# 5. Foreign Direct Investment in India

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## INTRODUCTION

For the first four decades after achieving independence from British colonial rule, the economic polices of the Indian government were characterised by planning, control and regulation. There were periodic attempts at market-oriented reform, usually following balance of payments pressures, which induced policy responses that combined exchange rate depreciation and an easing of restrictions on foreign capital inflows. However, the latter were relatively narrow in scope and had little impact on actual inflows, which remained small. Nevertheless, there were foreign shareholdings in many companies, partly as a result of their pre-independence origins. Moreover, in sectors upon which the government placed high priority, domestic firms were allowed to enter into technology licensing arrangements, which often involved an equity stake as well. But, there was a general sense of discomfort with a foreign presence in industry, particularly in “non-essential” sectors like consumer goods. This culminated in a series of major policy decisions in the late 1970s that forced companies to restrict their foreign shareholdings to a maximum of 40 per cent. Many companies did comply, but two prominent ones who did not, Coca Cola and IBM, were asked to shut down their Indian operations.

During the early 1980s, following a serious balance of payments crisis and a large loan from the International Monetary Fund, the Indian government relaxed its foreign investment policy. This engendered a number of joint ventures in the automotive industry, involving both financial and technical relationships between Indian and Japanese manufacturers. A few years later, Japanese two-wheeler manufacturers entered the domestic market, again through joint ventures with major Indian producers. Here again, the ventures were followed by a series of arrangements between component manufacturers in the two countries. Other key sectors, like the computer industry, were also provided a more liberal trade and investment environment.

The big opening up came in 1991, following yet another external crisis. This time, the government went much further than before in introducing a series of both domestic and external reforms that fundamentally changed the business environment. One of the key components of this new policy was a significant widening of the range of activities in which foreign firms could enter as well as an easing of the conditions under which they came in.

This chapter first outlines the reform progress and the evolving pattern of FDI over the past decade. We go on to report the key results from our FDI survey.

## REFORMS IN THE INDIAN ECONOMY

Prior to 1991, the government exercised a high degree of control over industrial activity by regulating and promoting much of the economic activity. The development strategy discouraged inputs from abroad in the form of investment or imports, while the limited domestic resources were spread out by licensing of manufacturing activity. The result was a domestic industry that was highly protected – from abroad due to import controls and high duties, and from domestic competition due to licensing and reservations.

Industrial policy was dominated by licensing constraints by virtue of which strict entry barriers were maintained. Under the Industries Development and Regulation Act (1951), it was mandatory for all companies to get government approval to set up a new production unit or to expand their activities. Approval was also required if the manufacturer wanted to change the line of production. Moreover, when permission was granted, it was very specific to product, capacity and location. The decision to award a license involved many stages and became a highly bureaucratic process, with some elements of state capture by incumbent domestic firms. This and other policies led to a very high degree of bureaucratisation of the economy. Also many sectors like textiles were reserved for the small scale sector, thereby making it difficult for domestic firms belonging to these sectors to enjoy economies of scale, and making these sectors unattractive to MNCs.

The government also controlled the exit option for a company. Manufacturers were not allowed to close operations or to reduce their work force without government approval. The intention was to try to avoid unemployment, but it also promoted inefficiency in the industrial economy.

Indian trade policy before the 1990s focused on import substitution. Restrictions on imports were imposed in different forms. In concurrence with the objective of attaining self-reliance, import licensing was imposed to exercise control over the importers. Further, imports were canalised, which meant that certain commodities could be imported by only one agency, which was generally a public sector company.

Import controls and high tariff rates led to high input costs, which made Indian producers un-competitive in the world market. Further, certain items were also subject to export controls with a view to ensure easy availability, low domestic prices and for environmental reasons. As a result, domestic industry operated in an isolated environment with limited exposure to the international products and markets.

FDI policy put severe restrictions on foreign investment. Few foreign companies were allowed to retain an equity share of more than 40 per cent, and as a result many did not use their best technologies in India. The economy was deprived of foreign capital and foreign technology and internationally efficient scales and quality of production could not be achieved.

Financial sector policy did not focus upon generating enough capital from within and outside the country. The financial sector was highly regulated by the state. The government had owned all the major banks since nationalisation in 1969 and the early 1980s. It administered low interest rates on borrowings and loans to small industries and agriculture; price controls and credit rationing. Indeed, the basis of planning in India was a Harrod-Domar growth paradigm which made the government focus on mobilisation of savings for investment. The problem was that there was financial repression because of price fixing and directed credit.

Raising equity from the market was also restricted. The government decided both the amount of capital as well as price. Apart from interest rates, initial public offerings and other equity issues required prior government approval through its arm - the Controller of Capital Issues (CCI). Banks could ignore market forces when taking functional and operational decisions, and private sector participation was discouraged. Profitability of financial institutions remained low owing to government control over interest rates and absence of competitive forces.

In addition to industrial and trade policies, public sector policy exclusively reserved certain sectors for the public sector. The public sector was also present in almost all parts of the economy - petroleum, consumer goods, tourism infrastructure and services, etc. Infrastructure industries such as power, telecom, air transport, etc., were almost wholly public sector controlled.

Reservation contributed to lack of competition, which reduced the incentive to be efficient. Over-manning, poor management, obsolete technology and insufficient research and development activities further contributed to the decay of public sector undertakings. Most important of all, non-commercial objectives and government muddling in day-to-day operations made these companies extremely inefficient.

Small-scale industry policy gave protection from domestic as well as international competition. This was done primarily by reservation of certain product lines exclusively for small industries. The smaller firms benefited from excise concessions and rebates that were determined on the basis of annual turnover rather than investment in fixed capital. Financial aid was also given in form of credit from government owned banks on softer terms. Small firms also benefited from preferential government purchases and input supplies.

To summarise the impact of pre-1990 policies, the Indian industrial structure was weak, both financially and technologically. However, domestic incumbents had been created who were entrenched and this had implications for FDI and for the mode of entry in the 1990s. The major prevailing problems were inefficiencies, high costs, poor management, non-competitiveness, excessive reservation, import controls, lack of export orientation and disincentives to the foreign investors.

Reforms launched in the early 1990s focused on addressing some of these issues. Since manufacturers were highly dependent on domestic growth, a more outward looking policy was adopted. Economic policies were liberalised with a view to encouraging investment and accelerating economic growth.

The new industrial policy announced in 1991 led to de-licensing of industry, competition rather than protection as the desired policy environment. The earlier requirement of approvals and licenses for any investments and expansions were abolished for all except 18 industries. Within a few years, only five sectors remained under the ambit of industrial licensing.

De-licensing gave companies freedom to take decisions for investments, expansions and plant locations. Bureaucratic practices involved in the investment procedures were reduced significantly. Lowering of entry barriers resulted in greater private sector participation.

Trade reforms addressed the anti-import bias by reducing tariffs, quantitative restrictions and foreign exchange control. From being one of the most protected domestic economies prior to the reforms, the Indian economy has become similar to other developing countries. Trade reforms have continued in a sustained manner throughout the 1990s and it is expected that they will continue in the same manner.

The government also liberalised its policy towards FDI. Many constraints that had historically been imposed on portfolio and direct investment were removed. The approval process for technical and financial collaborations was completely revamped. For many industries, the Reserve Bank of India (RBI) would give an automatic approval.

Indian law does not differentiate between an Indian and foreign owned company once it has been incorporated in India. The same procedures govern Indian and foreign owned companies alike. Like Indian companies, foreign owned companies also do not now require a license for production in most manufacturing sectors.

Technology transfers were also made easier by removing many mandatory approval requirements. Another measure to bring in FDI was reduction of controls on technology and royalty payments. Restrictions on foreign collaborations investment (both financial and technological) were by and large removed.

India's financial sector went through a wide variety of reforms during the 1990s (see Sarkar and Agarwal 1997), aimed at correcting the biases in the lending policies of government owned banks and financial institutions. Under new polices, the banks were free to decide lending and deposit rates. This was accompanied by a significantly proposed reduction in pre-emption of bank loans, both by the government and the priority sector. Both these gave the banks freedom to opt for the most rewarding investments. Capital market reforms coupled with the removal of restrictions on firms reduced entry barriers for the private sector. As a result, today there are many private operators in the sector - banks, financial institutions, NBFCs and insurance companies have a significantly higher private representation.

The reforms in the public sector enterprises (PSEs) were intended to be three pronged; privatisation, greater autonomy and reduction of the monopoly power of the public sector. However, much has not been accomplished. First, privatisation has not been very successful. Minor proportions of a few companies' total equity was "dis-invested', only one company out of a total of 242 public sector companies owned by the government has been completely privatised. Second, though some attempts were made at giving greater autonomy to PSEs this has largely been unsuccessful (Bhandari and Goswami 2002).

Third, the public sector environment was highly un-competitive *vis-à-vis* the rest of the world. Abolishing its monopoly was thought to be a solution that would force public companies to adopt better management practices. Sectors reserved exclusively for public sector were de-reserved (except for some social and security sectors). This was a policy measure to bring in private performers in competition with the PSEs. Compared to the first two, these measures have been much more successful.

The policy reforms with respect to small-scale sector have not been as significant. Small industries traditionally benefit from the preferential treatment given by the government in many ways, including reservations and tax concessions. Protective polices continue to shield small manufacturers from competition from the medium and large ones. As a consequence, much of the small sector depends on subsidies, concessions and reservations for its survival.

India removed most quantitative restrictions from April 1st, 2001. Under such circumstances, the small manufacturers face serious challenges from international producers who have open access to the domestic market. International companies that can benefit from large scale may therefore have a major advantage over the domestic small manufacturers with fragmented capacities.

## FOREIGN DIRECT INVESTMENT

### FDI Trends

As the restrictions on foreign investments were reduced or removed, there was a sudden spurt in foreign net inflows. The number of approvals of foreign technical collaborations registered a dramatic increase in the new policy regime, and the number of foreign technology approvals went up. The value of FDI approvals also increased significantly in the post-reform period. 1997, $15.8 billion of FDI was approved in contrast to US$ 0.3 billion approved in 1991. Figure 5.1 highlights the increase in net FDI inflows after 1991. Net FDI inflows were only US$ 0.074 billion in 1991 increasing to US$ 3.6 billion by 1997, though falling in later years (US$ 2.6 billion in 1998). After 1991, foreign investment followed a steep upward curve: from 1981 to 1990, FDI grew by 23 per cent annually; this increased to 44 per cent annual growth during 1991 to 2001. Only US$ 0.1 billion of foreign capital was invested in 1991, compared with US$ 4.28 billion in 2001 (World Bank Development Indicators).

However, FDI still constitutes a very low share of total investment in India. By 1998, this ratio was 2.5 per cent - much lower than that of most other Asian countries. In many other post-reform economies, FDI has been seen to increase substantially when there has been large-scale public sector privatisation. In India this has not happened as yet; indeed domestic firms in India have proved capable of absorbing large state owned firms that are being privatised, for example BALCO and VSNL. But the share of FDI, as a percentage of gross domestic investment (GDI) and GDP, has been growing. While the share of FDI in GDI was only 0.2 per cent in 1990, it increased to 3.98 per cent by 2001, while FDI as a per cent of GDP increased from 0.05 per cent in 1990 to 0.90 per cent in 2001.

Although, inflows of foreign investments did gear up, they were not very impressive in comparison with some other countries. (See for example UNCTAD 2003) for a comparison of India with China). India's FDI share in the developing world was only 0.4 per cent in 1991. A marginal improvement was seen by 2001, when the share had increased to 1.7 per cent.

### Distribution of FDI

In the absence of details of actual FDI inflows into different sectors, the present sector-wise discussion depends on approval data only. The bulk of the approvals from early 1990s to 2002, were directed towards infrastructure and energy sectors. More approvals were made in non-manufacturing sectors. An analysis of half-yearly figures from the SIA Database reveals increasing shares of the metallurgy, power and fuel sectors in total number of approvals. Large falls were observed in transport, industrial machinery and food processing. The services sector including telecommunication increased its share during the initial years of 1992 to 1994. Its growth was limited by the domestic climate in the later years.

A ranking of cumulative investment approved during the period 1991 to May 2002 reveals that USA was the largest investor in India with an investment of Rs. 570 billion. Mauritius, UK, Japan, Korea (South), Germany, Netherlands, Australia, France and Malaysia follow in that order. USA had a smaller share of FDI into India after 1997. Mauritius ranked next to USA in its cumulative investments since 1993. By 1997, the inflows from this country accounted for almost 20 per cent of FDI inflows, probably because of its status as a tax haven. Most of the approvals were in power, fuel, telecom and transport sectors.

**Ownership Classification**

The more liberal environment resulted in greater equity participation from abroad. Approvals for collaborations involving some amount of equity increased both in number and percentage. Nearly 70 per cent of collaborations were independent of any equity in 1991. Their share declined in successive years. Further, most of the approvals were for majority stakes in the host company. While there were only 4 per cent majority approvals in 1991, the share increased to almost 16 per cent by 1997. The most dramatic change was witnessed by the subsidiary (wholly owned) segment, which had carved a share of 17 per cent over seven years. Relatively greater investments were approved for absolute ownership during 1995 to 1997, when power and services sectors were opened up.

The reduction of rigidities in the investment procedures led to an increase in the number of international collaborations. Initially, there was a spurt in the number of joint ventures between international and Indian companies.

This was for two reasons. Firstly, approvals in many industries were possible only if an Indian company was also involved as a promoter. Even in cases where it was not necessary to have an Indian partner, the existence of one greatly facilitated the initial approval process. Secondly, operating in the Indian market was highly different from that in the other countries. Partnering with an established Indian company benefited the new entity in setting up labour relations as well as marketing. However both these factors have become less important since the 1991 reforms.

The government no longer insists on Indian partnership for FDI in most industrial sectors and operating in India is now more transparent. As a result,

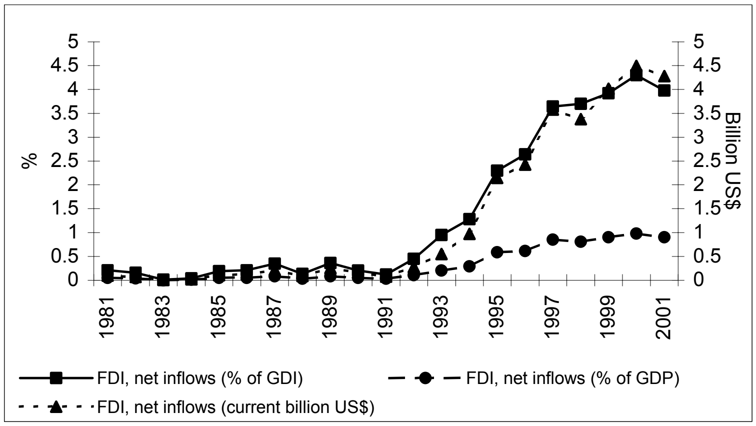


*Figure 5.1 Foreign direct investment in India*

*Source:* World Development Indicators, CD-ROM, 2002, World Bank Little Data Book, 2001 and www.worldbank.org

joint ventures in the form of technological collaborations also declined during the period.

In the recent past, more ventures have been motivated by greater foreign equity shares in the target firms. This is due to raising of the upper cap on the equity limits. Further, more investment decisions were focussed on the benefiting from the already built-in domestic distribution networks. This is evident from a slight increase in the approvals for marketing of international products in India.

Prior to the reforms, the government supported technology inflows by means of technical collaborations between Indian and foreign companies, and tended to restrict financial participation by foreign companies. The restrictions on financial investments were dropped in the 1990s. For example, new sectors were opened for automatic approvals up to 74 per cent of the total equity. A combination of factors discussed above, as well as preference for greater control, led to a situation where more foreign companies opted for capital investment rather than purely technological alliances.

Until 1993 most collaborations tended to be purely technical in nature. The situation reversed by 2002 when the share of financial approvals reached 82 per cent leaving behind purely technology transfer approvals at only 11 per cent.

*Table 5.1 Foreign ownership by level of control, India (in % of total FDI in the year)*

| Year | Non-equity | Minority | Majority | Wholly-Owned | Average Equity |
|---|---|---|---|---|---|
| 1991* | 69.0 | 27.0 | 4.2 | 0.0 | 35.6 |
| 1992 | 55.0 | 31.0 | 13.0 | 2.0 | 41.1 |
| 1993 | 50.0 | 32.0 | 13.0 | 5.0 | 35.4 |
| 1994 | 44.0 | 34.0 | 17.0 | 6.0 | 47.4 |
| 1995 | 54.0 | 47.0 | 18.0 | 9.0 | 45.3 |
| 1996 | 33.0 | 34.0 | 20.0 | 13.0 | 49.7 |
| 1997# | 30.0 | 29.0 | 27.0 | 17.0 | 65.8 |
| All | 43.5 | 32.7 | 16.2 | 7.7 | 47.5 |

*Notes*: Figures in column are percentage to column total. Non-equity collaborations are primarily technical collaborations, which have no equity ownership by the international collaborator. * Aug-Dec, # Jan-Aug.

*Source:* Rakesh Basant, 2000.

**Mergers and Acquisitions**

Mergers and acquisitions (M&A) activity grew at an unprecedented rate during the 1990s, rising from US$ 35 million in 1992 to a peak of US$ 1.520 million in 1997, and staying in excess of US$ 1 billion between 1999 and 2001. Many such arrangements were worked out between Indian and foreign firms and the bulk of these involved multi-national companies (MNCs), though M&A activity between Indian companies was also quite significant. Basant (2000) reports that between 1991 and 1997, 252 mergers and 145 acquisitions occurred. More than 85 per cent were between private Indian firms, and almost 60 per cent of 145 acquisitions between 1991 and 1997 were by private Indian firms. Foreign private acquisitions accounted for 32.4 per cent. 221 out of 252 mergers (88 per cent) belonged to the Indian private sector. Foreign private firms followed with a share of 7.5 per cent. Non Resident Indian (NRI) mergers were only 0.4 per cent, while joint ventures between Indian and foreign firms were a little higher at 1.6 per cent. 60.7 Per cent of the acquiring firms were Indian private companies. In about 32 per cent of the cases, the acquirer was a foreign company. NRIs acquired 4.1 per cent Indian firms while joint ventures between Indian and foreign firms had a share of only 1.4 per cent. Thus, merger and acquisition activity substantially increased in India in recent years, though foreign investors participate only in a minority of deals (although these may include some of the largest deals).

## FDI SURVEY IN INDIA

With the help of data collected from 152 MNC affiliates established in India in the last decade, the remainder of this chapter outlines the role of FDI in the Indian economy. The data were collected by way of stratified random sampling, to ensure that none of the sectors are over- or under-represented in the sample, relative to the population, and that there is no selection bias of any other kind. The majority of firms belong the manufacturing sectors, including machines and equipment (26 per cent), intermediate goods (16 per cent), and basic consumer goods (13 per cent). Information technology and software firms account for 20 per cent, while business services account for 13 per cent (chapter 2). The machines and equipment sector has been over-sampled, and the intermediate goods sector has been under-sampled. However, there is no selection bias at the 2-digit level of ISIC classification.

### Characteristics of MNC investing in India

Only a small fraction of the MNCs investing in India are large, the proportion of MNC affiliates with 250 or more employees in the sample being 16 per cent. On the other hand, small firms, those having between 10 and 50 employees, account for 42 per cent of the firms in the sample. The size of the affiliates in India seems to be positively correlated with the overall size of the MNCs. An overwhelming majority of them are small, about 76 per cent of them having fewer than 10,000 employees worldwide (Table 5.2). Most of the larger affiliates are concentrated in the infrastructure and machinery and equipment sectors. Interestingly, however, the machinery and equipment sector also accounts for a significant proportion of the very small firms. The intermediate goods sector and the IT sector account for the bulk of the other very small firms. A significant proportion of the MNC affiliates in India, namely, 23 per cent, contribute to a significant proportion of the worldwide turnover – greater than 5 per cent – of the parent MNCs (Table 5.2). However, about 47 per cent of the affiliates constitute a small fraction of the global turnover of the parent companies. Most of the firms contributing significantly to the parents' global output are in the IT and machinery and equipment sectors

Most of the firms investing in India are from the USA and Western Europe, together accounting for 78 per cent of the firms in the sample. MNCs from Germany (11 per cent) and the UK (9 per cent) are the leading European investors. This pattern of investment is consistent with India's trade patterns. Between 1990-1991 and 1998-1999, the EU accounted for 26 to 27 per cent of India's exports, and 24 to 29 per cent of India's imports. The USA, on the other hand, accounted for 14 to 21 per cent of India's exports and 8 to 12 per cent of her imports.

*Table 5.2 Characteristics of Investing MNC, India*

| | (Unit) | Categories | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | (000) | (< 1) | (1 - 10) | (10 - 100) | (>100) | | | |
| Worldwide employment | | 38.3% | 37.0% | 19.8% | 4.9% | | | |
| | (%) | (0 - 0.1) | (0.1 - 0.5) | (0.5 - 2) | (2 - 5) | (5 - 20) | (>20) | |
| Local contribution to global turnover | | 20.8% | 26.7% | 13.3% | 15.8% | 17.5% | 5.8% | |
| | (% of turnover) | (0 - 0.5) | (0.5 - 1) | (1 - 2) | (2 - 4) | (4 - 8) | (8 - 15) | (>15) |
| R&D expenditure | | 38.1% | 12.4% | 6.7% | 16.2% | 11.4% | 3.8% | 11.4% |
| Advertising expenditure | | 49.5% | 10.7% | 10.7% | 3.9% | 10.7% | 9.7% | 3.9% |
| | (count) | (None) | (1) | (2) | (3) | (4) | | |
| Emerging regions experience | | 22.5% | 34.9% | 20.2% | 10.1% | 12.4% | | |

Much of the European investment is concentrated in the intermediate goods and machinery and equipment sectors. The majority of the North American firms, almost all of which are from the USA, on the other hand, have invested in the IT and financial services sectors. Much of the investment of Japanese and East Asian firms have been concentrated in the "old economy" machinery and equipment sector and in the "new economy" IT sector.

In light of the fact that economic reforms in India began in earnest as late as 1991, it is hardly surprising that not many MNCs invested in India until 1994, i.e., during the first four years of economic liberalization, and investment into India picked up only after 1994. Indeed, only 25 per cent of the firms in the sample invested in India prior to 1995. This is consistent with the slow yet steady liberalization of FDI regulations and the capital account of the balance of payment in India since 1991. Most of the early entrants into India were in the intermediate goods, machinery and equipment and IT sectors. These three sectors, along with financial services, continued to account for most of the post-1995 MNC investment in India.

Most of the MNCs investing in India do not have R&D intensive products; parents of about half the firms in the sample invest less than 1 per cent of their global sales in R&D activities (Table 5.2). The MNCs with R&D intensive products have invested largely in the IT and pharmaceutical sectors.

The MNCs parents of about 60 per cent of the firms in the sample spend more than 1 per cent of their global sales on advertisement, while only about 13 per cent of the parents spend more than 8 per cent (Table 5.2). Given that high advertisement related expenditure is associated with consumer goods products, this is consistent with the pattern of MNC investment in India, with the majority of investment in the intermediate goods, IT and machine and equipment sectors.

About 57 per cent of the MNCs in the sample either did not have any emerging market experience before entering India, or their experience was limited to one of the four major regions with developing countries/emerging markets, namely, Asia (other than Japan), Eastern and Central Europe, Latin America and Africa (Table 5.1). The proportion of MNCs investing in India without significant emerging market experience – about 76 per cent – is especially striking for the financial services sector. However, two-thirds of the MNCs investing in the pharmaceutical sector had significant operational experience in all four regions.

**Entry Strategies**

Most of the MNCs enter into India either with greenfield projects or with joint ventures with local firms. Indeed, greenfield and JVs account for 83 per cent of entries captured in the sample. MNCs investing in the basic consumer goods sector prefer greenfield to JV, as do those investing in the pharmaceutical sector. MNCs investing in the machines and equipment sector, however, prefer JV to greenfield. Entry mode for these three sectors is entirely consistent with the hypothesis that MNCs with high proprietary "technology" would prefer to enter an emerging market on their own. There is, however, no discernible pattern for the other sectors.

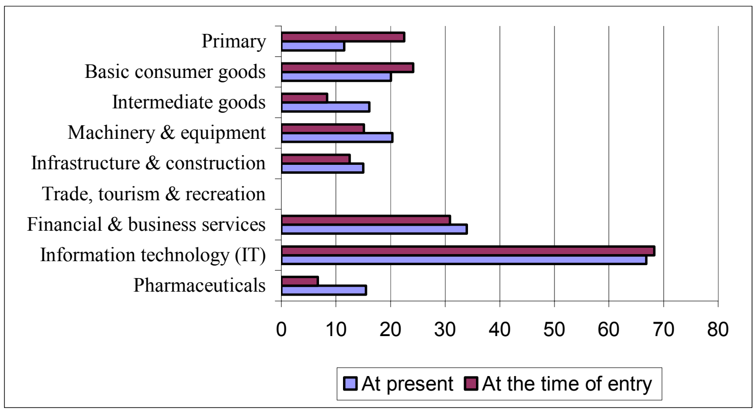


*Figure 5.2 Proportion of output exported in India*

Nearly 60 per cent of the output of the IT sector is exported (Figure 5.2), while another quarter of it is "produced" for either the parent MNC or other affiliates of the parent MNC. This is consistent with India's reputation as an IT hub catering to the rest of the world. MNCs in all other sectors sell 60 per cent or more of their output in the local market, confirming the popular wisdom that the size of the Indian domestic market plays a significant role in attracting FDI.

On average, MNCs that entered India by way of JVs cater more to the local market, while MNCs with greenfield entries cater more to overseas markets. About a third of the JVs in the sample sell more than half their output in the local market, and about 37 per cent of them sell 10 per cent or less. The corresponding numbers for greenfield projects are 20 per cent and 50 per cent. This is consistent with the literature which argues that MNCs aiming to cater to the local market are more likely to tie up with local partners to help mitigate costs associated with understanding markets and developing business contacts and distribution networks. MNCs with focus on the global market, on the other hand, are more likely to retain complete control to ensure that the quality of the products meets global standards, and that the contractual agreements with global buyers are met.

**Importance and Sources of Resources**

Brands are viewed by a significant proportion of the MNCs in India as the most important resource necessary for success. Most of these firms belong to the primary, basic consumer goods, financial services and pharmaceutical sectors. With the exception of distribution networks (for pharmaceutical sector), equity (for primary and infrastructure sectors) and technology (for the primary and machinery and equipment sectors), no other resource is as important to the MNC affiliates in the sample. However, if one takes into account the three most important resources necessary for success, as chosen by the firms' management, managerial and marketing capabilities also emerge as important resources. It should be noted that aside from equity and technology, most of the resources deemed important by the MNC affiliates are intangible. *Ceteris paribus*, this suggests that in India the potential gains from a tie up with a local firm can be significant.

In keeping with the literature on agency and transactions cost, a majority of the MNCs that entered India by acquisition, rate brand as the most important resource necessary for success, while a third of the MNCs entering by way of a JV, accord a similar status to business networks. If, as before, one takes into consideration the three most important resources contributing to a firm's success, managerial capability emerges as another resource important to the acquiring firms. Technology is deemed important for success by a majority of the firms, irrespective, of their choice of mode of entry.

The eight resources deemed most important for success by the MNC affiliates are brand, business network, distribution network, equity, machinery and equipment, managerial capability, marketing capability and technological know-how. Importantly, most of these are intangible resources. The MNC parents contribute 80 per cent of brand value, 85 per cent of equity and 73 per cent of technological know-how, on average (Figure 5.3). At the same time, 70 per cent of the business networks, nearly half of the managerial capability, about two-fifths of the distribution networks and almost all of marketing capability is sourced locally.

In other words, the MNCs provide most of the tangible resources and source most of the intangible resources from India. This is consistent with the fact that JVs constitute a significant proportion of the firms in the sample. Further, given that distribution networks and marketing capabilities are two of the key intangible resources sources that are sourced locally, it can be hypothesised that most of the MNCs aim to sell their products in the Indian market.

Brand, equity and technological know-how are the resources that are deemed important for success by a majority of the MNCs in the sample. Of these, technological know-how is important to firms of all sizes, the measure of size being the number of people employed by the local affiliate. Brand, on the other hand, is more important for larger affiliates while equity is more important for the smaller affiliates.

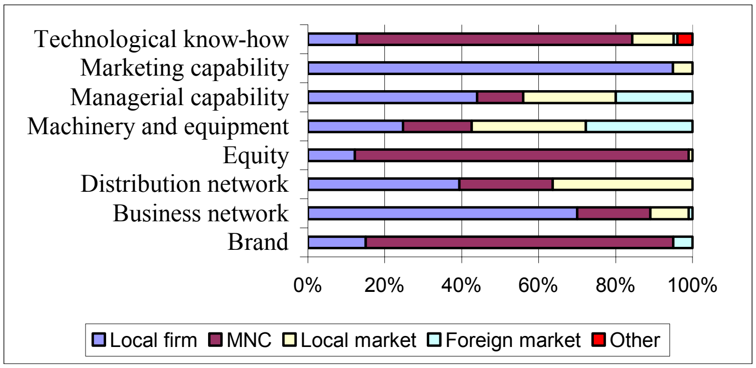


*Figure 5.3: Source of key resources in India*

## FACTOR MARKETS AND INSTITUTIONAL ENVIRONMENTS IN INDIA

The MNCs in the sample feel that there has been a noticeable improvement in the quality of labour available locally across the board (Figure 5.4). The average quality of labour registered a 0.40-point improvement, on a 5-point scale, for executive management, professionals, operations management and skilled non-managerial labour. MNCs investing in the primary, intermediate goods and IT sectors experienced the most significant improvements in labour quality.

The perception about the across the board improvement in the quality of labour available locally is also invariant with the mode of entry of the MNCs. Interestingly, however, the MNCs that are in JV with local firms experienced the least improvement in labour quality. This may be a manifestation of the agency costs associated with local partnership.

The MNCs in the sample experienced a noticeable improvement in a variety of local resources – IT, professional services, real estate, machinery and equipment and raw materials, but the perceived quality/reliability of utilities still lag the quality/reliability of other inputs. The most significant improvement was experienced, not surprisingly, with respect to IT: a 0.91-point increase on a 5-point scale. MNCs that invested in the primary, intermediate goods, financial services, IT and pharmaceutical sectors experienced the greatest improvement in quality of local resources, while those that invested in the infrastructure sector experienced the least improvement in quality.

The perception about the institutional environment in India, however, too is not as optimistic (Figure 5.5). Respondents felt that there was virtually no improvement in the legal-institutional framework relevant to business during the 1990s. The only perceptible improvements were with respect to procurement of business licenses, real estate and visa and work permits. The MNCs that invested in the pharmaceutical and machinery and equipment sectors experienced the greatest upturn in the business-related institutional environment.

The MNCs that entered India by acquisition had the worst experience with respect to the country's institutional environment. They felt that the legal-institutional environment in India deteriorated during the 1990s. MNCs that entered India by all other modes, including JV, however, experienced an improvement in the legal-institutional environment. While the experience of the JVs highlight the importance of local partnership in emerging markets, the experience of the MNCs that entered by way of greenfield is perhaps a reflection of a selection bias – these MNCs entered on their own because they were capable of functioning successfully under the Indian legal-institutional set up.

MNCs from North America reported the greatest improvement in the legal-institutional environment; the experience of MNCs from Europe and East Asia (including Japan) was not as good. Both the North American and European MNCs reported the greatest improvement with respect to business licenses and visa and work permits. The East Asian MNCs, in addition, felt that there was an improvement in the support of the central government's institutions and policies for FDI, as well as in the legal-institutional framework associated with procurement of real estate.

MNCs investing in all sectors were favourably impressed with the direction and pace of change in the quality of range of products produced in India (Figure 5.6). With some exceptions – intermediate goods and financial services sectors – the perception was that the pace of change in the quality of management was far less muted. In other words, there is *prima facie* evidence that the spillover effect of FDI in India has largely been in the form of better quality of products, rather than in the form of improved managerial abilities. Interestingly, while the MNCs in the sample felt that the productivity of local labour improved, on average, those investing in the IT sector experienced a decline in labour productivity. This is consistent with the views about the impact of *en masse* migration of high quality IT professions to North America and Europe, and the inability of the local educational system to rapidly replenish the stock of such professionals.

The MNCs that entered by way of JVs perceive the greatest improvement by far in range and quality of products, as also in managerial and marketing capabilities of local firms, the level of technology used and labour productivity. This suggests that JVs contribute most to FDI-related spillovers in India.

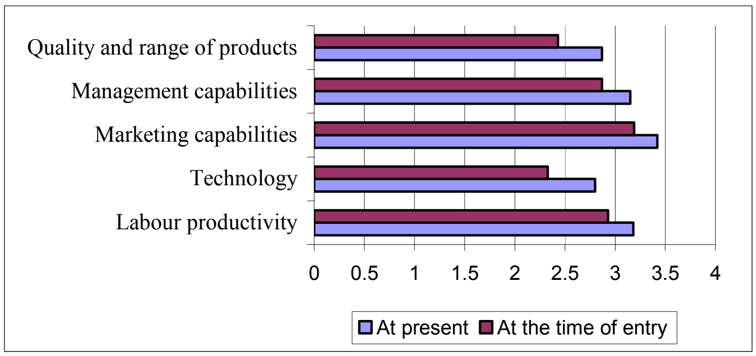


*Figure 5.4: Perceptions about the local industry in India*

## TRANSFER OF TECHNOLOGY AND KNOW-HOW

A negligible proportion of the firms spend a significant fraction of their turnover on training (Figure 5.7). Indeed, only about 6 per cent of the MNCs in the sample spend more than 8 per cent of their turnover on training, while a meagre 12 per cent spend more than 4 per cent. Even in the IT sector, only 17 per cent of the MNCs that invested in India spent more than 4 per cent of their turnover on training. By contrast, three quarters of the MNCs spend less than 2 per cent of their turnover on employee training. In other words, abstracting from the relative contribution of different entry modes to spillovers, the absolute level of knowledge and know-how spillover from FDI is not significant in India.

Even MNC affiliates whose parent firms have R&D intensive products do not spend a noticeable proportion of their turnover on training.

Only 15 per cent of such MNC affiliates spend more than 4 per cent of their turnover on training. This suggests that by and large MNCs use India as a manufacturing base for low-end generic or downstream products. This is consistent with the experience of the IT industry, which has not moved significantly up the value-addition ladder.

Although firms across the board offer little or no training to their employees, there is a weak relationship between training and performance of the MNCs in India. The firms that were most dissatisfied with their own performance are also the ones that offered noticeably less training to their employees, as compared to the other firms.

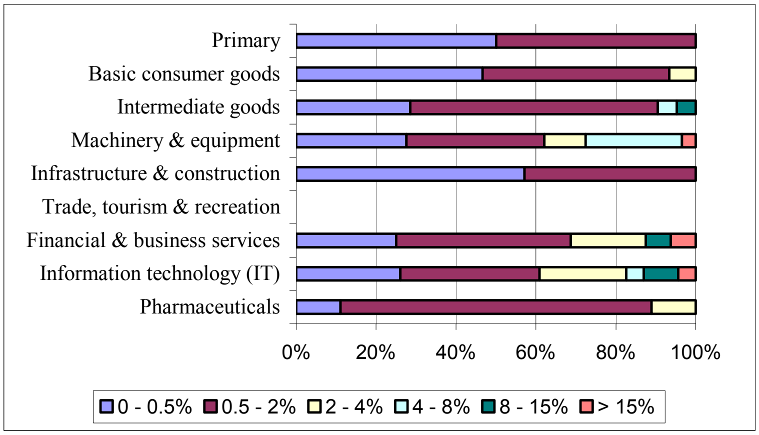


*Figure 5.5: Proportion of revenue spent on training by local affiliate in India*

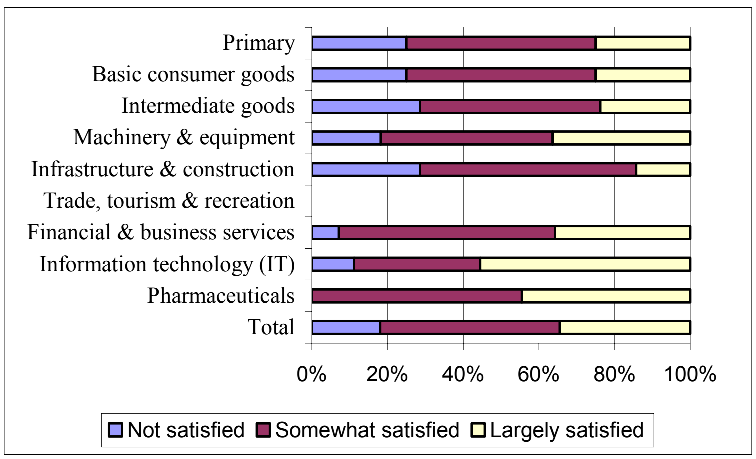


*Figure 5.6: Performance of MNC affiliates relative to expectations in India*

## PERFORMANCE OF MNC AFFILIATES

Overall, most MNCs were satisfied with their own performance, relative to their initial expectations (Figure 5.8). However, the aggregate numbers mask a significant amount of heterogeneity across firms. MNCs in the sample that entered India by way of greenfield projects were by and large happy with their performance; the measure of experience being an index that accords equal weights to the MNCs' experience with respect to labour productivity, revenue growth and profit growth. About 40 per cent of them feel that all or nearly all their expectations have been satisfied. In comparison, MNCs that entered by way of JV were less successful; only 28 per cent of them feel that all or nearly all their expectations have been satisfied. Overall, only 16 per cent of the MNCs report that their expectations have been largely or entirely unmet.

A significant proportion (nearly 40 per cent) of the early entrants, i.e., those that entered India prior to 1995, have had their expectations with respect to performance met. By contrast, only 29 per cent of the late entrants, i.e., those that entered after 1998, were satisfied. This may be a reflection of the change in the *a priori* expectations of the MNCs about investment in India over time.

The largest number of well-performing firms is in the machinery and equipment and, not surprisingly, IT sectors. A large proportion of the MNCs in the financial services and pharmaceutical sectors, about 35 and 44 per cent respectively, are also satisfied with their performance. The machinery and equipment and the intermediate goods sectors account for most of the under-achieving MNC affiliates in the sample.

MNCs in the sample are more likely to have been satisfied with their performance if they are very export oriented than if they are focused on the domestic market. About 52 per cent of highly export oriented MNCs are very satisfied with their performance. By contrast, only about 33 per cent of the MNCs with domestic market focus feel that all or nearly all their expectations have been fulfilled.

As seen before, all MNCs experienced an improvement in the quality of local labour during the 1990s. However, the MNCs that were least satisfied with their performance experienced the most significant improvement in the quality of non-managerial skilled labour and, at the same time, the steepest decline in the quality of executive management (Table 5.3). This possibly suggests that "failure" of MNCs in India is closely associated with management problems, as opposed to problems with the non-managerial labour force.

MNCs that are dissatisfied with their performance in India experienced noticeably less improvement in the reliability of utilities, compared to other MNCs. However, on average, satisfaction with performance and experience with local resources have a non-monotonic relationship. Indeed, while MNCs that are completely or almost entirely dissatisfied and those that are by and large satisfied with their own performance experienced similar (average) levels of improvement in the quality of the local resources – 0.44 points on a 5-point scale – the middle of the road MNCs have distinctly better experience with the quality of the same resources. The latter experienced an average improvement of 0.58 points on the aforementioned 5-point scale. This surprising result might be a reflection of the high *a priori* expectations of the "successful" MNCs about the rate of improvement in the quality of the local resources.

The degree of satisfaction of the MNCs with their own performance has an unambiguous negative relationship with the perceived change in the quality of the local industries to which the MNCs belong. This is possibly a reflection of the more realistic *a priori* expectations of the "successful" MNCs about the quality/extent of local competition they were likely to face, and hence the extent to which they would be able to extract rent using their proprietary products and brands.

Firms across the performance spectrum witnessed improvement in the legal institutional environment pertaining to procurement of business licenses, real estate and visa and work permits. In addition, a large number of the MNCs perceived an improvement in the FDI-related policies of the central and state governments. Firms who were entirely or almost entirely satisfied with their own performance did not perceive any significant improvement in the governments' policies. Indeed, the firms at the two ends of the performance spectrum felt that the state governments' policies actually became less investor friendly over time, albeit marginally.

## CONCLUDING COMMENTS

India has come a long way since 1991 in so far as quantum of FDI inflow is concerned. But it is still a mere USD 4 billion per year, and seems to have stagnated at that level. FDI inflow in 2002 was just 3.2 per cent higher than FDI inflows in 2001. The popular wisdom is that MNCs are discouraged from investing in India by bureaucratic hurdles and uncertainty about the sincerity of the government(s) about economic reforms.

However, to date, there has been very little discussion about two important issues, namely, the experience of MNCs that have invested in India and the relationship between their performance and experience with the operating environment, and the extent of spillovers in the form of transfer of technology and know-how. The importance of the former is that the satisfaction of expectations of the MNCs that are already operational within India is, for obvious reasons, an important pre-condition for growth in FDI inflow. Transfer of technology and know-how, on the other hand, is at least as likely to have an impact on India's future growth as the quantum of FDI inflow. Indeed, to the extent that India's future growth will depend on the global competitiveness of its firms, the importance of such spillovers can be paramount.

*Table 5.3 Assessment of the Indian business environment and FDI performance*

| Performance | Not satisfied | | Somewhat satisfied | | Largely satisfied | |
|---|---|---|---|---|---|---|
| | Initial | At present | Initial | At present | Initial | At present |
| *Labour market* | | | | | | |
| Executive manager | 3.32 | 3.81 | 3.37 | 3.82 | 3.81 | 4.16 |
| Professionals | 3.68 | 3.19 | 4.07 | 4.38 | 4.23 | 4.58 |
| Operations management | 3.68 | 4.24 | 3.71 | 4.12 | 3.98 | 4.37 |
| Skilled non-managerial labour | 3.68 | 4.38 | 4.07 | 4.35 | 4.14 | 4.48 |
| *Local inputs* | | | | | | |
| Utilities | 3.45 | 3.76 | 3.39 | 3.69 | 3.88 | 3.91 |
| IT and Telecommunications | 3.32 | 3.82 | 2.98 | 4.07 | 3.37 | 4.40 |
| Competent professionals | 3.91 | 4.36 | 3.85 | 4.40 | 4.19 | 4.62 |
| Real Estate | 3.68 | 3.95 | 3.76 | 4.16 | 4.09 | 4.34 |
| Machinery and equipment | 3.55 | 4.14 | 3.59 | 4.16 | 3.98 | 4.38 |
| Raw materials and components | 3.53 | 4.05 | 3.33 | 3.90 | 3.61 | 4.10 |
| *Local industry* | | | | | | |
| Quality and range of products | 2.18 | 2.86 | 2.29 | 2.75 | 2.74 | 3.00 |
| Management capabilities | 2.86 | 3.41 | 2.93 | 3.25 | 3.00 | 3.05 |
| Marketing capabilities | 2.64 | 3.36 | 3.39 | 3.45 | 3.16 | 3.38 |
| Level of technology | 2.23 | 2.86 | 2.39 | 2.84 | 2.60 | 2.89 |
| Labour productivity | 2.77 | 3.50 | 3.15 | 3.27 | 3.00 | 3.08 |
| Institutional environment | | | | | | |
| Business licenses | 3.55 | 3.20 | 3.02 | 2.55 | 2.72 | 2.49 |
| Procurement of real estate | 3.05 | 2.81 | 2.80 | 2.42 | 2.88 | 2.65 |
| Visa and work permits | 2.73 | 2.67 | 2.98 | 2.54 | 2.84 | 2.70 |
| Environmental regulations | 3.27 | 3.35 | 2.76 | 2.70 | 2.86 | 2.89 |
| General legal framework | 2.86 | 2.77 | 3.05 | 2.86 | 2.74 | 2.83 |
| Predictability and stability of rules | 3.00 | 3.18 | 3.39 | 3.27 | 3.05 | 3.08 |
| Central government | 3.00 | 2.68 | 3.19 | 2.78 | 2.74 | 2.70 |
| State government | 3.00 | 3.05 | 3.26 | 3.00 | 2.63 | 2.70 |

Data obtained from the 160 MNC affiliates in India directly address both these issues. MNCs that have invested in India are, by and large, satisfied with their own performance, the measure of experience being an index that incorporates into itself the MNCs' experience with respect to labour productivity, revenue growth and profit growth. Indeed, the majority of the firms in both old economy sectors like machines and machine tools and new economy sectors like IT feel that their expectations with respect to these parameters of performance were largely met. Importantly, neither the central nor the state and local governments were viewed as obstacles to carrying on business in India.

However, there is little room for complacence. Firms whose expectations with respect to performance have not been met experienced a noticeable decline in the quality of executive management in India, and were largely dissatisfied with the extent of improvement in the reliability of utilities. Further, late entrants into India were found to be less satisfied with their own performance, on average, than the early entrants, perhaps reflecting the fact that the growth of labour productivity, revenue growth and profit growth of MNCs did not keep pace with the *ex ante* expectations about the rapidly growing Indian economy.

But the optimism on this front has to be tempered by two observations, namely, that most of the firms investing in India have small R&D budgets, relative to their turnover, and most of them do not provide significant training to the employees in their Indian affiliates. This casts doubt on both the extent of transfer of cutting edge technology to India, and the extent of spillovers by way of enhancement of skills of the labour force.

As with the overall economic reforms programme, India's performance with respect to FDI remains a mixed bag. A stagnation of the quantum of FDI inflow coexists with the perception that quality of labour and other inputs, as well as the legal-institutional environment relevant to the MNCs, have improved noticeably during the 1990s. The average MNC remains satisfied with growth in labour productivity, revenue and profits, and remains willing to transfer technological resources to the Indian affiliate. At the same time, however, supply of key resources like power remain unreliable, and the extent of spillover effects in terms of both quality of technology and know-how remain uncertain. The appropriate mood, perhaps, is one of cautious optimism.