

# Non-equity Operation of Multinational Enterprises in India Focus on Outsourcing

*Jaya Prakash Pradhan<sup>1</sup>*

**Abstract:** The development policy literature on multinational enterprises (MNEs) is yet to adequately analyze the emerging cross-border activities of MNEs through emerging modes of non-equity operation like international outsourcing. As a result of accelerating globalization process and growing trend of vertical disintegration of value-chains, MNEs and their foreign affiliates are increasingly sourcing raw materials, intermediates, parts and services from independent suppliers based in emerging and developing economies like India. It is, therefore, necessary that host countries like India should appreciate this non-equity operation of MNEs and formulate suitable policies for enhancing their development impacts.

**Keywords:** MNEs, foreign affiliates, non-equity modes, outsourcing, India

**JEL classification:** F23, L24, N65

---

## 1. Introduction

Multinational enterprises (MNEs) are key players in the growth of global business and their role has only increased during the last two decades of globalization. They dominate the world markets by a network of affiliates located across different countries with inter-affiliates flows of investment, trade and technology and their non-affiliate business transactions. The growing trends of international outsourcing and offshoring in the global value chain of goods and services are clearly changing the operative functions of MNEs in the global business.

MNEs involvements in a host country is assuming a complex combination of equity modes like establishing wholly-owned subsidiaries and joint ventures and various non-equity modes like international subcontracting, licensing, franchising, management contracts, etc. (UNCTAD, 2010). MNEs are outsourcing their business functions over the value chain hitherto done in-house to companies based overseas. In addition to the captive offshoring, such activities are increasingly being rendered by external suppliers in the host economy.

It is not just the parent MNEs that are relying on overseas outsourcing but their affiliates operating in the host country are likely to depend on purchasing of local intermediate and raw materials for their operation. That means that the parent MNE and its network of foreign affiliates are adopting the tool of strategic outsourcing to reduce cost, improve quality and competitiveness. Their choice of outsourcing can be at any level like low-skilled labour-intensive tasks, manufacturing of a product or a component, R&D and logistics depending upon the business environment and comparative advantages of a host country and capabilities of host local firms.

---

<sup>1</sup> **Acknowledgement:** This paper has been prepared for the UNCTAD Expert Meeting on World Investment Report 2011, Geneva, February 15, 2011.

In addition, MNEs are entering into strategic alliances with local companies for joint R&D or product development and marketing arrangements. Sometime they are sourcing technologies for niche products from local firms in a host country.

For a host country promoting or facilitating such non-equity operation of MNEs can be critical for improving technological efforts of local firms and exports in the global value chain. Therefore issues of what determine MNEs outsourcing and other non-equity operation to a host country at macro, sectoral and firm-level is a critical policy issue. In this brief note, we document outsourcing to India by global MNEs for selected industries and explore on the key determinants of such process. Due to paucity of information at the economy level, we will also supplement the analysis by presenting data on the sourcing of local raw materials and intermediates by foreign affiliates operating in India.

### **2. Outsourcing and MNE: a theoretical view**

As outsourcing shifts outside some activities internal to the firm, it can be seen as a process of redrawing the boundary of it (Coombs and Battaglia, 1998). In the transaction cost theory, the boundary of a firm gets larger if the transaction costs of using markets for its activities are greater than the costs of performing in-house, reflecting greater levels of uncertainty, frequency and asset specificity (Williamson, 1985; Holmstrom and Roberts, 1998). Within the firm production by integration is more optimal in this situation and the firm will bypass the market.

However, firms' make or buy decision are not independent of the dynamics of the evolution of industries or value chain structures. The emergence of specialist departments representing different parts of the value chain within a single organization (i.e. intraorganizational boundaries) and the associated learning process ultimately pave the use of a market (Jacobides, 2005). According to Jacobides, the simplification and minimization of the coordination between the adjoining stages along a value chain and standardization of information and ease of their transfer finally led to the creation and growth of intermediate markets. Vertically specialized firms are driving the disintegrated industry structure with significant value creation in the form of gains from specialization and trade.

The rise of the vertically disintegrated value chains can significantly alter the modes of global operation by an MNE. It allows MNEs to adopt new forms of interaction with their host countries in addition to establishing affiliated units like wholly owned subsidiaries and joint ventures. An MNE can source services and inputs from unaffiliated foreign suppliers or resort to procurement from their affiliated overseas ventures. When MNEs prefer offshore external sourcing of inputs due to existence of specialized suppliers they have little need to do FDI for sourcing abroad. Therefore, there is a trade-off between FDI to procure inputs in a host country and outsourcing (Grossman and Helpman, 2003) and given the standardization of information (Jacobides, 2005), MNEs are likely to opt for outsourcing from efficient local suppliers. Clearly, MNEs involvements in host input markets is likely to be more in the form of non-equity modes (i.e. outsourcing) than FDI.

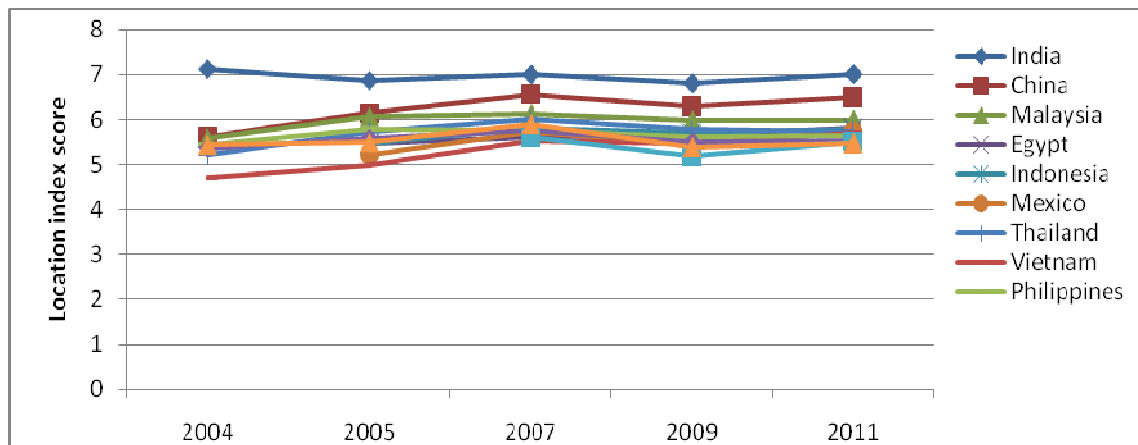
### **3. MNE outsourcing in India**

In the last two decades, India has emerged as an attractive destination for global outsourcing in many areas of service and manufacturing sectors. India ranked the top attractive outsourcing destination in the A.T. Kearney Global Services Location Index (GSLI) throughout during 2004–2011 (Figure 1). The most important locational advantage that India enjoys over her competitors is on the category of

people skills and availability (Figure 2). It represents India's first mover advantage in possessing cumulative business process experience and skills and a large pool of educated manpower with the advantage of English language (A.T. Kearney, 2004; Chanda, 2008). Low cost of skilled labour, improvement in telecommunication infrastructure and proactive government policies for the software sector are all contributing to the global attractiveness of India. The attempt of Indian software companies in moving up the value chain while maintaining their low-cost arbitrage is furthering Indian advantage as a leader in services outsourcing.

As per the information from the National Association of Software & Services Companies (NASSCOM), India's share in the global outsourcing market rose to 55 per cent in 2010 from 51 per cent in 2009<sup>2</sup>. About 25 per cent of the Indian software and services exports is contributed by the ITeS-BPO (Information Technology Enabled Services- Business Process Outsourcing) segments in 2010 (Department of Information Technology, 2010). About one-third of the global firms from the Fortune 500 were outsourcing their software requirements to India in the early half of the twenty-first century and this proportion increased to around two-thirds in the latter half of the decade<sup>3</sup>. Interestingly, this increasing MNE outsourcing trend to India is associated with relatively faster growth in sourcing from third-party service providers than captives implying growing non-equity mode of MNE operation (Reuters, 2009). Moreover, other emerging economies like China, Malaysia, Philippines, Indonesia and Vietnam are catching up with India due to maturing of their services centres, cost advantage and strategic government efforts.

MNE outsourcing in India is not confined to the services sector alone. Global firms' outsourcing in the manufacturing sector now covers a wide range of activities from knowledge-based industries like pharmaceuticals and automotives to low-technology products like apparel and footwear. Though the incidents of international outsourcing vary considerably among different manufacturing activities, it is emerging as important form of MNE operation in India.

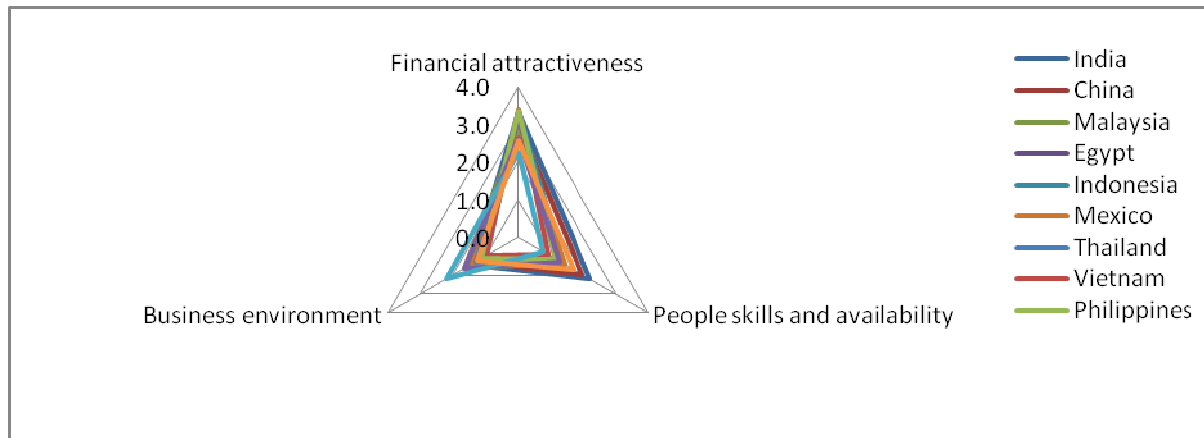


**Source:** Based on AT. Kearney global services location index, various years

**Figure 1. Global services location index, 2004–2011**

<sup>2</sup> International Business Times (2011), 'India's share in global outsourcing market rises to 55 pct in 2010, says Nasscom', February 4.

<sup>3</sup> NASSCOM (undated) 'Indian IT Industry– A Success Story', accessible at [www.nasscom.in/download/IndianITIndustry.doc](http://www.nasscom.in/download/IndianITIndustry.doc); [www.escindia.com/htmlsite/AboutUs.aspx?Id=35](http://www.escindia.com/htmlsite/AboutUs.aspx?Id=35)



*Source:* Based on AT. Kearney global services location index, various years.

**Figure 2. Category-wise average locational attractiveness score in services offshoring during 2004–2011**

### Pharmaceuticals

International contract manufacturing emerged as an important growth model for Indian pharmaceutical companies in the 1990s (Pradhan, 2006). Pharmaceutical MNEs realized that they can harness their long term competitiveness and create economic values by outsourcing from worlds' one of the cheapest producers of active pharmaceutical ingredients, raw materials and bulk drugs. With their low cost manufacturing capabilities approved by international quality and regulatory standards like the ISO (International Organization for Standardization) certifications, WHO's GMP (World Health Organization-Good Manufacturing Practices), U.S. FDA's (Food and Drug Administration) current GMP (cGMP) and regulatory bodies from other countries, Indian pharmaceutical companies turn out to be attractive suppliers for MNEs in contract manufacturing as well as contract services like marketing, research, clinical trials, data management and laboratory services<sup>4</sup>.

A large number of MNEs have resorted to contract manufacturing from India but cases of a few outsourcing deals can be elaborated here. The U.S. MNE Eli Lilly started sourcing Cefaclor intermediates from Ranbaxy in 1993. In June 2002, Schwarz Pharma AG of Germany announced a licensing deal with Ranbaxy to acquire the exclusive rights of developing, marketing and distributing Ranbaxy's New Chemical Entity RBx-2258 for the treatment of Benign Prostate Hyperplasia in USA, Japan and Europe<sup>5</sup>. As per the agreement Ranbaxy would manufacture and supply finished formulations of the product to Schwarz Pharma.

The U.S. MNE, DSM Anti-Infectives, entered into a supply and marketing agreement in September 2005 with Lupin Limited where the Indian entity is to supply the active pharmaceutical ingredient for a range of products to DSM under the alliance<sup>6</sup>. In the same year, Lupin had another marketing agreement with

<sup>4</sup> India Infoline (2000), 'Contract Manufacturing: Growth Engine for Indian Pharma Companies?', August 16; Equitymaster (2003), 'Pharma outsourcing: The next big thing', August 25; India Brand Equity Foundation (2004), 'Pharma MNCs turn to India for cost management', August 6.

<sup>5</sup> Ranbaxy (2002) 'Ranbaxy and Schwarz Pharma Sign a Deal to Develop New Drug to Treat Benign Prostate Hyperplasia', Press Release, June 27.

<sup>6</sup> Hindu Business Line (2005), 'Lupin signs pact with DSM', September 3.

GlaxoSmithKline (GSK) to manufacture and supply certain fixed dose combinations of tuberculosis drugs to GSK for marketing in the Philippines<sup>7</sup>.

In December 2003, Nicholas Piramal got a five-year outsourcing deal from Advanced Medical Optics Inc. of the US. As per the deal, Nicholas Piramal will supply the ophthalmic products to the American company for developed markets like the US, Europe and Japan. The Indian company expected additional annual revenue in the range of around \$15–25 million from this contract manufacturing arrangement<sup>8</sup>. The year 2004 has seen Nicholas Piramal entered into two new custom manufacturing agreements with two US drug companies, which are expected to add \$30 million revenues per annum<sup>9</sup>. One contract deal is from Allergan Inc of the US to whom Nicholas Piramal would supply two eye-related, anti-glaucoma active pharmaceutical ingredients, namely Levobunolol and Brimonidine. In November 2005, AstraZeneca AB, Sweden, signed a development and know-how agreement with Nicholas Piramal. As per this agreement, Nicholas Piramal is chosen as a partner in development of processes for the manufacture of intermediates, active ingredients or bulk drugs for supply to AstraZeneca<sup>10</sup>. In December 2005, a long-term contract manufacturing agreement between Pfizer International LLC and Nicholas Piramal was signed for animal health products<sup>11</sup>. Under this agreement, Nicholas Piramal will develop processes for Pfizer, provide scale-up batches for Phase trials and contract manufacture after the product is launched.

In the first case of a patented molecule to be manufactured in India on a contract basis, Solvay Pharmaceuticals of Netherlands signed its contract manufacturing agreement with Dishman Pharmaceuticals in 2001 for production and supply of an active ingredient of an anti-hypertension drug, Teveten. The contract was for eight years with an estimated value of more than \$10 million<sup>12</sup>. Since then Dishman is providing contract services to a growing number of global pharmaceutical firms including AstraZeneca, GlaxoSmithKline and Merck. In July 2005, Dishman entered into an agreement with NU SCAAN of the UK to develop and manufacture bulk actives for nutraceutical products of NU Scaan<sup>13</sup>.

Shasun Chemicals and Drugs another Indian company chosen by MNEs for contract manufacturing, was found to derive nearly 12 per cent of its turnover from contract research and manufacturing business in the third quarter that ended on December 2005<sup>14</sup>. The the US-based company, Austin Chemical, entered into a joint venture with Shasun in December 1999 for joint process development and custom manufacturing to serve multinational pharmaceutical companies operating in the regulated American market. In June 2004, Shasun achieved a strategic partnership with another US firm, Eastman Chemical, to collaborate on the development and manufacture of performance chemicals for the pharmaceutical industry<sup>15</sup>. In May 2005, US firm Codexis and Shasun entered into a manufacturing and supply agreement under which Shashun will manufacture the intermediate for a generic drug and Codexis will market the products worldwide to

---

<sup>7</sup> Hindu Business Line (2005), 'Lupin joins hands with GSK to market TB drugs in Philippines', October 25.

<sup>8</sup> Financial Express (2003), 'NPIL In Outsourcing Deal With Advanced Medical Optics', Wednesday, December 10.

<sup>9</sup> Hindu Business Line (2004), 'NPIL inks two custom mfg contracts', November 04.

<sup>10</sup> Express Pharma (2005), 'AstraZeneca, Nicholas Piramal clinch R&D pact', 16-30 November.

<sup>11</sup> Hindu Business Line (2005), 'NPIL-Pfizer deal on animal health products', Dec 27.

<sup>12</sup> Hindu Business Line (2001) 'Dishman inks supply pact with Dutch co', March 22.

<sup>13</sup> Express Pharma (2005) 'Dishman Pharma enters into an agreement with NU SCAAN, UK', July 05.

<sup>14</sup> Hindu Business Line (2006) 'Shasun Chemicals net up 43 pc', Saturday, Jan 21.

<sup>15</sup> Hindu Business Line (2004) 'Shasun, Eastman Chemical in tie-up — To make performance chemicals for pharma cos', Wednesday, Jun 16.

the generic pharmaceutical industry<sup>16</sup>. Shasun also had other strategic partnerships for supplying ranitidine (anti-ulcer drug) and ibuprofen (anti-inflammatory pain reducer) to the US-based Apotex and for anti TB drugs with Eli Lilly.

### Automotives

The Indian automotive industry is also turning out to be another centre for outsourcing by automotive MNEs. According to the online data released by the Automotive Component Manufacturers Association of India (ACMA), the auto component segment of the industry had grown nearly 19 per cent per annum in terms of production during 2000–09 and exports accounted for about 18 per cent of Indian auto component output in the same period<sup>17</sup>. Again in this industry, India offers MNEs the advantage of sourcing from low cost auto component suppliers possessing the globally preferred industry-specific quality standards. Singh (2010) noted that two-thirds of the ACMA members are ISO/TS-16949 accredited and some of them possessed more than one quality management system accredits.

Most of the vehicle MNEs operating in India through local subsidiaries shows a strong preference for local component sourcing. Take for example the cases of Japanese MNEs like Maruti, Toyota, and Nissan and the U.S. MNEs like Ford Motor Company. The crucial role of Maruti (then a joint venture with Government of India) during the 1980s in establishing a chain of subcontracting for component manufacturing in India with a supportive vendor development programme is well documented in the literature (Suneja, 2000). For this Japanese MNE the use of local components account for as high as 90 per cent of the total components for manufacturing of its cars in India. Maruti has played a very important role in the technological developments of Indian auto component suppliers.

The Indian subsidiary of Toyota Motor Corporation, Toyota Kirloskar Motor (TKM), currently sources components from some 67 domestic suppliers and is planning to expand its supplier base to 101 when the production of its model Etios starts in India<sup>18</sup>. Another Japanese MNE Nissan Motor Company sources auto components from India through its Indian subsidiary Nissan Motor (India) Limited for local production as well as its production units in China, Japan and Thailand. As per the company source, it has a target of sourcing components worth \$25-30 million from India during 2010-11<sup>19</sup>. Similar to Maruti, Ford India's model the Ikon has an indigenisation level close to 90 per cent. It had a supplier base of 100 in 2003. In addition to its own procurement of local components, in January 2003 Ford India Limited selected about 7 local suppliers to supply components to the parent's subsidiaries elsewhere<sup>20</sup>. The company also extended help to its Indian suppliers to earn Q1 quality certification so that the latter becomes eligible to supply to any of the Ford affiliates across the globe. As per the newspaper report, the Fiat Group Purchasing and General Motors are targeting sourcing of auto components worth \$1 billion each from India and Ford is looking at Indian components purchase worth \$500 million for its world-wide operations<sup>21</sup>.

---

<sup>16</sup> Hindu (2005), 'Shasun Chemicals pact with Codexis of U.S.', Thursday, May 12.

<sup>17</sup> Industry data is available here: <http://www.acmainfo.com/#stat>

<sup>18</sup> Financial Express (2010), 'Toyota to widen supplier base after Etios launch', June 10.

<sup>19</sup> Hindu Business Line (2010), 'Nissan revises parts-sourcing target from India to \$30 m', December 12.

<sup>20</sup> Hindu Business Line (2003), 'India to become component sourcing base for Ford', January 28.

<sup>21</sup> Financial Express (2009), 'Auto parts sourcing from India on a steady upswing', October 17.

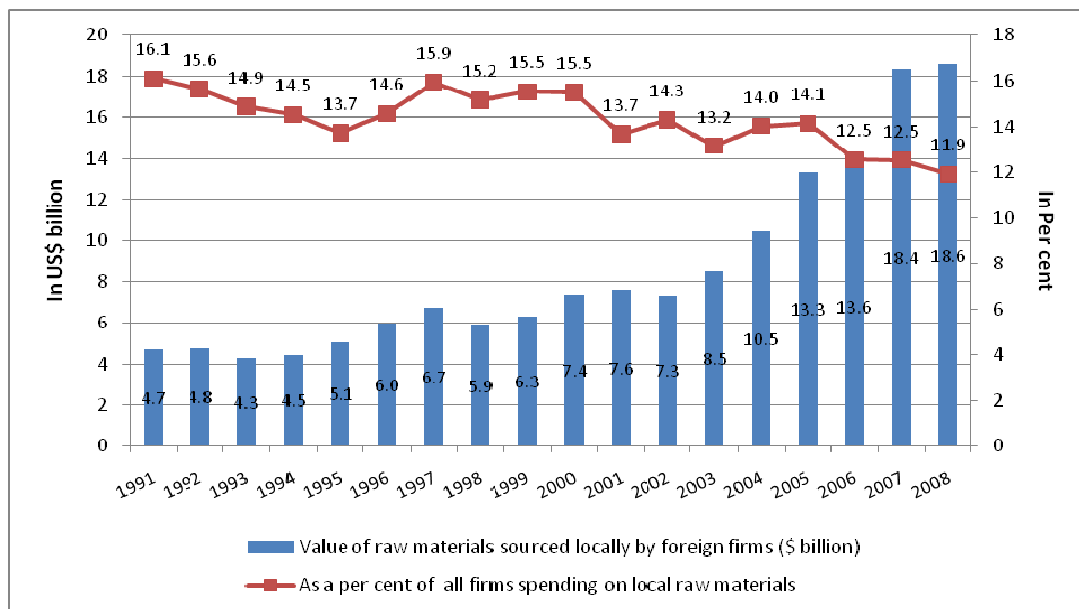
#### 4. Trends and patterns of local sourcing by MNE affiliates in Indian manufacturing

As emphasized before, the fragmentation of value chains has changed the boundary of the global firms by motivating them to externalize their upstream and downstream functions. It is not just the parent MNEs but their foreign subsidiaries are also adopting outsourcing model for reaping the benefits of value creation. The rise of cost efficient and quality intermediate suppliers in a host country is likely to strengthen the process of local sourcing by MNEs.

However, the data on the exact extent of total outsourcing (i.e. captive and standalone outsourcing) by MNEs is not readily available for many host countries and particularly so for emerging countries like India. As a result, a number of studies have analyzed the local inputs sourcing behaviour of foreign affiliates operating in a host country (Giroud and Mirza, 2006; Giroud, 2007; De Beule, 2009). In this section, a similar exercise has been undertaken for India and statistics on the size of MNE affiliates' purchase of local raw materials has been presented.

The study has draws upon a sample of 8369 Indian manufacturing firms from the Prowess database of the Centre for Monitoring Indian Economy (CMIE). Out of the total number of sample firms, a subset of 566 foreign manufacturing affiliates could be identified based on the CMIE group classification and available latest year information on the firm-level foreign equity participation.

Figure 3 summarizes the trends in the size of local raw material sourcing by foreign affiliates in Indian manufacturing during 1991–2008. The spending by foreign manufacturing firms on local raw materials has been on the rise in the last two decades. It increased from \$4.7 billion in 1991 to \$7.4 billion in 2000 and then reached to \$12 billion in 2008. In the 1990s, foreign firms accounted for about 15 per cent of total manufacturing enterprise spending on local raw materials; the ratio slightly fell to 13.5 per cent in 2000–08. Nevertheless, this share of foreign firms in all firms spending on local materials is significant given that foreign affiliates constitute about just 7 per cent of the total of number of firms in the sample.



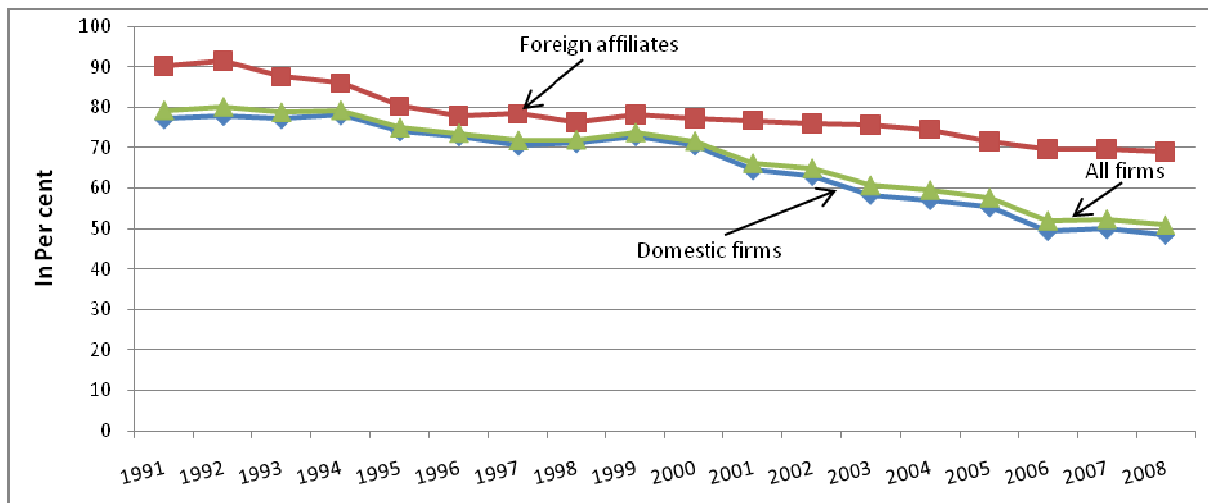
## Non-equity Operation of Multinational Enterprises in India Focus on Outsourcing

*Source:* Based on prowess database, CMIE.

**Figure 3. Size of local raw material sourcing by foreign affiliates in Indian manufacturing**

As the foreign affiliates operating in a host country basically rely on both the local sourcing of raw materials and importing them from elsewhere, it will be useful to examine the share of local raw materials in the total purchase of raw materials. This ratio would indicate the extent of localization in production done by foreign firms in the host country.

In the case of Indian manufacturing, foreign firm's production activities have been observed to be highly localized for the use of raw materials. Foreign firms have procured about 82 per cent of their raw materials locally in terms of spending during the 1990s, much higher than their domestic counterparts (Figure 4). While the share of raw materials sourced locally for domestic firms has fallen sharply to 54 per cent during 2000–08, the same for foreign firms remained high at 72 per cent. It is important to note that foreign firms' spending on local raw materials out of the total raw materials purchase in India far exceeds than what they possess in other emerging countries. This ratio of foreign affiliates in India is found to be more than double of those ratios associated with foreign firms in Malaysia and Thailand (35 per cent each) and more than triple in the case of Vietnam (24 per cent) (Giroud and Mirza, 2006). This shows that foreign firms operating in Indian manufacturing possess significantly higher degree of vertical linkages with local suppliers.



*Source:* Based on prowess database, CMIE.

**Figure 4. Share of raw materials sourced locally by categories of firms**

The dominating use of local raw materials by foreign affiliates is widespread among different manufacturing activities in India. The local raw materials purchase ratio of foreign affiliates is 95 per cent, 86 per cent and 78 per cent respectively for low-technology, high-technology and medium-technology industries during 1991–95 (Table 1). This may indicate that the strength of vertical linkages of foreign firms with local suppliers is highest in low-technology manufacturing products in India, followed by high-technology and medium-technology manufacturing. Remarkably, this ordering of sectors in terms of vertical linkages of foreign firms with host suppliers stand unaltered from 1991–95 to 2005–08.



As observed in the case of total manufacturing, there is an increasing trend of the use of imported raw materials in production by foreign firms across majority of individual industries. The share of spending on local raw materials by foreign firms has fallen for all these three technology-based industry groups between 1991–95 and 2005–08 but the fall is most significant for the medium-technology industries. With the substantial reduction in the custom duty on imported raw materials and liberalization of policies requiring use of indigenous components, foreign affiliates seems to be moving towards an optimal combination of imported-indigenous component mix in the recent periods.

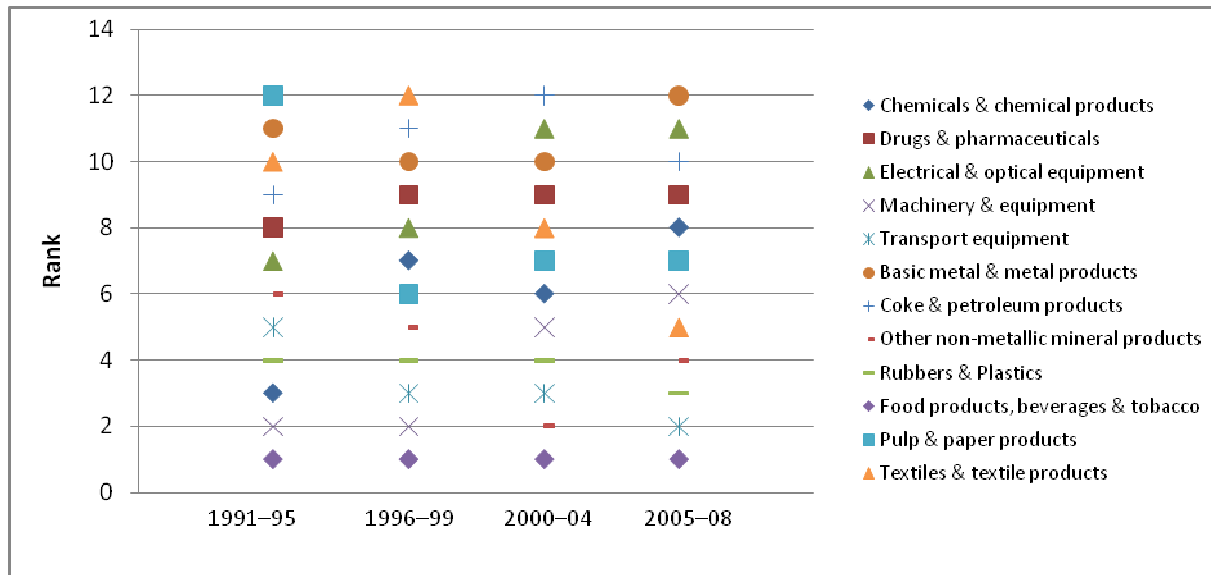
At individual industry level, foreign firms had the highest ratio of local raw materials spending in food products, beverages & tobacco in the early 1990s and continued to be so throughout (Figure 5). If one ignores a set of four industries, namely leather, other manufacturing, diversified and publishing for having a few foreign firms in the sample and rank the remaining industries, then foreign firms' local raw material purchase share is found to be stronger in food products, machinery & equipment, chemicals, rubbers & plastics, and transport equipment during the period 1991–95. Transport equipment has improved its ranking position from 5<sup>th</sup> in 1991–95 to 2<sup>nd</sup> in 2005–08 indicating that foreign firms' have continued with significant use of local auto components and parts. Between 1991–95 and 2005–08, other two industries that have seen significant improvement in their ranking position are textiles (from 10<sup>th</sup> to 5<sup>th</sup>) and pulp & paper (from 12<sup>th</sup> to 7<sup>th</sup>).

**Table 1. Share of raw materials sourced locally by foreign manufacturing affiliates in India**

Industry	In per cent				No of firms
	1991–95	1996–99	2000–04	2005–08	
<b>High-technology</b>	<b>86.0</b>	<b>77.8</b>	<b>76.4</b>	<b>75.5</b>	<b>352</b>
Chemicals & chemical products	87.5	73.3	71.7	65.7	87
Drugs & pharmaceuticals	79.5	65.5	64.4	55.5	51
Electrical & optical equipment	82.3	69.7	59.8	53.7	74
Machinery & equipment	90.4	86.4	81.3	76.2	84
Transport equipment	85.8	82.4	83.2	84.1	56
<b>Medium-technology</b>	<b>78.4</b>	<b>69.3</b>	<b>67.5</b>	<b>42.5</b>	<b>102</b>
Basic metal & metal products	68.5	63.9	60.3	31.2	41
Coke & petroleum products	79.0	62.8	55.9	54.7	10
Other non-metallic mineral products	84.5	76.4	85.1	78.8	25
Rubbers & plastics	87.3	81.6	82.9	81.9	26
<b>Low-technology</b>	<b>94.7</b>	<b>85.2</b>	<b>83.6</b>	<b>87.5</b>	<b>112</b>
Diversified	96.1	47.5	26.4	32.0	3
Food products, beverages & tobacco	98.1	90.5	88.4	90.2	73
Leather & leather products	96.8	97.4	94.4	88.8	3
Other manufacturing	91.3	34.3		100.0	2
Publishing & printing	94.8	96.5	100.0	100.0	1
Pulp & paper products	64.1	73.8	67.0	68.5	9
Textiles & textile products	76.8	59.1	66.3	76.5	21
<b>Grand Total</b>	<b>86.8</b>	<b>77.7</b>	<b>75.9</b>	<b>69.9</b>	<b>566</b>

*Source:* Based on prowess database, CMIE.

## Non-equity Operation of Multinational Enterprises in India Focus on Outsourcing



**Note:** Ranking is done excluding leather, other manufacturing, diversified and publishing for having a few foreign firms in the sample.

**Source:** Based on table 1.

**Figure 5. Industry ranking based on the share of local raw material purchase by foreign manufacturing firms in India**

## 5. Concluding remarks

The role of non-equity mode of MNEs operation in host countries like outsourcing is continue to grow over time as global industry evolves and value chains get more and more vertically disintegrated. MNEs are likely to carry on their outsourcing from locations that provides cost advantage and facilitative business and regulatory environments. This non-equity interaction of MNEs can make commendable contribution to the development process of host economies by enhancing their exports and facilitating technological capability building in local enterprises. Unlike horizontal FDI by MNEs that have crowding-out possibility in a host country, MNEs sourcing of inputs and services actually boost domestic investment and creates local employment.

The case of India demonstrates that a host country may attract raw material and service sourcing by parent MNEs as well as their affiliates operating in the host economy. The rise of Indian IT, pharmaceuticals and automotives as global centres of outsourcing was preceded by a phase of local capability building and internationalization of firms under a plethora of strategic government policies.

However, sustaining and improving the process of outsourcing would largely depend upon host country's ability in the provision of required regulatory regime, innovative support-institutions and adequate infrastructure. For example, in the case of outsourcing in biologics manufacturing, India is still perceived to be having unclear policy, intellectual property issues and problem in quality regulation. In addition to policy changes, it is also very important that local suppliers be ready to move up the value ladder and adjust to the changing quality requirements of MNEs.

## Reference

- A.T. Kearney (2004), *Making Offshore Decisions*, Chicago: A.T. Kearney, Inc.
- Chanda, R. (2008), 'India and Services Outsourcing in Asia', *Singapore Economic Review*, 53(3), pp. 1–29.
- Coombs, R. and P. Battaglia (1998), 'Outsourcing of Business Services and the Boundaries of the Firm', *CRIC Working Paper*, No. 5, Centre for Research on Innovation and Competition, Manchester: University of Manchester.
- De Beule, F. (2009), 'Sourcing of multinational enterprises in China', Paper presented at the *Annual Research Center for International Economics (RCIE) Conference 2009*, University of International Business and Economics, Beijing, June 22–23.
- Department of Information Technology (2010), *Annual Report 2009–10*, Ministry of Communications & Information Technology, New Delhi: Government of India.
- Giroud, A. (2007), 'MNEs vertical linkages: The experience of Vietnam after Malaysia', *International Business Review*, 16(2), pp.159–176.
- Giroud, A. and H. Mirza (2006), 'Factors determining supply linkages between transnational corporations and local suppliers in ASEAN', *Transnational Corporations*, 15(3), pp. 1–34.
- Grossman, G.M., and E. Helpman, (2003), 'Outsourcing versus FDI in Industry Equilibrium', *Journal of European Economic Association* 1(2–3), pp. 317–327.
- Holmstrom, B. and J. Roberts (1998), 'The Boundaries of the Firm Revisited', *Journal of Economic Perspectives*, 12(4), pp. 73–94.
- Jacobides, M.G. (2005) 'Industry Change through Vertical Disintegration: How and Why Markets Emerged In Mortgage Banking', *Academy of Management Journal*, 48(3), 465–498.
- Pradhan, J.P. (2006), 'Global Competitiveness of Indian Pharmaceutical Industry: Trends and Strategies', ISID Working Paper, No.2006/05, New Delhi: Institute for Studies in Industrial Development.
- Reuters (2009), 'Captives in India: Is the honeymoon over?', November 3, available at: <http://in.reuters.com/article/2009/11/03/idINIndia-43637520091103>.
- Singh, N. (2010), 'Adoption of industry-specific quality management system standards: determinants for auto component firms in India', *International Journal of Productivity and Quality Management*, 5(1), pp. 88–107.
- Suneja, J.S. (2000), 'TNC-SME Co-operation: The Experience of India', in UNCTAD (eds.) *TNC-SME Linkages for Development: Issues-Experiences-Best Practices*, pp. 85–97, New York and Geneva: United Nations.
- UNCTAD (2010), *World Investment Report 2010: Investing in a Low-carbon Economy*, New York and Geneva: United Nations.
- Williamson, O. (1985), *The Economic Institutions of Capitalism*. New York: The Free Press.

## About the Author



Jaya Prakash Pradhan, (PhD, Jawaharlal Nehru University) is an Associate Professor of Economics at the Central University of Karnataka, India. He has served on faculties of leading academic institutions in India including the Sardar Patel Institute of Economic & Social Research (Ahmedabad), Institute for Studies in Industrial Development (New Delhi), Gujarat Institute of Development Research (Ahmadabad), and worked as a consultant to the Research and Information System for Developing Countries (New Delhi). He is the author of *Indian Multinationals in the World Economy: Implications for Development* (Bookwell Publisher, New Delhi, 2008); co-editor of *The Rise of Indian Multinationals: Perspectives on Indian Outward Foreign Direct Investment* (Palgrave

Macmillan, New York, 2010) and *Industrialization, Economic Reforms and Regional Development: Essays in Honour of Professor Ashok Mathur* (Shipra Publication, New Delhi, 2005); and co-author of *Transnationalization of Indian Pharmaceutical SMEs* (Bookwell Publisher, New Delhi, 2008). He is also the co-editor of the special issue of *International Journal of Emerging Markets* on Emerging Multinationals (2010) and that of the special issue of *Economics, Management, and Financial Markets* on The Rise of Emerging Economies (2011).

**Contact Information:** Jaya Prakash Pradhan, Associate Professor, Department of Economic Studies & Planning, School of Business Studies, Central University of Karnataka, II Floor, Karya Soudha, Gulbarga University Campus, Gulbarga-585106, Karnataka, India. Telefax: 08472-272 066 (off.), [pradhanjayaprakash@gmail.com](mailto:pradhanjayaprakash@gmail.com).