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Emerging challengers in knowledge-based industries? The case of Indian pharmaceutical multinationals

by
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The growth of outward foreign direct investment (FDI) from developing countries and of a new generation of "emerging multinational enterprises" (EMNEs) has stimulated a flurry of publications. EMNEs have been portrayed as on their way to adulthood, latecomers that leapfrog into advanced positions, emerging giants, and challengers of conventional multinational enterprises (MNEs) from advanced economies.

While some EMNE FDI can be classified as resource-seeking, often by state-owned enterprises, an increasing number of EMNEs, often in private hands, operate in knowledge-based industries. Most EMNEs in knowledge-based industries (KB EMNEs) are headquartered in India or China. They have tended to pursue interrelated asset-augmenting and market-seeking strategies in North America and Europe.

While much research has been devoted to KB EMNE's internationalization and resource-building, the particular structural characteristics of industries in which these operate have been neglected. As the case of Indian pharmaceutical companies demonstrates, the latter factor plays a significant role in whether and how fast KB EMNEs can close the gap with their competitors from advanced economies.[1]

Some of the more prominent Indian pharmaceutical companies, such as Ranbaxy or Dr. Reddy's Limited (DRL), have been cited as instances of a leapfrogging internationalization trajectory leading to fast catch-up in competitiveness with conventional MNEs. However, a closer look at the global pharmaceutical industry reveals a vast scale-gap between Indian pharmaceutical companies and major conventional pharmaceutical companies ("Big Pharma") (see table 1 on the website version of this *Perspective*). In 2009, DRL, India's leading

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[1] For a more thorough discussion see Gert Bruche, "Emerging Indian pharma multinationals: Latecomer catch-up strategies in a globalised high-tech industry," *European Journal of International Management* (forthcoming May 2012).

pharmaceutical company by worldwide revenues, was not ranked among the global top 50 pharma companies. DRL's worldwide revenues of US$ 1.5 billion fell far short of the US$ 45 billion generated by the market leader Pfizer (USA) or the US$ 37.6 billion by the Swiss company Roche, ranked fifth, and are still less than the US$ 1.7 billion achieved by the Swedish Meda company, placed 50th.

Research and development (R&D) expenditure is a more specific indicator of global competitive resources. In a lengthy and risky process, more than US$ 1 billion are usually required to bring a new drug to market (see table 2 on the website version of this *Perspective*). Indian pharmaceutical companies spend far less than Big Pharma. The 2009 research spending of US$ 99 million (Ranbaxy), US$ 89 million (DRL) and US$ 67 million (Sun Pharma) compares with US$ 8,570 million by the largest spender, Roche, US$ 6,286 million for the fifth largest (GlaxoSmithKline), and are still only roughly half of the 50th in the global ranking (Watson, a generics company).

In addition to critical mass in R&D, other factors such as a worldwide sales force, relationships with key opinion leaders, worldwide regulatory experience, and ownership of intellectual assets present formidable entry barriers into the research-based segment which still dominates the more than US$ 800 billion global pharmaceutical market. Given the valuations of Big Pharma firms, overcoming entry barriers via acquisitions does not seem to be a feasible pathway for Indian pharmaceutical companies.

In view of these barriers Indian pharmaceutical companies pursue more modest upgrading internationalization strategies. Based on location-specific cost advantages and reverse engineering, their FDI is primarily aimed at building international positions as generics (imitator) companies, often by acquiring smaller generics players in the US and Europe. So far they have not yet achieved leading positions in the global generics market partly due to rapid market consolidation and the increasing entry of Big Pharma. Most major Indian pharmaceutical companies have also engaged in manufacturing and R&D outsourcing for Big Pharma, exploiting growth and learning opportunities.

Although leading Indian pharmaceutical companies such as DRL or Lupin Labs have invested in high-risk discovery research with some success, the enormous costs and risks of global development have often led to partnering with Big Pharma. In view of the considerable barriers and uncertain outcomes, a number of family-owned Indian pharmaceutical companies have sold out to Big Pharma in recent years. This sale of India's crown jewels has prompted consideration in Indian Government circles of restrictions on inward FDI in the pharmaceutical industry and led to calls for industry consolidation.

In comparing Indian pharmaceutical companies with other Indian and Chinese knowledge-based EMNEs, it may be useful to distinguish two extremes on a continuum. At one end, there are leapfrogging industries such as telecommunications equipment and IT services, in which knowledge-based EMNEs have captured globally competitive positions in relatively shorter time spans (Huawei or Tata Consultancy Services are prominent examples). At the other end, we have "fortress industries" such as pharmaceuticals, packaged software or certain branded consumer goods segments where, due to the interaction of global oligopolistic structures, complex and multiple complementary resource and capability requirements or intellectual property and brand walls, the catch-up process – if left to market forces – may take much longer.

Emerging market government policies may influence this scenario. Massive support of selected state-owned champions may support a faster "invasion" into fortress industries, as the examples of China in wide-bodied aircraft or high-speed trains may indicate. Governments may also pursue infant industry protection of national private champions. Both cases raise important governance issues and may eventually trigger political reactions in the developed world.

Annex:

Table 1. Worldwide sales of leading Indian and global pharmaceutical MNEs, FY 2009

Indian pharmaceutical companies				Global pharmaceutical companies		
Indian rank in worldwide sales	Company	Worldwide sales (million US$)	Share of international sales, %	Global rank in worldwide sales	Company	Worldwide sales (million US$)
1	Dr. Reddy's	1,517	78.6	1	Pfizer, USA	45,400
2	Ranbaxy*	1,509	84.4	5	Roche, CH	37,600
3	CIPLA	1,158	56.9	10	Bristol-Myers Squibb, USA	18,800
4	Sun Pharma	974	52.8	25	Mylan, USA	4,800
5	Lupin Labs	842	66.0	50	Meda, SWE	1,700

* Ranbaxy was acquired by Daiichi Sankyo from Japan in March 2009.
Source: Bruche 2011 (ref. 1).

Table 2. R&D spending of leading Indian and global pharmaceutical MNEs, FY 2009

Indian pharmaceutical companies			Global pharmaceutical companies		
Indian rank in R&D spending	Company	R&D exp. FY 2008/09, million US$	Global rank in R&D spending	Company	R&D exp. 2009, million US$
1	Ranbaxy*	99	1	Roche, CH	8,570
2	Dr. Reddy's	89	5	GlaxoSmithKline, UK	6,286
3	Sun Pharma	67	10	Elli Lilly, USA	4,300
4	Cipla	51	25	Lundbeck, DNK	615
5	Lupin Labs	50	50	Watson, USA	197

*Ranbaxy was acquired by Daiichi Sankyo from Japan in March 2009.
Source: Bruche 2011 (ref. 1).

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