PM2008:013

Indian Multinational Corporations

– low-cost, high-tech or both?

Stefan Jonsson

SWEDISH INSTITUTE
FOR GROWTH POLICY
STUDIES

Indian Multinational Corporations

Low-cost, high-tech or both?

Stefan Jonsson

SWEDISH INSTITUTE
FOR GROWTH POLICY
STUDIES

ITPS, Swedish Institute for Growth Policy Studies
Studentplan 3, SE-831 40 Östersund, Sweden
Telephone +46 (0)63 16 66 00
Fax +46 (0)63 16 66 01
E-mail info@itps.se
www.itps.se
ISSN 1652-0483 (web)

For further information, please contact Stefan Jonsson
Telephone +91 11 44 19 71 00
E-mail stefan.jonsson@itps.se

Content

1 March 2008: Indian Multinational Corporations Gain World Wide Recognition

When Tata bought Jaguar and Land Rover from Ford it was one of the first Indian multinational firms to gain world-wide recognition. This acquisition was however only one among many high profile overseas cquisitions carried out by Indian multinationals since the late 1990's. In Sweden alone there are over twenty subsidiaries of Indian multinationals, with one of the most prominent being Imatra Kilsta in Karlskoga, acquired by Bharat Forge in 2005.

Indian firms are increasingly important in the world top lists of important corporations. While there are only seven Indian-based firms on the *Global Fortune 500 firms* in 2008 (and six Swedish firms), twenty out of the top one hundred *Global Challenger* firms identified by the Boston Consulting Group are Indian[1]. Indian multinational firms make up a divergent group of service, manufacturing and natural resource-based firms and in contrast to the Chinese multinational firms they are primarily privately held[2]. While the Indian oil companies top the list in terms of absolute revenues abroad, the five firms that derive the largest percentage of their revenues abroad include two pharmaceutical firms, one food-processing firm and two ICT firms. Looking to the share of employees abroad, the top five include one pharmaceutical firm, one steel firm, two engineering firms and one manufacturing firm. Thus, depending on how globalization is measured a different profile of the global Indian firm is brought forward.

The emergence of Indian multinational corporations (MNCs) is interesting from several perspectives. First, they represent the leveraging of competitive advantage largely distinct from that of the traditional Swedish engineering-based MNCs that began internationalizing in a pre-ICT era and mainly to other similar economies; Indian MNCs often seek to expand to markets that are unlike their home market (i.e. to developed economies). Second, Indian multinationals are often service firms, which implies a different form of internationalization than the traditional Swedish MNC or the recently internationalized Chinese manufacturing firms[3].

1.1 Where is the advantage?

A central idea of the literature on multinational corporations holds that corporations expand beyond their home market on the strength of a distinct competitive advantage created in the home market[4]. Such advantages have typically been a global technological edge, as is the case of Swedish multinationals like SKF, Ericsson or Tetra Pak. Exceptions are of course retail-based MNCs, such as H&M and Ikea where organizational innovations have provided a competitive advantage for global leverage. Later studies of, for instance Japanese, Korean and lately also Chinese multinational firms, outline a strong home-based cost advantage in manufacturing industries on which firms initially globalize then later

[1] *The 2008 BCG 100 New Global Challengers Report. Boston Consulting Group.*
[2] *Fortainer and Tulder, 2008.*
[3] *Kapur and Ramamurty, "India's emerging competitive advantage in services" Academy of Management Executive, 2001, Vol. 15, No. 2.*
[4] *Dunning 1980 "Toward an Eclectic Paradigm of International Production" Journal of International Business Studies, 11(1) 9–13.*

upgrade to a technological advantage through countrywide investments in human resources and R&D.[5]

Indian MNCs are interesting because they diverge from this common pattern[6]. Their competitive advantage is impossible to categorize as either strictly technology or low-cost based. A large number of the Indian MNCs are services-based, primarily IT-enabled services, about which the internationalization literature knows little.[7] While the initial globalization project of Indian IT firms was often related to low-value-added outsourcing tasks, the Indian IT industry is progressively shifting to a higher value-added knowledge process outsourcing (KPO) position[8]. Furthermore, many Indian MNCs that compete from a low-cost position in manufacturing do so in traditionally R&D-intensive domains of the economy; consider for instance Tata in automotives or Dr Reddy's in pharmaceuticals. A pertinent question is thus whether Indian multinationals represent a new breed of multinationals that build their competitive advantage in novel ways: multinational corporations that derive their advantage from service rather than technological innovations and manufacturing MNCs that straddle a low-cost and medium technology position.[9]

This question is not merely of academic interest. Any policy discussion that includes the role of Indian MNCs as investors in Sweden and competitors to Swedish multinationals will be shaped fundamentally by an understanding of the origin of competitive advantage of Indian MNCs. A key question discussed in this PM is thus what type(s) of advantages are Indian multinational corporations leveraging when expanding across the world.

1.2 What are possible policy questions to consider in the light of what we know?

Natural follow-on questions to how Indian multinationals compete concern how a country like Sweden should view this development and what possible policy implications the rise of Indian MNCs may hold for Sweden. A first seemingly obvious question to ask is how the rise of Indian multinationals impacts the global market shares of Swedish MNCs. This PM will not touch on this question for two reasons. First, it is beyond the scope of this project to map the competitive effects on individual Swedish firms or on Swedish firms as a group in any conclusive manner. Anecdotal evidence from discussions with Swedish MNC representatives indicates that currently direct competition is not a major concern as Indian firms often compete for a different segment of the market.

Second, and more importantly, the long run validity of such an analysis is dependent on the assumption that future global market structures will closely reflect those of today, where an unparalleled purchase power rests with the developed economies. When this condition holds, as it has in the post-second world war period, the only long-term sustainable strategy is to create competitive advantages for developed economies, typically where cost sensitivity is lower and quality demands are higher than in developing markets. Such a strategy entails upgrading not only the capabilities of individual firms but those of entire economies and business systems[10]. Canonical examples of such 'value system migration'

[5] *See for instance Lazonick, 2007.*
[6] *Chittoor, Sarkar, Ray and Aulakh, 2008.*
[7] *Eriksson, Kent, 1994.*
[8] *Evalueserve, 2007.*
[9] *Boston Consulting Group argue along these lines in a recent book "Globality".*
[10] *See for instance the work by Michael Porter, 1990.*

from low-cost to high-value production of entire countries includes Japan and Korea and presumably also soon China.[11]

The future will however not be a linear projection of the past. Through the rapid economic development of the BRIC countries (Brazil, Russia, India and China) large new consumer groups are entering the globalized economy. In 2008, for the first time, the combined BRIC markets for new cars will be larger than that of the US[12]. By their size these countries promise new market types where consumers are plentiful, technologically relatively sophisticated but at the same time cost sensitive.[13] An example would be the market for mobile telephony in India, which grows at an annual rate of eight million subscribers but where the average spending capacity is far less than in a developed economy. This market is too important for any mobile telecommunication firm to ignore, but market participation requires the implementation of new business models and technical innovations to lower handset and user costs as compared to developed markets. A long-term strategy can also not be to simply migrate low-end products developed for other markets; when the market is the largest in the world, customized products will be needed. This is not only the case for consumer goods – over sixty percent of the future expansion in nuclear energy generation capacity is planned in India and China.[14]

If we accept the notion that the strategic markets of the future will not look like those of today but will be characterized by for instance cost sensitivity and large economies of scale, it would be misleading to analyze only how well Swedish multinational corporations are holding up in the developed economy. It would then be necessary to evaluate how well suited they are to meet a challenge from Indian MNCs in the new type of markets.[15]

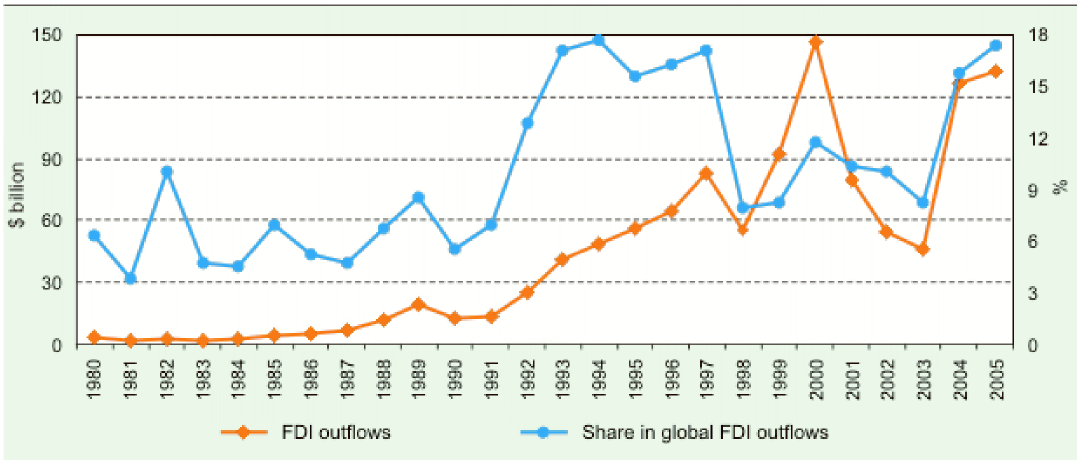
One way forward is to map the contours of the manner in which Indian multinational corporations compete globally to provide a relief against which current strengths and weaknesses of a Swedish innovation system and multinational corporations can be contrasted. This is what this PM aims to accomplish.

[11] *Panagariya, 2008.*
[12] *The Economist 2008*
[13] *BCG 2008 "Globality".*
[14] *ITPS 2008 "Watts Going On – Kärnkraften I Kina, Indien och Japan".*
[15] *Exportutredningen SOU 2008:90.*

2 An Increasing Trend: Foreign Direct Investment from Emerging Economies

Over the past twenty years foreign direct investment (FDI) from emerging economies, as well as multinational corporations with their home base in one of the emerging economies, have increased markedly. From a steady share of about six percent of the world FDI flows during the entire eighties about eighteen percent of global FDI emanated from emerging economies in 2005 (see figure 1). In the period 1980 to 1990 it was primarily Taiwan, Mexico and Korea that generated the growth; in the period 1990–2005 it is India, Turkey and Colombia that have been the fastest growing sources of FDI.[16]

Figure 1 Emerging economies share of FDI.



Source: UNCTAD 2006.

Figure 1 clearly shows that FDI from emerging economies is a strong and growing trend in the global economy. This is, however, not a direct effect of a growing size of emerging economies. There is no significant relationship between Gross National Product (GDP) and outward investment. Instead there seems to be developmental stages that many countries transition through with an initial low level of outward investment, followed by an increase and then a tapering off in FDI intensity.

While the stock of foreign direct investment out of India and Indian companies was about 1 600 million USD in 2006, India is still a small player in terms of its level of FDI to the total size of its economy. UNCTAD measures the world share of an economy's outward FDI as a ratio of its share in world GDP. In this index, India ranks 88 where Hong Kong ranks number one and Sweden number ten (see table 1) – but the Indian share has quadrupled from 0.01 to 0.04 over ten year whereas the Swedish has declined marginally.

[16] *WIR 2006.*

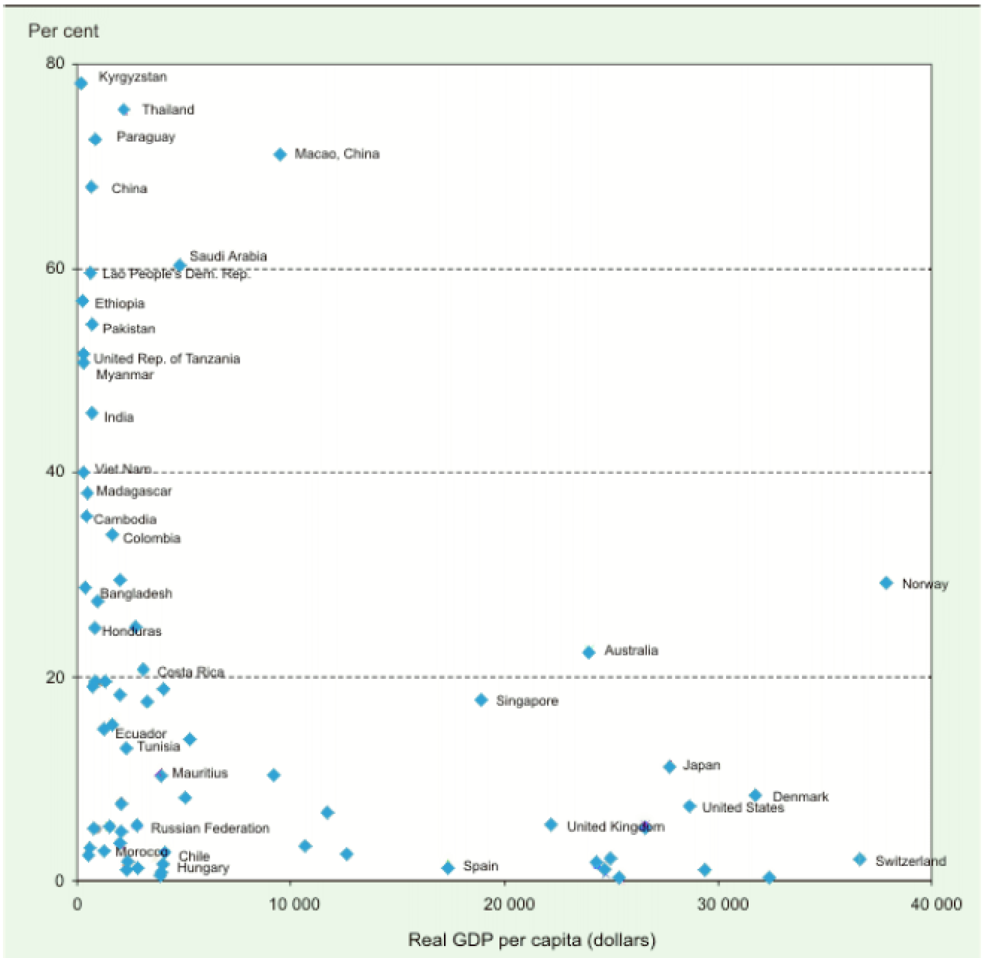
Table 1 UNCTAD FDI Performance Index.

Rank	Economy	1993-1995	2003-2005
1	**Hong Kong, China**	**4.63**	**9.97**
2	Norway	1.40	5.80
3	Luxembourg	..	4.99
4	Switzerland	4.32	4.42
5	Netherlands	4.13	4.22
6	Belgium	..	4.00
7	**Singapore**	**3.61**	**3.97**
8	**Panama**	**5.45**	**3.36**
9	United Kingdom	2.72	2.47
10	Sweden	2.80	2.46
11	Ireland	3.32	2.28
12	Denmark	1.32	1.84
13	Finland	1.20	1.76
14	France	1.33	1.66
15	Iceland	0.24	1.62
16	Canada	1.92	1.50
17	**Bahrain**	**1.84**	**1.46**
18	Germany	1.08	1.41
19	Spain	0.59	1.41
20	**Malaysia**	**1.07**	**1.39**
21	**Taiwan Province of China**	**1.68**	**1.19**
22	Australia	1.43	1.12
23	**Bahamas**	**4.12**	**1.10**
24	**Azerbaijan**	**..**	**1.09**
25	Portugal	0.30	1.06
26	Austria	0.48	0.92
27	**Chile**	**0.34**	**0.76**
28	**Russian Federation**	**0.06**	**0.73**
29	Cyprus	0.08	0.73
30	Malta	0.10	0.70
41	***Brazil***	***0.80***	***0.42***
59	***Korea, Republic of***	***0.18***	***0.18***
62	***Mexico***	***0.11***	***0.13***
67	***Turkey***	***0.09***	***0.10***
71	***China***	***0.26***	***0.09***
88	***India***	***0.01***	***0.04***

Flows of FDI from developing economies are increasingly oriented towards other developing and transition economies. Where half of the FDI from developing economies in 1985 was invested in other developing economies, UNCTAD estimates that almost all FDI in 2004 (excluding financial off-shore centers) from emerging economies was directed at other emerging economies.[17] This also means that emerging economy MNCs are becoming increasingly important as financiers of other emerging economies. Figure 2 shows how important other emerging economies are for the FDI into a specific country. This is measured as the share of inward FDI for a number of countries in relation to their economic development (GDP/capita). Khyrgyzstan, for instance, derives almost eighty percent of its FDI from other emerging economies whereas Switzerland derives almost nil.

[17] *WIR, 2006.*

Figure 2 Share of developing economy FDI and level of income.



Source: UNCTAD based on FDI TNC/FDI database (www.unctad.org/fdistatistics) for FDI data and UNCTAD secretariat for GDP data.
[a] Based on 76 economies.
[b] The periods 2000-2002 and 2001-2003 were used where data for 2003 and/or 2004 were not available.

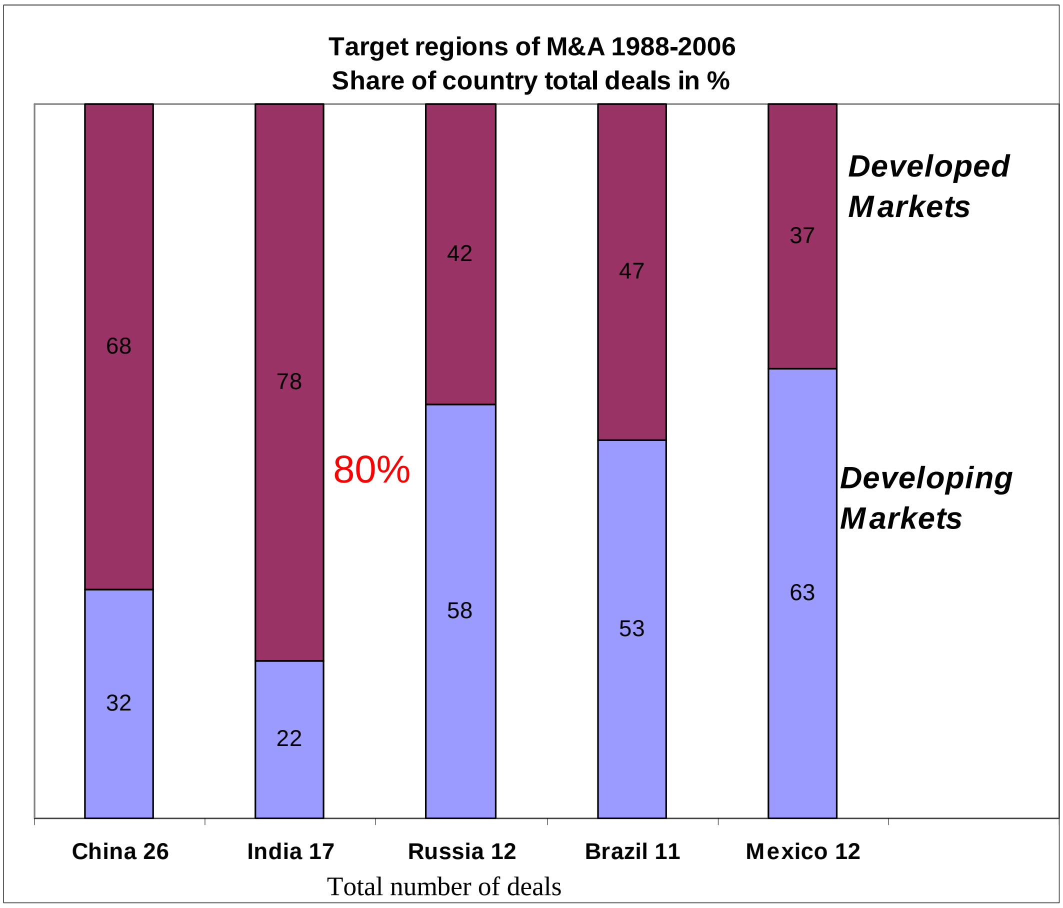
2.1 Mergers and Acquisitions from emerging economies

A particularly noteworthy trend in emerging economy FDI is the prevalence of mergers and acquisitions (M&A) – emerging economies are now buying firms in developed economies at an unprecedented scale. Emerging economy share of total M&A activity has risen from four to thirteen percent of global M&A activity in terms of value of deals over the period 1990–2000. In 2005, cross-border M&A by MNCs based in emerging economies with target companies in the developed and emerging markets respectively were almost equally large in value terms. Since 2000, emerging to developed market transactions have shown particularly fast growth, which suggests that companies in emerging markets need to acquire strategic assets and/or speed up their expansion in these markets. The value of emerging to developed market M&As rose from 9 billion USD in 2003 to 43 billion USD in 2005[18]

[18] *WIR 2006.*

There are great differences across emerging economies and their MNCs in where they invest. India and China are the two BRIC countries with the largest share of their M&A activities in developed markets according to the Boston Consulting Group[19].

Figure 3 M&A in BRIC countries.



The world economy is today significantly more globalized than in the mid 1980's. One significant aspect of this development is that foreign direct investment is no longer a feature only of the developed economies; as noted above an increasing share of the world FDI emanates from emerging economies, and there are more MNCs from emerging economies. This investment travels primarily from emerging economies to other emerging economies, but with respect to mergers and acquisitions there is a trend towards increasing acquisitions in the developed economies. While India is in the lower end of the top 100 list of FDI-intensive emerging economies, its size still means that it held a FDI stock of 1 600 million USD in 2006. Furthermore, India is one of the fastest growing sources of FDI and one of the BRIC countries that is most actively engaged in mergers and acquisitions in developed economies. The next section provides an overview of the development of Indian multinational corporations.

[19] *BCG 2008.*

3 The Effect of Indian Policy on Indian MNCs: FDI pre- and post-liberalization

3.1 Waves of liberalization: from NAM to India Inc.

A few Indian multinational corporations existed long before independence in 1947, but for all practical purposes the Indian MNC sector was virtually non-existent until recently. Like the rest of the Indian economy, upcoming Indian MNCs have been extremely dependent on Indian governmental policy. It is important to understand that until the mid 1990s the Indian economy was a semi-command and control economy and the government still uses five-year plans as the primary policy framework.[20] The establishment and development of Indian MNCs can be divided into two periods that coincide with two waves of economic liberalization initiatives by the Indian government.

The two liberalization waves influenced the very ways by which Indian firms globalized. First, it changed the rules by relaxing a number of restrictions that had been in place since the late 1940's. Prior to the first liberalization wave in 1978, Indian firms were in essence supposed to internationalize in order to earn foreign exchange for the Indian exchequer. This meant that it was, for instance, near impossible to acquire foreign currency to expand abroad and there were strict rules about ownership as well as the repatriation of profits. The first wave of liberalization eased some of these rules, but the policy aim remained: internationalization for the Indian external balance of payments. The second wave of liberalization that started in 1991 lessened the restrictions even further, and with the abolishing of currency restrictions, Indian multinationals could raise capital for expansion like any of their foreign competitors.

A second, and more fundamental shift that also gave shape to the softening of the rules, was a **re-conceptualization at a policy level** of the role of multinational corporations in the development of India. The envisioned role of multinational corporations evolved from corporations as a support to the south-south (developing to developing country) partnership and the non-aligned movement (NAM) policies from the 1950's and onwards, to a view where multinationals are a crucial part of the development of a globally competitive "India Inc." from the 1990's onward. Some of the major features of the two re-regulation waves are outlined below in table 2.

[20] *Panagariya 2008.*

Table 2 Re-regulation of Indian MNCs.

Salient features of different phases of FDI policy	**Phase I: 1978–1992**	**Phase II: 1992–onwards**
Policy Objectives	• Promoting Indian FDI as a tool of south-south cooperation • Maximizing economic gains (mainly exporting of machinery and know-how) from FDI at minimum foreign exchange costs	• Promoting FDI as a tool of global competitiveness • Maximizing exporting from India, acquiring overseas technology, gaining insider status in emerging trading blocs.
Strategies	• Permission only for minority owned joint ventures (JVs)	• Removal of ownership restriction in overseas ventures
	• Equity participation should be through exports of Indian made capital equipments and technology • Capitalization of export of secondhand or reconditioned machinery against foreign equity is prohibited • Cash remittances, except in deserving cases, are normally not permitted	• Foreign equity participation normally allowed through cash transfer along with the usual way of capitalization of exports of plant, machinery and know-how. • Equity participation through export of second-hand or reconditioned machinery is permitted
	• Overseas JVs must be in the same line of business activity	• FDI can be in any business activity
	• FDI is permitted only through normal route under the Inter-Ministerial Committee.	• Automatic route under Reserve Bank of India (RBI) is instituted for FDI approval.

Source: Adapted from Pradhan and Sahoo (2005).[21]

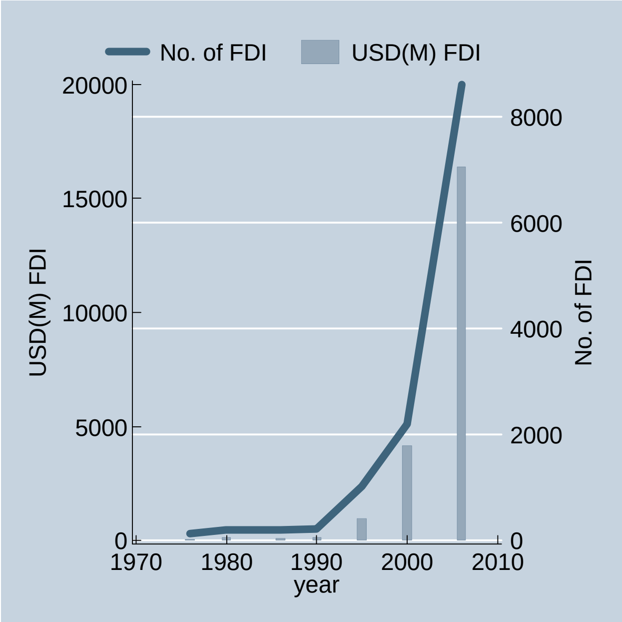
Liberalization had three integrated effects on the development of Indian FDI.

- It provided corporations with a wider scope of activities and possibilities of financing than earlier.
- As the economy was widely deregulated, local competition in India increased both through local and international entrants, which enhanced the competitiveness of Indian firms.
- Deregulation boosted the rapid growth of the Indian market; an average growth of six percent from the late 1980s to the early 2000 and close to eight percent over the period 2003 to 2008.[22]

These changes brought about a rapid increase in both the number and amounts of Indian FDI, as shown in figure 4 below.

[21] *Pradhan and Sahoo 2005.*
[22] *Panagariya, 2008.*

Figure 4 Growth of Indian FDI.



Source: Adapted from data in Pradhan, 2007.[23]

The larger liberalization of the Indian economy came with a significant policy shift in how India considered its economic role in the world. Where an overriding earlier policy aim had been to be a good partner in the Non-Aligned Movement and to develop close contacts with other developing economies, post-liberalization meant a policy shift to make India an economic world power. The change in the use of FDI in a policy sense reflected this in for instance the modes of ownership allowed under the different phases. In the **first phase**, when it was "India the assisting partner from the south", ownership was restricted to minority holdings in joint ventures and there were few provisions for remittances of profits to India. Foreign Direct Investment was a means to promoting growth in another developing country. In the **second phase** of liberalization, FDI was seen as an important way of increasing Indian competitiveness with FDI as a tool for enhancing the national image of India. Media captured this incorporation of corporate India into the nation-building exercise and coined the term "India Inc." by the end of the 1990's. In the early 2000s, this word was further formalized by the public-private partnership, the India Brand Equity Foundation (www.ibef.org). The shift in the way FDI was considered useful to build India also meant a shift in the geography of its FDI investments – from a focus on other developing economies to a focus on developed economies.[24]

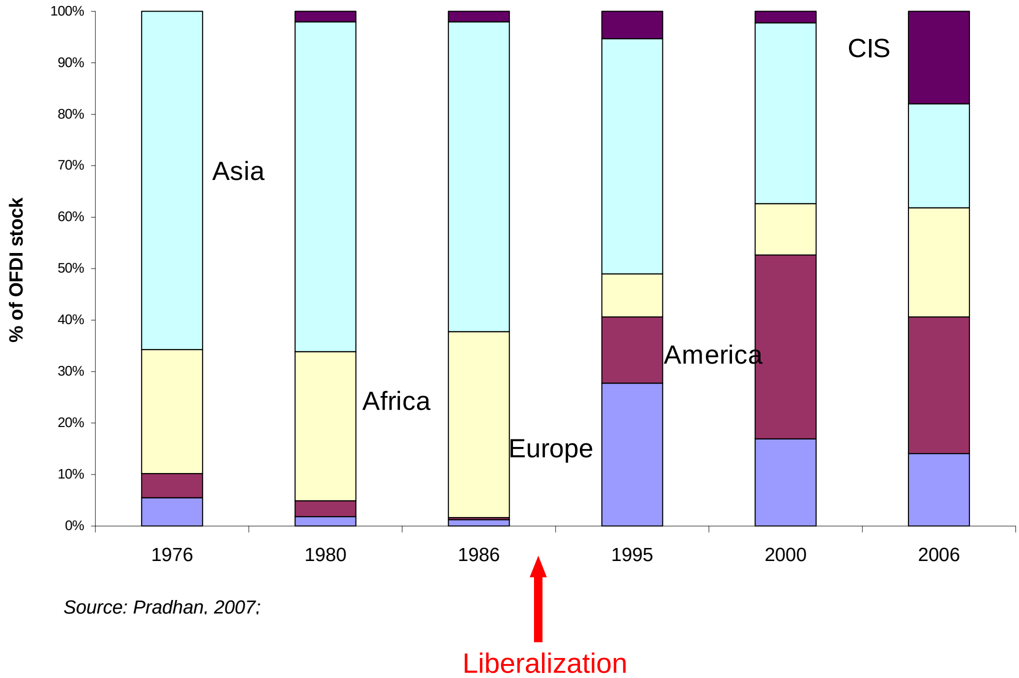
The main impetus for the shift in destination of Indian FDI came from the preferences of the firms that were investing abroad. Developed economies were attractive to increasingly sophisticated Indian manufacturing firms, and in particular to the IT and IT-enabled services firms whose primary markets were other businesses in developed economies. Furthermore, firms that had developed their process technologies by providing goods to emerging economies were increasingly able to leverage these capabilities even in developed markets. An example of such process upgrading is found among Indian pharmaceutical firms that initially served a market of low-cost generics. To handle production

[23] *Pradhan, 2007.*
[24] *Panagariya,2008.*

process-based patent regulations these firms needed to develop process-development skills that over time became important world-class capabilities[25]. These enabled competitiveness in its own right on a global market, based on product and process development.[26] A similar story about continuous upgrading of process and service innovation can be told about the globalization of the Indian software industry[27] where initial back-office work has been systematized and encoded in processes and managerial innovations.

The changing FDI composition through which Indian FDI went over thirty years is depicted in figure 5 below. There is a sharp change in composition before and after the liberalization in 1990, for several reasons discussed above; while the importance of investments in Africa wane, Europe and the US become increasingly important.

Figure 5 Geographical distribution of Indian FDI pre- and post-liberalization.



Source: Pradhan. 2007:

3.2 The Indian MNC story: from soft to hard and from emerging to developed

Multinational firms have traditionally developed on the basis of their relatively abundant factor endowments – resources – that are possible to export; exporting manufactured goods or raw materials on the basis of either cheap labor or material or both. That was the pattern of Korean multinationals in the 1980s, or the Japanese firms before them. This was also the case with Indian FDI in the first phase, and manufacturing firms constituted almost ninety-five percent of the Indian FDI stock in 1980. Beginning in the early 1980s, however, a marked shift in the composition of Indian FDI occurred, a shift from manufacturing to services.

[25] *Ramachandran, Mukherji and Sud, 2006. See also Kapur and Ramamurti, 2001.*
[26] *Pradhan, 2007.*
[27] *Mukherji and Ramachandran, 2004.*

The development of the Indian multinationals active in the IT sector is the result of the confluence of underemployed engineering graduates, a global ICT revolution and the popularization of new managerial techniques such as outsourcing. While the initial growth was primarily in the form of in-sourcing simple back-office tasks, it has over time been upgraded to more qualified tasks of knowledge management.[28] Service industries were not as fettered as manufacturing industries in their global expansion during the period of strict currency restrictions, and their later growth coincided with the deregulation of the Indian economy, and these new firms could expand abroad fairly rapidly. A rapid growth in the Indian IT services sector led to a successive change in the composition of the stock of Indian FDI. From a total dominance of manufacturing industries in the early 1980's, services came to account for fifteen percent in 1987 and about forty percent in 2006[29].

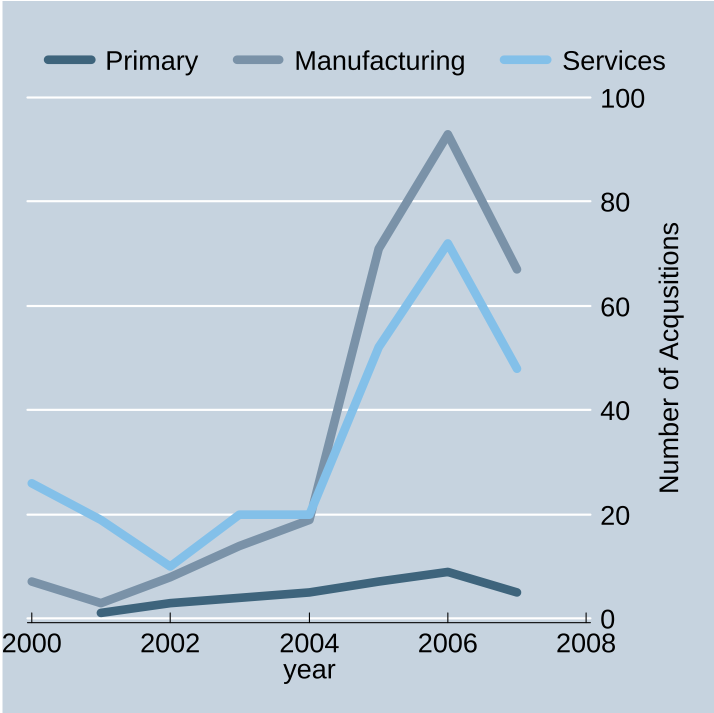
3.3 Mergers and acquisitions

A salient feature of the Indian FDI expansion from 2000 onwards is the propensity to engage in cross-border mergers and acquisitions. M&A activities were initially primarily an expansion strategy of the Indian service firms, and until 2002 about eighty percent of the M&As were within the service sector.[30] The mergers within the service sector were largely a strategic response to a need to come closer to the main customer markets, in part due to the negative political reactions of the effects of outsourcing on the local labor market. In part, the acquisitions were also a way of moving further along the value chain (i.e. closer to the end consumer) which meant the integration of a larger part of the service design and delivery, which often represents the high end of the value addition.[31]

Post-2002, Indian manufacturing MNCs have again become increasingly involved in M&A activities. Figure 7 charts the number of M&As in services, manufacturing and primary industries from 2000 to 2007. As can be seen, M&A activities increase very quickly from 2004, quadrupling over of a two-year period.

[28] *Ramachandaran, Mukherji and Sud, 2006. Evalueserve, 2007.*
[29] *Pradhan, 2007.*
[30] *Ibid.*
[31] *Ramachandaran, Mukherji and Sud, 2006. Interview with Tata Consultancy Services in OutlookBusiness, February 23, 2008.*

Figure 6 Number of Mergers and acquisitions per sector.



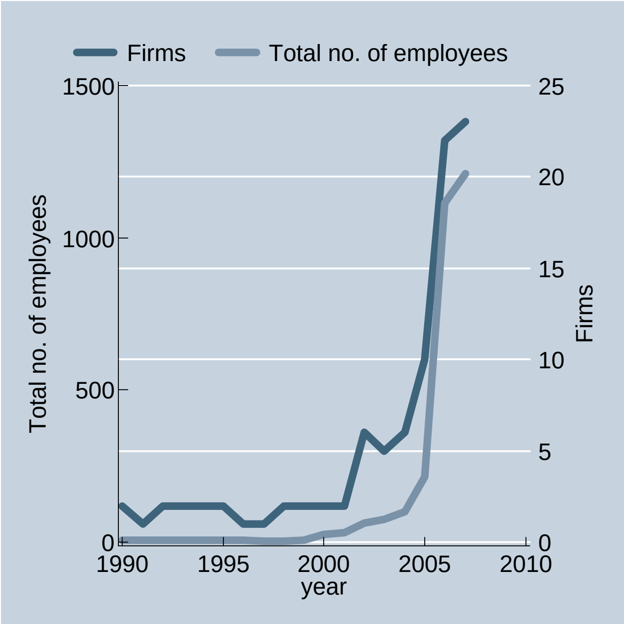
Source: Pradhan, 2007.

3.3.1 Indian investments in Sweden[32]

There are today around twenty three firms with fifty percent or higher Indian ownership operating in Sweden, and another seven to fifteen with some form of Indian ownership (exact figures are difficult to come by). For the purposes of this report, it is the twenty three with a majority Indian ownership that are interesting. Eight of these twenty three are acquisitions and seven of these acquisitions are within manufacturing. Out of the fifteen non-acquired (also known as 'greenfield investments'**)**, nine are IT-related service firms and six are trading firms in different sectors. Thus the primary entry to Sweden for Indian manufacturing firms has been through acquisitions. Until 2004 all the Indian-owned firms were service firms, but out of the fourteen establishments after 2004, half were manufacturing firms. There was thus a strong growth in Indian-owned firms in Sweden from 2004 (see figure **7**), albeit from a low level, which is consistent with the general upswing in Indian FDI activity after 2002.

[32] *This section utilizes data from ITPS on enterprise in Sweden.*

Figure 7 Indian firms in Sweden.



Source: ITPS data on enterprise in Sweden.

Indian acquisitions in Sweden have been low-key affairs that have generated scant media attention. This is a common feature of Indian acquisitions worldwide, where Indian acquirers thus far have generated little post-acquisition controversy. There are very few examples of large-scale retrenchment or management shake-up and Indian takeovers are often contrasted to those of US firms as being handled sensitively.[33] The controversies that have played out in media have generally been in the run-up to an acquisition, where local sentiments seem to have been based primarily on misunderstandings of the level of sophistication of Indian firms. One example is the controversy regarding the Mittal Steel acquisition of Arcor and another is that of the negative response of Orient Express hotel to an offer of a strategic alliance with the Taj Group of hotels (a Tata company).[34]

There can be several explanations for this observed "sensitivity" of Indian acquirers. The first, rational one, is that since acquisitions often have taken place in service industries where the primary asset can walk out the door, sensitivity has been a requirement. This would not explain a sensitiveness in manufacturing acquisitions, but discussions with Indian managers and management consultants suggest that a current shortage of Indian management with international experience has necessitated keeping existing management in place to a great degree. Over time, as Indian managers gain international experience, this may change.

3.4 Motivations for Indian FDI

There is a clear geographical trend towards establishment in developed economies, even when compared to other BRIC countries[35] in acquisition patterns. There is also a strong preference for locations in developed economies and an increasing preference for acquisi-

[33] *Pradhan, 2007.*
[34] *Businessworld,"Prejudice" December 31 2007.*
[35] *The 2008 BCG 100 New Global Challengers Report.*

tions over greenfield investments (i.e. entry through a newly constituted firm)[36]. While there is little information on the globalization strategies of Indian MNC, available interviews and reports support a view of complex motives for internationalization. For instance the acquisition of Kilsta by Bharat Forge was reportedly part of a global "dual shoring" strategy that entails establishing manufacturing capability in strategic customer locations and integrating production processes to enhance production efficiency globally. Tata, in their acquisition of Corus Steel not only gained access to new markets but also acquired a large number of US patents to deepen their knowledge base. Also firms with their traditional strength in Indian-based operations, such as IT services firms, have acquired foreign subsidiaries for service delivery (not just sales offices). Part and parcel of a strategy to migrate along he value chain from back-office production towards service design and delivery is the establishment of a presence in important markets.[37] Furthermore Indian IT firms are also working to mitigate the negative political fall-out of the recent outsourcing debate by establishing service production in the US in a similar manner that the Japanese auto industry established local auto manufacturing in the end of the 1990's. The 600 million USD acquisition by Wipro of US-based Infocrossing in 2007 is an example of this dual strategy.[38]

The motivations for Indian FDI are thus multifaceted and include market seeking, manufacturing efficiency as well as competence enhancement. A common feature of these motivations, whether it is to gain a market presence or to benefit from firm-specific knowledge, is the continuation of "business as usual" of the acquired unit and the eventual incorporation of its capabilities into the rest of the Indian corporation. The careful style of post-acquisition management that has become the signature of Indian firms is consistent with complex but essentially knowledge-seeking drivers for acquisition.

3.5 Indian FDI in summary

Overseas investment from India has increased considerably over the past twenty years and this is part of a larger trend of growing importance of FDI from emerging economies. While India is still a small investor compared to many other economies, ranking 88 on the UNCTAD FDI performance index, it is expanding rapidly. Historically Indian FDI has been very small and largely confined to manufacturing investments in other emerging economies. After the second wave of economic liberalization in the 1990s, however, Indian FDI has grown exponentially and its geographical focus has shifted to developed economies. Where the initial growth was through service firms expanding abroad, Indian manufacturing has caught up in the last five years. Mergers and acquisitions are favored as a mode of entry over greenfield establishment, and investments and motivations are both market-seeking as well as competence and technology acquisition.

[36] *Pradhan and Abraham, 2005.*
[37] *Karki, Rajnish 2008.*
[38] *Hindu Business Line 200.*

4 Implicit Policy Effects: Limitations of India as a Home Base

4.1 India as a home base for MNCs

Literature on multinational corporations explains multinational expansion as an outcome of a competitive advantage that is initially created in the home country and later leveraged cross-borders. In the Swedish case the known multinationals were ‘genius firms’, based on one or several innovations that were globally unique. SKF and its ball-bearings or Tetra-Pak with its packaging technology are typical examples, and research on Swedish multinational firms suggests that the level of research and development activities and a strong engineering tradition were largely to thank for the emergence of globally competitive firms from Sweden.[39] The development of engineering-based Swedish multinational firms is a pre-second world war phenomenon, with virtually no new large firms emerging after 1945.[40]

India, in contrast, has never had a well developed innovation system[41] and public financing of R&D activities has traditionally not reached a target of one percent of GDP, rendering the innovation system underfinanced. Furthermore, a lack of a coherent innovation policy and direction has been detrimental to the development of a productive innovation system. This is an important implicit policy effect on Indian multinational firms; without a strong home base in terms of innovations on which to grow a technically oriented advantage, Indian firms have had to globalize in a different manner than for instance Swedish firms. Furthermore, Indian firms have typically not undertaken R&D activities to any great extent, with a reported eighty percent of Indian firms not conducting any R&D activities at all[42]. Consequently, as discussed in the introduction, Indian firms have typically expanded abroad on the basis of other advantages than technical innovations. The process of internationalization of Indian multinational firms has little in common with the traditional Swedish multinational firm. Rather, it is much closer to the development of the few post-second world war Swedish multinational firms in retail and services such as H&M and Ikea in terms of building its advantage on process development as well as the globalization itself.

4.2 Ways that Indian firms go abroad

As discussed earlier there are a number of motivations for Indian firms to expand abroad. The Boston Consultancy Group in their report on global challengers from emerging economies categorizes four main strategies by which firms expand abroad: taking a local brand global; leveraging local engineering into global innovation; global category leadership and monetizing natural resources. This categorization scheme is useful to slot different Indian MNCs to provide a picture of the diversity of means and ways by which they globalize.

[39] *Blomstrom, and Kokko 1995.*
[40] *Henrekson and Jakobsson, 2003.*
[41] *DEMOS 2007.*
[42] *ITPS 2007.*

4.2.1 Taking local brand global: the Indian automotive industry

The Indian automotive industry is not known for its exports, and the acquisition of Land Rover and Jaguar by Tata is not seen as a way of launching Tata cars abroad. However, both Bajaj Motors and Mahindra & Mahindra have been working on rolling out their own products across the world.

Mahindra & Mahindra, for instance, manufactures tractors and cars. They have been exporting tractors to the US for close to ten years and in 2009 they plan to enter the US market with their SUV model named Scorpio. Scorpio is already sold in South East Asia as well as in South Africa. M&M claim two particular strengths behind their market successes. The first is their cost efficiency. In the US, the Scorpio will retail in the US for less than 25 000 USD. With a market share of more than fifty percent in the Indian market for SUVs, where the Scorpio retails at Rs 800 000 (SEK 115 000) it is an affordable luxury car. The basis of their cost efficiency is the skills of "frugal engineering" within the firm. Frugal engineering is a concept often spoken about in Indian media and business circles to label the art of cost-effective engineering. Given the resource-scarce environment in which Indian manufacturing industry has developed, with prohibitive import duties curtailing global inputs until fairly recently, a premium has developed on engineering skills that fully utilize cost-effective work-arounds already in the design. Frugal engineering capabilities characterize engineering across India, where for instance a space program to develop indigenous satellite delivery vehicles has been completed at a fraction of the cost of the US space program. Several global automotive manufacturers such as Renault and Nissan have established a design and manufacturing presence in India to pick up on the skills of frugal engineering[43] and cost is the key competitive advantage of Indian automotive manufacturers[44]. M&M for instance reportedly invested less than 150 million USD to develop the Scorpio from concept to production, which is very low by automotive industry standards.

The globally best known example of frugal engineering is the Tata Nano – the car developed by Tata Motors that will retail for Rs 100 000, or SEK 15 000. While there is a large market for the Nano in India, Tata also plans to eventually take the car abroad.

4.2.2 Turning local engineering into global innovation: pharmaceuticals

The globalization of the Indian pharmaceutical industry is an example of how a locally developed skill is leveraged. The Indian pharmaceutical industry grew by reverse engineering drugs and manufacturing these for the local market. Until 1995 this was possible under the 1970 Indian patent laws that allowed patenting processes rather than end products. In 1995, however, India signed on to the WTO and promised to change its patent regime in 2005. This meant that the industry had to seek new ways of sustaining itself. The business model until then had relied on two building blocks: a strong skill in reverse engineering existing drugs, through synthetic chemistry, and good manufacturing process skills; it was in the manufacturing process that competitive cost cutting was possible. It was not only cost cutting that was developed, but also processes of quality control, and India boasts the largest number of US FDA-certified manufacturing plants of any country outside the USA.

[43] *Times of India, April 5 2007.*
[44] *KPMG's 2007.*

Based on their manufacturing skills, Indian pharmaceutical firms such as, Ranbaxy and Dr Reddys and the insulin giant Wockhardt began positioning themselves as global generic manufacturers of drugs. Drawing on their engineering skills developed from reverse engineering, Dr Reddys and Ranbaxy also initiated programs of developing new drugs.

A similar trajectory, of leveraging process knowledge, is characteristic of the development of the Indian ICT industry as it transited from a global business process outsourcing to a knowledge processing outsourcing center. The large Indian IT players such as Wipro and Infosys started out by providing fairly simple services, but because of their distance to the main markets and because India was initially unknown in service industries they had to work very hard on quality assurance schemes. As a result India now has the largest number of Software Engineering Institute Capability Maturity Model (SEICMM) level 5[45] certified organizations in the world. This, along with reasonable cost levels, is what now provides a competitive edge of the Indian ICT industry.

4.2.3 Global category leadership

A third way of globalizing, by taking a local category leadership position and leveraging it to a global category leadership position, is evident in for instance polyester yarn with the Reliance group, or in steel where Bharat forge has pioneered a dual shoring system. Both of these ways have at their base a strong local market demand as the backbone, on which a global presence can be leveraged. The large demand in India for polyester yarn allows for the build-up of a significant manufacturing base, enabling economies of scale that can be leveraged globally. In the case of Bharat Forge, it is a combination of production scale and a proximity to crucial markets through what they term a “dual shoring” strategy that provides an advantage that is not entirely cost-based[46].

[45] *This is a global standard for IT service delivery quality developed by Carnegie Mellon University.*

[46] *BCG 2008 ”Globality”.*

5 Challenges for Indian MNCs

5.1 The global economic slowdown: drying up investment funds

India is hit by the global recession. This is primarily visible in an increase in lay-offs in the export sector where orders have shrunk. Another important change is the difficulty of finding external financing, on which Indian multinational firms have become increasingly dependent. Tata is reported to be looking for ways of sustaining its recent acquisitions and Reliance Industries is said to be looking for takers for some of its overseas investments. The Indian IT industry is also hit hard, with almost half its export revenues coming from the US market and in particular the financial markets, which is the epicenter of the recession.

The economic slowdown may however not be such a catastrophe for India as for many other countries. First, the banking system of India seems to be in reasonably good shape, and due to a semi-insulated rupee, a strong internal market and the fall in oil prices, the Indian economy is predicted to grow at about six percent during 2009. While it is a downward revision from the earlier projected nine percent it is, of course, very good compared to many European economies. Second, a global recession can also increase the pressure on cost across the world, which would provide a business opportunity for Indian firms.

5.2 Increasing competition

India has become a very important destination for most global firms, and in particular in ICT. While this is good for the economy and for overall economic efficiency, it means that the earlier fairly safe home market of Indian firms now is contested. IBM, Accenture and EDS together have 100 000 employees in India. This means that they are one third as big as the big five Indian firms.

As the Indian market develops it will become more competitive and less of a captive market for Indian firms.

5.3 Talent crunch

One result of the expansion of the Indian economy is a serious shortage of talent. This may sound paradoxical in one of the largest countries in the world, but more and more sectors are reporting difficulties in recruiting what they need. Indian IT firms are currently recruiting abroad, in Russia, the Philippines and other places. The rapid inflow of global firms in combination with a poor supply through higher education and an unresponsive government has led to this almost crisis situation. There is now a national mission on upgrading of vocational schools that is planned by the central government and that will work on a joint venture basis. It is however a long time in the making. Meanwhile there are a number of private alternatives that are developing – from the private education systems of the large firms (in-house universities) to public-private partnerships where firms take over and run government-owned training centers and schools.

5.4 Global firms require global management

There are currently few Indian managers with international management experience. There is no quick fix for this situation, but there is a functioning international market for management. Indian industry is currently so hard up for good managers that, according to local

Swedish multinationals, it is as expensive or even more to recruit an Indian manager as to bring in a Swedish expatriate to manage Indian operations.

This is shown in an increase in hiring of expatriates to run firms both in India and abroad. From only a handful of expatriate managers in Indian firms in 2003, the latest estimation is about 5 000 in 2007. An outcome of this shortage of management capability is probably the currently observed ”soft acquisition” strategy of many Indian multinational firms as they may have difficulties in finding replacement managers.

6 Conclusions and Policy Implications for Sweden

Indian multinational firms are and will become an ever more important feature of the global economic landscape. As argued in this PM, Indian multinational firms are a heterogeneous group with a fairly recent global presence. In contrast to Swedish multinational firms they have typically not expanded abroad on the basis of a technical advantage, but on a favorable cost position, “soft” innovations (for instance IT services industry) or design innovations that allow a medium to low-cost position in engineered goods (for instance Indian automotive industry). Answering the question posed in the subtitle of whether Indian firms are low-cost or high-tech, the answer is neither. Where the question was posed from a standard Porterian[47] perspective of low-cost or differentiation strategies, Indian MNCs largely build their global presence on a compromise between the two[48] by providing appropriate level technology at a reasonable cost[49]. Indian MNCs should thus be thought of in terms of medium range competitors and using Ikea as a Swedish benchmark would probably be more appropriate than SKF or Sandvik.

It is clear that the increasing presence of Indian multinational corporations will have ramifications for Swedish economic growth. There will be the positive effects of an economy that grows, with its increased demand for among other things Swedish products. India and Indian multinational firms also offer an increased space of possible collaborators to Swedish firms. Already, Indian multinational firms invest in Sweden through acquisitions of Swedish firms which should provide increased dynamism of the Swedish economy. There will also be cases where Swedish firms are out-competed by Indian rivals, as we can see examples of already today in the IT services industry[50]. The risks of negative direct competitive effects should however not be over-stated as there are few industries and markets where Swedish and Indian global firms are direct competitors.

It would nevertheless be counterproductive and shortsighted to conclude that Indian firms pose no long-term competitive threat to the Swedish economic interests. The center of gravity of a number of important markets is thought to be shifting with the demographic and economic changes currently taking place in the world. Goldman Sachs estimates in their controversial report *Dreaming with BRICs* that a significant part of the growth in automotive markets over the coming twenty-five years will take place within the BRIC countries. While the Swedish automotive industry may not have its current focus on the BRIC markets, it would present a challenge for Swedish firms to break into the price-sensitive mass-segments of those markets. It may be that Swedish firms should never attempt to do that but remain providers of differentiated goods, but that can be a risky long-term strategy in a globalized economy where economies of scale play an increasingly important role.[51]

If Swedish firms want to compete in the fast growing BRIC markets, new business models may need to be developed. Several issues need to be addressed at the Swedish policy level. At the root of these issues is the question of how an innovation system, such as the

---

[47] Porter 1980.
[48] Later developments of the 1980 generic strategies framework emphasize the importance of such intermediate positions in a modern economy. See for instance Kim & Maugborgne, 1999.
[49] BCG 2008 ”Globality: Competing for Everything with Everyone from Everywhere”.
[50] Ny Teknik, 2003.
[51] BCG 2008 ”Globality: Competing for Everything with Everyone from Everywhere”.

Swedish, can adapt to a set of conditions that are far removed from the all-important home market.

6.1 Dealing with frugal engineering

A first question is how Swedish engineering firms can deal with competitors with a strong competence and experience base in “frugal engineering[52]”. A core finding in research on society level learning is the prevalence of “competence traps”[53]. The reasoning is that because learning and the outcome of new behavior often is less certain than what is already known, outdated behavior persists and learning is avoided. The better an organization/nation is doing something, the more difficult it will be to ”unlearn” and do something else. This insight suggests particular difficulties in changing from traditional areas of strength – such as high-end engineering among Swedish firms. Education systems can reinforce tendencies of competence traps at a national level. Feedback from industry to engineering schools is often difficult and lagged, and when an education system promotes a particular type of knowledge it becomes more entrenched among firms.

6.2 Business skills for two or fifteen percent growth

The appropriate products and service innovations to enter a new market are necessary but not sufficient conditions for competing in a market; to succeed, business model innovations are also crucial. Considering the question of how Sweden can manage economic growth in an environment where fast-growing emerging markets are becoming more important markets, a second question is how well equipped Swedish management students are to operate and innovate successfully in an emerging market setting where growth levels are at ten to fifteen percent as compared to two to three at home.

Swedish management education is primarily based on Swedish and other western management literature and experience. Similarly, practitioners who provide important real-world experience to most management educations also draw their experience from primarily Swedish markets. Because Swedish and other developed markets differ significantly in their level of maturity from emerging markets, the strategic demands on managers also differ. Experiences from management education in emerging economies point to the difficulty in adapting the teaching materials to the questions that are relevant to the local conditions.[54] Where long-term efficiency is a paramount strategic outcome in a mature market, rapid action and dexterity may be crucial in an emerging market context. Again, because Swedish education is built on Swedish experiences, there is risk of a competence trap even when concerning business education.

6.3 Possible ways forward

What are the possible options to avoid competence traps? One of the advantages of multinational firms is their ability to ‘tap into’ different systems of competence around the world.[55] India is already a preferred destination of several firms that seek to learn “frugal engineering” as well as to tap into the skills base by establishing global engineering centers

[52] Frugal Engineering (meaning resource efficient engineering) is a term purportedly coined by the Renault head to describe the capabilities available in India for engineering in cost-effectiveness in new products. A Swedish example would be Ikea.
[53] For a discussion see for instance Levitt and March, 1988.
[54] See for instance Khanna, & Palepu 2005.
[55] Hedlund 1993.

there. The question then becomes how the Swedish innovation system can adapt in response to the global experiences of Swedish multinational firms? One way is to open up the Swedish higher education system to impulses from industry, which is a question that has received a fair amount of attention in earlier policy studies. Another way forward is to increase the exposure of Swedish students to other education systems and students from other education systems. Current governmental deliberations on internationalizing the Swedish higher education are a step in the right direction. A concrete suggestion would be to support the initiation of a management education focused on emerging markets. In the mid 1970s the Stockholm School of Economics opened the Institute of International Business to provide management training for Swedish MNC managers. A similar initiative may be needed (including both management and engineering education) to focus on emerging economies. The need for the Swedish innovation system to receive important impulses is thus another argument in the affirmative in the current Swedish discussion regarding the internationalization of Swedish higher education.

References

Books and reports

BCG (2008) The 2008 BCG 100 New Global Challengers Report. Boston Consulting Group

BCG (2008) ”Globality: Competing for Everything with Everyone from Everywhere”, Boston Consulting Group

Blomstrom, M. and Kokko, A. (1995), *Home Country Effects of Foreign Direct Investment: Evidence from Sweden*, NBER Working Paper No. W4639.

Chittoor, R,, Sarkar M.B., Ray S. and Aulakh P. S. (2008), “Third-World Copycats to Emerging Multinationls: Institutional Changes and Organizational Transformation in the Indian Pharmaceutial Industry” *Organization Science*, Articles in Advance pp 1–19 DoI 10.1287/orsc.1080.0377

DEMOS (2007), ”India the uneven innovator” by Kirsten Bound in the series *The Atlas of Ideas: Mapping the new geography of science*, DEMOS London

Dunning (1980), “Toward an Eclectic Paradigm of International Production”, *Journal of International Business Studies*, 11(1) 9–13.

Eriksson, K (1994), *The Inter-relatedness of Environment Technology and Structure - A Study of Differentiation and Integration in Banking*, Uppsala: Department of Business Studies

Evalueserve, (2007), “India’s Knowledge Process Outsourcing (KPO) Sector (available at www.evalueserve.com/media-and-reports/whitepapers.

Fortanier, F and Tulder R v (2008) *Internationalization Trajectories – A cross-country comparison: Are Large Chinese and Indian Companies Different?* #2008-054 Working Paper Series UNU-MERIT United National University Maastricht.

Hedlund, Gunnar (1993), ”The Hypermodern MNC – A Heterarchy?” in Transnational Corporations and Business Strategy. Eds. Donald Lecraw and, Allen Morrison. *United Nations Transnational Corporations and Management Division*. Routledge

Henrekson, M and Jakobsson, U (2003), The Transformation of Ownership Policy and Structure in Sweden: Convergence towards the Anglo-Saxon Model?, *New Political Economy*, Vol. 8, No. 1.

ITPS (2007), *India’s emergence as a global R&D center* by Raja M Mitra, Working paper R2007:012

ITPS (2008), *Watts Going On – Kärnkraften I Kina, Indien och Japan*.

Kapur and Ramamurti (2001), India’s emerging competitive advantage in services, *Academy of Management Executive*. Vol. 15, No 2, pp 20–33.

Karki, R (2008), *Competing with the best: strategic management of Indian companies in a globalizing arena*, Penguin Portfolio, New Delhi, India.

Khanna, T. and Krishna, P. (2005). "Strategies That Fit Emerging Markets", *Harvard Business Review*, Vol. 83, No. 6..

Kim and Maugborgne (1999), *Creating New Market Space* Harvard Business Review.

KPMG (2007), *KPMG's India Automotive Study 2007*. KPMG International.

Lazonick (2007), "Globalization of the ICT Labor Force" in Robin Mansell, Christianti Avgerou, Danny Quah and Roger Silverstone, eds., *The Oxford Handbook of Information and Communication Technologies*, Oxford University Press, 55–99.

Levitt and March (1988), "Organizational Learning", *Annual Review of Sociology*, Vol. 14: pp 319–338.

Mukherji and Ramachandran (2004), Complementary and continuous innovation: case of Indian software industry, *Journal of Academy of Business and Economics*, 2004 Vol. 4, No. 1, pp 211–21.

Panagariya (2008), *India The Emerging Giant*, Oxford University Press

Porter M. (1980), *Competitive Strategies*, Free Press, New York

Porter M. (1990), *The competitive advantage of nations*, Free Press New York.

Pradhan (2007), Growth of Indian Multinationals in the world economy: Implications for development. ISID working paper No. 2007/04. Institute for Studies in Industrial Development, New Delhi, India.

Pradhan and Abraham, (2005),"Overseas mergers and acquisitions by Indian enterprises: patterns and motivations". *Indian Journal of Economics*, Vol. LXXXV pp 365–386.

Pradhan, J.P. and M.K. Sahoo (2005), *Outward Foreign Direct Investment by Indian Small and Medium-Sized Enterprises*, A consultancy report prepared for the UNCTAD's Global Network of Global Players project.

Ramachandran, Mukherji and Sud (2006), Strategic Entrepreneurship in a Globalizing Economy: Evidence from Emerging Economies. *IIMB Management Review*.

SOU (2008), *Svensk export och internationalisering*. SOU 2008:90, Statens Offentliga Utredningar.

WIR (2006), UNCTAD World Investment Report, FDI from Developing and Transition Economies: Implications for Development. United Nations, New York and Geneva.

Magazines and newspapers

Businessworld,"Prejudice" December 31 2007, pp 29–38.

Hindu Business Line 2007, Wipro buying Infocrossing of US for Rs 2,340 cr August 2007.

NyTeknik, 20030212, "Indiska Konsulter Slåss om Svenska Kunder"; VA.se 20060831 "Wipro blir en storspelare i Sverige"

OutlookBusiness, February 23, 2008, Interview with Tata Consultancy Services in.

Times of India, April 5 2007, "Frugal engineering is India's strength" interview with Renault CEO.

The Economist "A global love affair – A special report on cars in emerging markets" November 15, 2008

The Swedish Institute for Growth Policy Studies (ITPS) is a Government Agency responsible for providing policy intelligence to strengthen growth policy in Sweden. ITPS primarily provides the Government Offices, Members of the Swedish Parliament, other state authorities and agencies with briefings based on statistical material, policy papers and key analyses. Business policy and regional development policy are areas given high priority.

Changes in policy should be based on:

- Statistic data and analyses of the structure and dynamics of industry – to obtain an up-to-date view of future challenges and opportunities.

- Evaluation of results and effects of policy measures and programmes – to provide benchmarks and learn from measures implemented earlier.

- Policy intelligence in order to look outwards and ahead – what issues are likely to come on the growth policy agenda in the future?

These represent the principal missions of ITPS.

ITPS, Swedish Institute for Growth Policy Studies
Studentplan 3, 831 40 Östersund, Sweden
Telephone: +46 (0)63 16 66 00
Fax: +46 (0)63 16 66 01
info@itps.se
www.itps.se
ISSN 1650-349X

itps SWEDISH INSTITUTE FOR GROWTH POLICY STUDIES