 10 times the Chinese wage. However, the benefits appear to outweigh the costs, at least in Haier's case. By employing local workers, Haier aims to coordinate local design, production, distribution, and after-sale service and thus resolves the problems associated with unfamiliarity of Haier's top management with the local market. In spite of the higher cost of labor, Camden plant lets Haier save considerably in the transportation cost of large refrigerators from China. Other benefits include access to a highly trained manpower, prospects of absorbing technology and the "Made in USA" sticker, such as being eligible to bid for government contracts. Haier's decision to hire local workers is in contrast to what Sony Corporation did when it entered the US market in the 1960s: Sony filled its fully owned subsidiary with an all-Japanese staff (Yi and Ye, 2003).

⁷Tata does undertake joint ventures with leading foreign firms, like the one with Fiat for joint development and production.

Overseas acquisitions, in addition to some of the aforementioned costs, can pose further challenges. A major challenge is integrating the acquisitions with existing operations, which is a slow and costly process. For example, integration of Tetley tea with Tata tea took over three years and assistance from professional consultants. However, the acquisition eventually yielded dividends. Domestically Tata tea reduced its plantation holdings—thus evolving from a major plantation player to a branded tea business. The company also diversified into other areas like coffee, tea tourism, and mineral water.

How important has the conglomerate structure been for diversification—both product and international? We noted earlier that conglomerate structure provides an internal pool of tangible and intangible assets. Conglomerate structure thus offers each business the leeway needed for readjusting its operations. In the case of Tata, one example is the tea business, which initially struggled after acquiring Tetley tea and another is the auto business, which in the late-1990s took time to readjust and reorient itself after suffering heavy losses in the Indian market.

Conglomerate structure might also be helpful in forging alliances with leading global firms. Our explanation for this in the case of Haier, although speculative, runs as follows. Companies from China, like those from several other LDCs, are often plagued by fundamental problems of poor transparency and disclosure standards. It is reasonable then to assume that the reputation being built up by the group as a whole, and not necessarily the performance of individual product lines like refrigerator or washing machine, has helped Haier forge alliances, on a partnership basis, with global players in a variety of technological fields. An additional explanation, from the industrial organization literature, rests on the fact that many of Haier's technology alliance partners are diversified firms themselves. The argument is that "multipoint competitors are more likely to recognize their mutual dependence ... to sustain tacit collusions in a range of markets in which they meet' (Ghemawat and Khanna, 1998).

What are the new challenges facing these enterprise groups and how equipped are they to deal with them? Haier, like most Chinese companies, started off as a technological novice. Currently, however, Haier develops on average 1.2 new products and applies for 2.3 patents daily, and it ranks number one of all Chinese enterprises. Amidst the substantial progress it has made, the company still faces major obstacles in establishing itself as a leading global firm. For one, Haier remains highly dependent on foreign firms for key components and technology including high performance compressors and sensors. In this sense, Haier, and perhaps Tata too, is yet to demonstrate its prowess in entering technologically more advanced segments, as shown in the past by more established Asian MNCs like Samsung. Samsung was for long an assembler of electronic goods using imported components. In the early1980s, it decided to enter the filed of dynamic random access memory (DRAM). While DRAM was a high-growth segment, very few firms were willing to license the DRAM technology to Samsung. Eventually Samsung bought chip design

and technology from Micron, a financially distressed firm. Samsung followed this up with putting its research team on "crisis mode' and forming a series of joint ventures, eventually establishing itself in DRAM technology (Lee and Slater, 2007).

However, there are two important characteristics that appear common for Haier, Tata, and Samsung: dynamic capability and entrepreneurial rent seeking (see e.g. Lee and Slater, 2007). With regard to the former, all three firms have demonstrated their ability in making the best use of their available pool of capabilities but also in developing new capabilities. Such dynamic capabilities have been important in their entering new fields and new markets and successfully adapting their businesses in view of new and evolving challenges. As regards entrepreneurial rent seeking, we observe that in the aggressive investment behavior of all three firms. Thus even when the industry went through falling sales through the 1990s Samsung continued to invest heavily in DRAM technology. We noted before that some of the acquisitions which Tata made did not make much sense at the outset, at least to the stock market. We also discussed the costs associated with Haier's Greenfield investment in the United States, and Haier's turning down a bid for its takeover by Whirlpool in the early 1990s. All three companies ultimately proved that their long run gains outmatched the resource commitments and the associated costs in the short run. It appears that it is this kind of long-term vision of the top management that has kept these enterprise groups apart from others, which too possessed similar resources to start with.

To what extent can Haier's success be emulated by firms with similar backgrounds? In our view, Haier's progress has not been just about innovative management of internationalization strategies. It has also been about the way in which the Chinese state has adapted its role. The prevailing view about technology transfer since the 1950s until at least the early 1980s was that technology could be easily "bought" and "unpackaged." Thus governments that followed ISI strategies often acted as a "hard bargainer" with foreign suppliers on behalf of domestic companies. The focus was inevitably on keeping the cost of technology at its lowest. However, in the globalized environment, intra-firm learning is only secondary to learning through external interactions. Established firms are taking a variety of measures to keep their technologies from leaking (see, for a discussion, Radosevic, 1997). Thus, while production capabilities could be achieved in house, acquiring design capabilities requires developed network of partners and sourcing capabilities. In other words, technology is no longer traded at the boarder, but through MNC structures or through sourcing arrangements (subcontracting, alliances) over which government has little control. In such a context, the Chinese government appears to have performed the role of a "supporter and organizer of technology networks." In this respect, the Chinese state must have learnt its lessons from its Korean and Taiwanese counterparts.

Haier's and Tata's spectacular growth embodies the dynamism exhibited by emerging MNCs from China and India. It demonstrates that success in the globalized

age is about embracing globalization, diversifying into new, growing fields, and partnering with and acquiring global firms. The success of these and other globalizing firms from China and India also underscores that firms that operated inefficiently under ISI can turn around and become internationally competitive through developing appropriate internationalization, alliance, and domestic capability building strategies. Haier's case further illustrates that the state can play a very important role in this process—by not being an arbitrator between domestic and foreign firms as it did under ISI but by being a supporter and facilitator of firms' technological sourcing strategies.

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Addresses for correspondence

Geert Duysters, Maastricht University India Institute, UNU-MERIT, Keizer Karelplein 19, 6211 TC Maastricht, The Netherlands or Maastricht University India Institute and Eindhoven Centre for Innovation Studies (ECIS), P.O. Box 513, 5600 MB Eindhoven, The Netherlands. e-mail: Geert.Duysters@bu.unimaas.nl, duysters@merit.unu.edu, or g.m.duysters@tm.tue.nl

Jojo Jacob, UNU-MERIT, Keizer Karelplein 19, 6211 TC Maastricht, The Netherlands. e-mail: jacob@merit.unu.edu

Charmianne Lemmens, UNU-MERIT, Keizer Karelplein 19, 6211 TC Maastricht, The Netherlands. e-mail: lemmens@merit.unu.edu

Yu Jintian, Wuhan University of Technology, 122 Luoshi Road, Wuhan, Hubei, People's Republic of China

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