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Survey of FDI in India*

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Project Working Papers
Foreign Direct Investment in Emerging Markets

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This research project explores the relation between institutions in emerging markets and the entry strategies chosen by foreign direct investors. The merits of alternative strategies from investors' perspective as well as the impact on the host economy are investigated. For this purpose, FDI strategies are investigated and compared in four important emerging markets India, Egypt, South Africa and Vietnam.

Project working papers no 1 to 12 present the field research reports, cases and data collected by the country teams. The "*Background Paper: Institutional Development and FDI*" outlines the economic and institutional context in the country. The "*Case Studies of FDI*" explore in depth the three case companies with respect to investor strategies and interaction with the local environment. The "*Survey of FDI*" summarizes and interprets the main results of the questionnaire survey.

Paper no.	Title	Authors
1	Background Paper: Institutional Development and FDI in Egypt	Maryse Louis and Heba Handoussa
2	Case Studies of FDI in Egypt	Azza El-Shinnawy and Heba Handoussa
3	Survey of FDI in Egypt	Maryse Louis, Heba Handoussa and Saul Estrin
4	Background Paper: Reform and FDI in India	Laveesh Bhandari, Subir Gokarn and Anjali Tandon
5	Case Studies of FDI in India	…
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8	Case Studies of FDI in South Africa	Anthony Black and Stephen Gelb
9	Survey of FDI in South Africa	Stephen Gelb
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11	Case Studies of FDI in Vietnam	Ha Thanh Nguyen, Hung Vo Nguyen and Ca Ngoc Tran
12	Survey of FDI in Vietnam	Hung Vo Nguyen, Ha Thanh Nguyen and Klaus Meyer

1. Economic Reforms in India

Major economic reforms in India have been associated with crises. For example, after nearly two decades of industry-oriented planning, India accorded due importance to the agricultural sector in the late 1960s, in response to massive food shortages. The consequence of this policy shift was the Green Revolution in the early 1970s. The balance of payments crisis of the early 1980s, together with the stagnation that had become known as the "Hindu" rate of growth, precipitated the "new" economic policy of 1984-85, in which lay the genesis for the economic reforms of the 1990s. The reforms process in the 1980s was aimed mostly at opening up the economy to import competition, and at streamlining the process of tax administration.

The much discussed economic reforms of the 1990s, the first sustained effort at restructuring the economy, came in response to another balance of payments crisis in 1991, when India was left with two weeks' import cover. The government reacted by ushering in sweeping macroeconomic and structural changes. Direct tax rates were reduced for both individuals and corporate entities, with the expectation that reduced tax rates would lead to greater compliance. Tariff rates too were reduced, and the peak tariff rate came down from 350 percent in 1990-91 to 35 percent in 2000-01. The structure of the other indirect taxes was rationalized, and a process was put in place to enable the introduction of value added tax in the foreseeable future.

Licensing was eliminated, and firms in all but a few sectors were allowed to start operations without government approval. The impact of de-licensing was most evident in sectors like steel, automobiles, FMCG and consumer electronics which witnessed a surge in entry of new firms. Over time, capital account restrictions were eased to allow Indian companies to raise capital abroad, by way of Eurobonds and GDR/ADRs, and acquire firms in other countries. The domestic capital market was restructured with the Securities and Exchange Commission and the National Stock Exchange as the driving forces, and interest rates were liberalised. In brief, market forces were unleashed both in the product and, by and large, in the factor markets, and firms were given much more freedom to realize gains associated with allocational efficiency.

The government also made is easier for MNCs to invest in India. Today, India welcomes foreign investment in virtually all sectors except defence, railway transport and atomic energy. In sectors like road and port infrastructure, mining of gold and minerals, and pharmaceuticals, MNCs can own up to 100 percent of their Indian affiliates without government approval. In certain other lines of business like generation of power and development of integrated townships, 100 percent foreign ownership is possible with government approval. In activities like exploration for petroleum reserves, development of marketing infrastructure for petroleum products, and exploration and mining of coal, MNCs are allowed majority stake in the affiliates, usually varying between 51 percent and 74 percent. In most cases, however, their stakes in SOEs are restricted to 26 percent. Finally, in sectors like media and insurance, MNCs are restricted to minority stake, and are expected to obtain government approval prior to initiation of business.

All is not well with the business environment in India, however. Aside from continuing bureaucratization of many processes affecting business, the reforms process in India has three weak links. First, the policy of protecting small firms in some sectors has not completely been eliminated, thereby preventing entry of larger and more solvent firms, with greater economies of scale, to these sectors. This has had adverse impact on the competitiveness of firms in these sectors. Second, privatization in India has largely been a tame affair, despite some major privatization deals involving companies like the aluminum giant BALCO, the (former) telecom monopoly VSNL and the country's flagship (automobile) product Maruti Suzuki. Successive governments have failed to meet privatization targets, and privatization of large and inefficient firms like Indian Airlines and Air India have repeatedly been postponed. Third, the labour code remains largely unchanged, and closure of bankrupt firms remains a difficult and tedious process. While a newly enacted legislation (in 2002) has given the financial institutions more power to recover bad loans, resolution of insolvency and bankruptcy is still pursued in the spirit of Chapter 11, as opposed to quick attachment of assets and liquidation.

2. Global Response to India's Reforms

How has the rest of the world reacted to the width and depth of the Indian reforms? As measured by the quantum of FDI inflow, global response has been, by and large, positive. The annual flow of FDI rose from a paltry USD 0.1 billion in 1991 to USD 4.28 billion in 2001. FDI in 2001 accounted for 1 percent of GDP and 4.3 percent of domestic investment, the corresponding figures for 1991 being 0.07 and 0.12 respectively. However, the aggregate stock of FDI received by India during the 1990s stands at a low USD 18 billion, less than half of China's annual flow of FDI. From the average policymaker's perspective, more worrisome is the fact that an exponential growth in FDI inflow is not expected in the near future, despite the elimination of a large number of barriers to FDI during the last 10 years.

In order to better understand the reason behind India's sub-expectations performance, in so far as quantum of FDI is concerned, one has to probe at the sub-national level. Specifically, one has to understand the nature and *ex post* views of the MNCs investing India. Are they large MNCs, for example, who want to have a small exposure to India by way of a downstream affiliate or are they largely in sectors like financial services where there is a lot of scope for transfer of technology and know-how but little scope for significant transfer of capital? Are the spillover effects of entry, by way of technology transfer, training of personnel and export growth, significant such that the inflow of relatively small quantum of capital is supplemented by significant intangible gains? Are they entering largely by way of JVs where the investment is split between MNCs and local firms, thereby reducing the MNCs contribution to capital? Given the possible relationship between entry mode choice and the aforementioned intangibles, what determines the choice of the entry mode? Are MNCs that are in operation in India meeting their expectations about performance, thereby signaling to others that investment in India is worthwhile?

With the help of data collected from 152 MNC affiliates operating in India, this chapter aims at addressing these questions. The data was 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. Firms belonging to the machines and equipment (26 percent), IT (20 percent) and the intermediate goods (16 percent) sectors account for most of the firms in the sample [Figure 1]. 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.

3. Characteristics of MNC Affiliates in India

3.1 Origin and Size

Interestingly, 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 percent [Figure 2]. On the other hand, small firms, those having between 10 and 50 employees, account for 42 percent 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 percent of them having fewer than 10,000 employees worldwide [Table 3]. 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 percent, contribute to a significant proportion of the worldwide turnover – greater than 5 percent – of the parent MNCs [Table 1]. However, about 47 percent 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 percent of the firms in the sample [Figure 3]. MNCs from Germany (11 percent) and the UK (9 percent) are the leading European investors. This pattern of investment is consistent with India's trade patterns. Between 1990-91 and 1998-99, the EU accounted for 26-27 percent of India's exports, and 24-29 percent of India's imports. Of these, the contribution of Germany and the UK were an average of 7 percent and 6 percent respectively towards both exports and imports. The USA, on the other hand, accounted for 14-21 percent of India's exports and 8-12 percent of her imports. 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" machines 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 percent 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, and the greater than 6 percent growth rate during the latter half of the 1990s. Most of the early entrants into India, accounting for 62 percent of the pre-1995 entrants, 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.

3.2 R&D and Advertisement Intensity

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 percent of their global sales in R&D activities [Table 1]. Only 15 percent of the MNC parents invest more than 8 percent. This has serious implications for potential technology spillovers from MNC investment in India. The MNCs with R&D intensive products have invested largely in the ICT and pharmaceutical sectors.

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

3.3 Emerging Market Experience

Interestingly, about 57 percent 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 1]. The proportion of MNCs investing in India without significant emerging market experience – about 76 percent – 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 the four regions.

3.4 Focus

The majority of the MNCs investing in India – about 53 percent – are focused on a single activity or product, while another 35 percent are diversified into related business sectors [Table 1]. This suggests that only MNCs with clear business focus enter India, possibly with a well-defined business strategy, whether seeking resources or markets.

3.5 Mode of Entry

Most of the MNCs enter into India either with greenfield projects or with joint ventures with local firms [Figure 4]. Indeed, greenfield and JVs account for 83 percent 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.

3.6 Market Orientation

Not surprisingly, nearly 60 percent of the output of the IT sector is exported [Figure 5], 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 a IT hub catering to the rest of the world. MNCs in all other sectors sell 60 percent 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 which 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 percent of them sell 10 percent or less. The corresponding numbers for greenfield projects are 20 percent and 50 percent. This is entirely 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.

4. Importance and Source of Resources

Interestingly, brand is viewed by a significant proportion of the MNCs in India as the most important resource necessary for success. Not surprisingly, 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 was of 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. Not surprisingly, the MNC parents contribute 80 percent of brand value, 85 percent of equity and 73 percent of technological know-how, on average [Figure 6]. At the same time, 70 percent of the business networks, nearly half of the managerial capability, about two-fifths of the distribution networks and almost all of marketing capability are 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 hypothesized 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.

5. Factor Markets and Institutional Environment in India

5.1 Labour

The MNCs in the sample feel that there has been a noticeable improvement in the quality of labour available locally across the board [Figure 7]. 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.

5.2 Other Inputs

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 [Figure 8]. 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.

5.3 Institutional Environment

The perception about the institutional environment in India, however, too is not as optimistic [Figure 9]. The MNCs in the sample 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 way of 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 experienced 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 felt that the greatest improvement was 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.

6. Product Markets

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 10]. 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. Clearly, there is some evidence that JVs contribute most to FDI-related spillovers in India.

7. Transfer of Technology and Know-how

A negligible proportion of the firms spend a significant fraction of their turnover on training [Figure 11]. Indeed, only about 6 percent of the MNCs in the sample spend more than 8 percent of their turnover on training, while a meager 12 percent spend more than 4 percent. Even in the IT sector, only 17 percent of the MNCs that invested in India spent more than 4 percent of their turnover on training. By contrast, three quarters of the MNCs spend less than 2 percent 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.

Interestingly, even MNC affiliates whose parent firms have R&D intensive products do not spend a noticeable proportion of their turnover on training. Only 15 percent of such MNC affiliates spend more than 4 percent 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 entirely consistent with the experience of the IT industry which has not moved significantly up the value-addition ladder.

Even though 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 noticeable less training to their employees, as compared to the other firms.

However, while MNCs investing in India do not, on average, provide significant training to employees of the local affiliate, they are more willing to transfer technology to the latter [Figure 12]. About half the MNCs in the sample feel that they would always be able to obtain technological resources from the parent companies, while another 28 percent feel that, more often than not, they would be able to obtain such support from their parents. Only 6 percent of the MNCs feel confident that they would never be able to draw on their parents' technological strengths. Not surprisingly, two-thirds of the MNCs that invested in sectors like IT and pharmaceuticals – sunshine sectors in India which can gain significantly from technology spillovers – are likely to receive significant technological resources from their parent firms.

In keeping with the literature, MNC entry by way of greenfield projects is likely to be more beneficial for India in the form of greater spillovers. While about 14 percent of the greenfield projects in the sample feel confident of readily receiving technological resources from the parent MNCs, only 2 percent of the affiliates involved in JVs are as optimistic.

8. Performance of MNC Affiliates

Overall, most MNCs were satisfied with their own performance, relative to their initial expectations [Figure 13]. However, the aggregate/average 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 percent 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 percent of them feel that all or nearly all their expectations have been satisfied. Overall, only 16 percent of the MNCs feel that their expectations have been largely or entirely unmet.

Interestingly, a significant proportion (nearly 40 percent) 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 percent 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 percent and 44 percent 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.

Interestingly, 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 percent of highly export oriented MNCs are very satisfied with their performance. By contrast, only about 33 percent 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. Interestingly, 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 2]. 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.

Interestingly, 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 [Table 2]. 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 [Table 2]. In addition, a large number of the MNCs perceived an improvement in the FDI-related policies of the central and state governments. Interestingly, 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.

By and large, MNCs in India do not operate in industries in which their products give them monopoly or near monopoly advantage; 56 percent of the MNCs in the sample have 5 or more local competitors. *Ex post*, this is reasonable behaviour, given that, if anything, the degree of local competition and the extent of the MNC's satisfaction with their own performance are positively correlated. Indeed, 62 percent of these MNCs that are almost entirely satisfied with their own performance have 5 or more local competitors.

There is no clear link between the extent to which the MNCs in the sample are satisfied with their own performance, and the extent to which they face import competition in the local market. If anything, there is weak evidence about greater import competition associated with better performance. About a third of the MNCs that are almost entirely satisfied with their own performance operate in industries where they face negligible import competition, while about 40 percent of these firms operate in industries where they face import competition from 5 or more firms. At the same time, more than a quarter of the firms in low import competition industries are very dissatisfied with their own performance, while the proportion of such dissatisfied firms in the high import competition industries is 9 percent.

About 28 percent of the MNCs that feel that their performance goals were largely met sell 75 percent or more of their output in the local market. None of the firms with such high local market focus feel that their performance goals were largely unmet. However, by and large, there is no clear relationship between market focus and perceived performance.

Given that transfer of technological resources was significant across the board, the relationship between performance and the extent of technology transfer is not clear. Indeed, while 41 percent of the firms in the sample that are confident of always receiving technological resources from the parent MNCs almost entirely meet their expectations with respect to performance, a greater proportion – about 57 percent – of the MNCs who feel that they would never receive such support are as satisfied.

9. Concluding Views

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. Indeed, FDI inflow in 2002 was just 3.2 percent 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, till 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 firm, the importance of such spillovers can be paramount.

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, 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.

The optimism about MNCs' performance in India also extends to their contribution to the technological progress of Indian firms and industries. About half the MNC affiliates in the sample feel that they would always be able to obtain technological resources from the parent MNCs, and only 6 percent feel that they would never be able to draw on their parents' technological strengths. Importantly, two-thirds of the affiliates in the IT and pharmaceutical sectors are confident about their ability to obtain technological resources from their parent companies.

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.

Figure 1

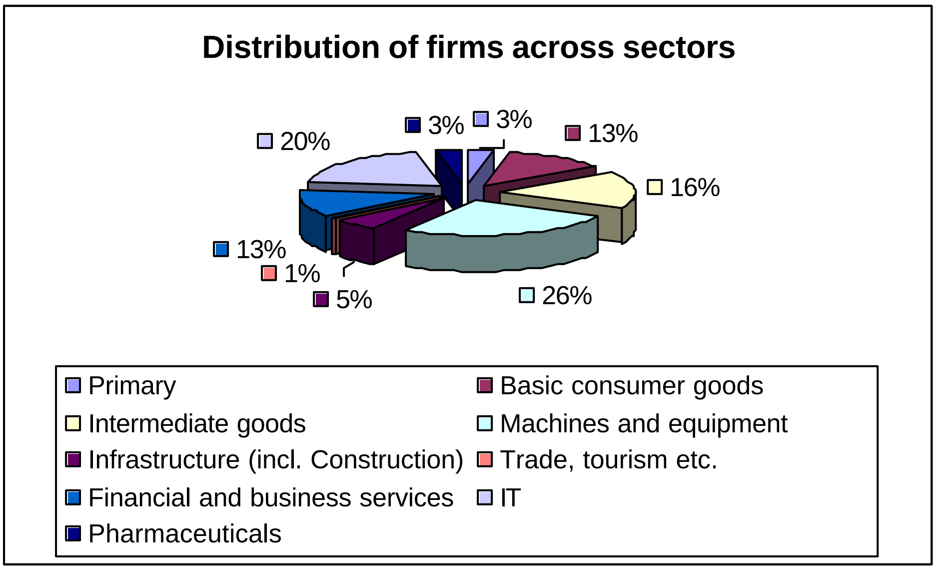

Figure 2

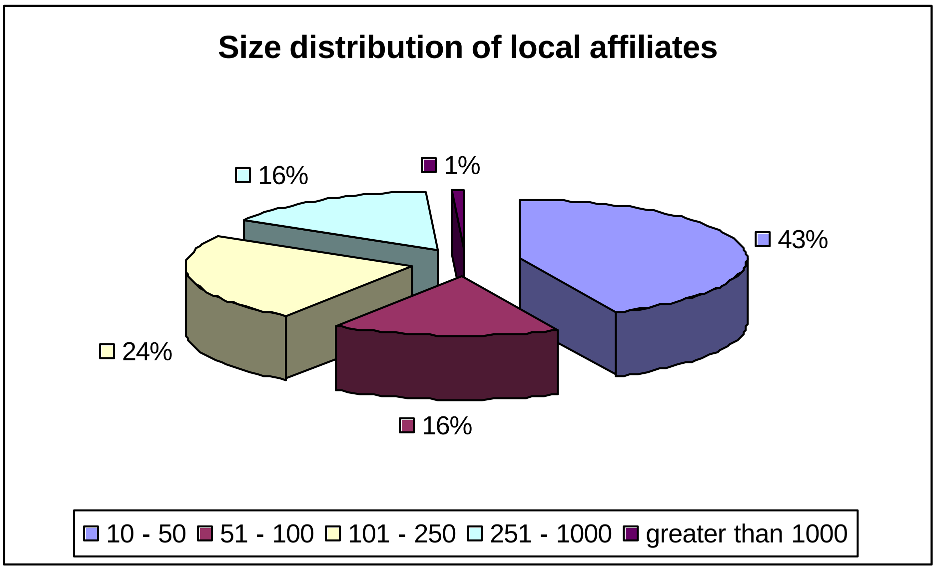

Table 1

	Categories						
	1	2	3	4	5	6	7
Worldwide employment (,000)	**38.3%** (< 1)	**37.0%** (1 - 10)	19.8% (10 - 100)	4.9% (>100)			
Local contribution to global turnover (%)	**20.8%** (0 - 0.1)	**26.7%** (0.1 - 0.5)	13.3% (0.5 - 2)	15.8% (2 - 5)	17.5% (5 - 20)	5.8% (>20)	
R&D expenditure as % of turnover (%)	**38.1%** (0 - 0.5)	**12.4%** (0.5 - 1)	6.7% (1 - 2)	16.2% (2 - 4)	11.4% (4 - 8)	3.8% (8 - 15)	11.4% (>15)
Ad expenditure as % of turnover (%)	**49.5%** (0 - 0.5)	10.7% (0.5 - 1)	10.7% (1 - 2)	3.9% (2 - 4)	10.7% (4 - 8)	9.7% (8 - 15)	3.9% (>15)
Emerging regions experience (number)	**22.5%** (None)	**34.9%** (1)	20.2% (2)	10.1% (3)	12.4% (4)		
Extent of diversification	10.9% (conglomerate)	35.2% (diversified)	**53.9%** (focussed)				

Figure 3

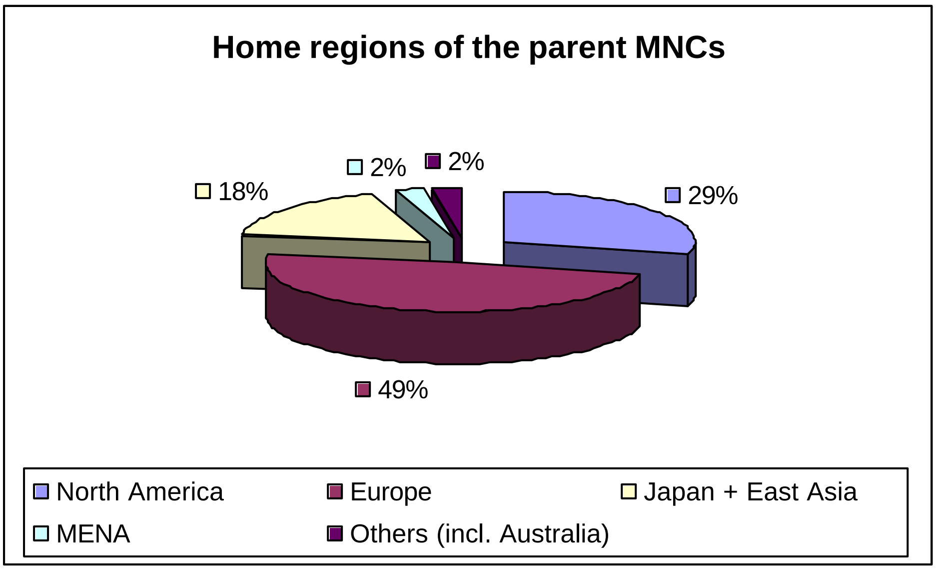

Figure 4

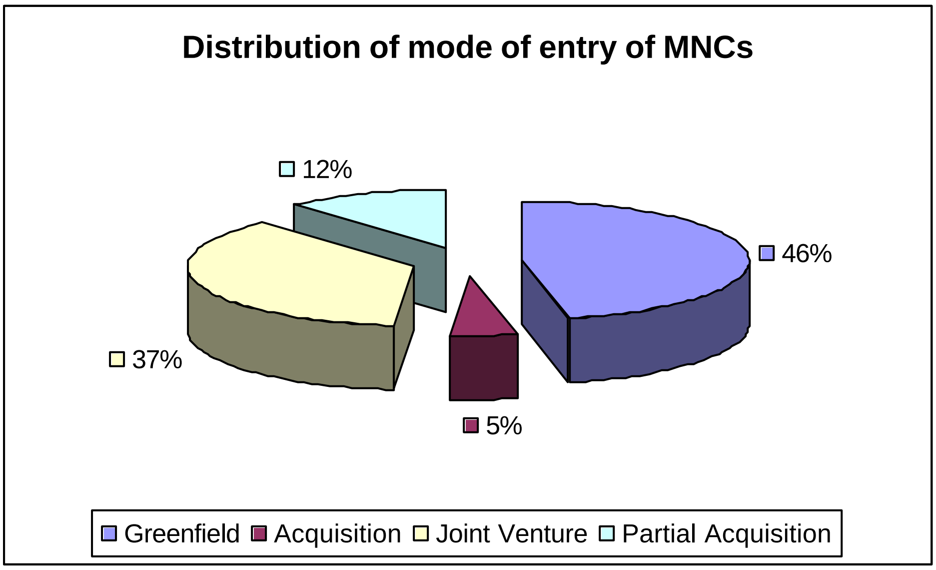

Figure 5

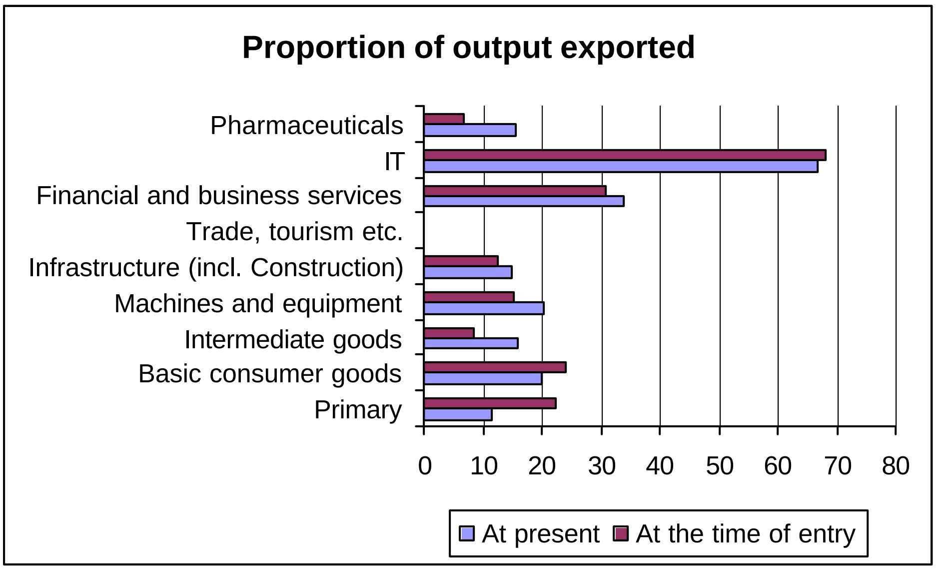

Figure 6

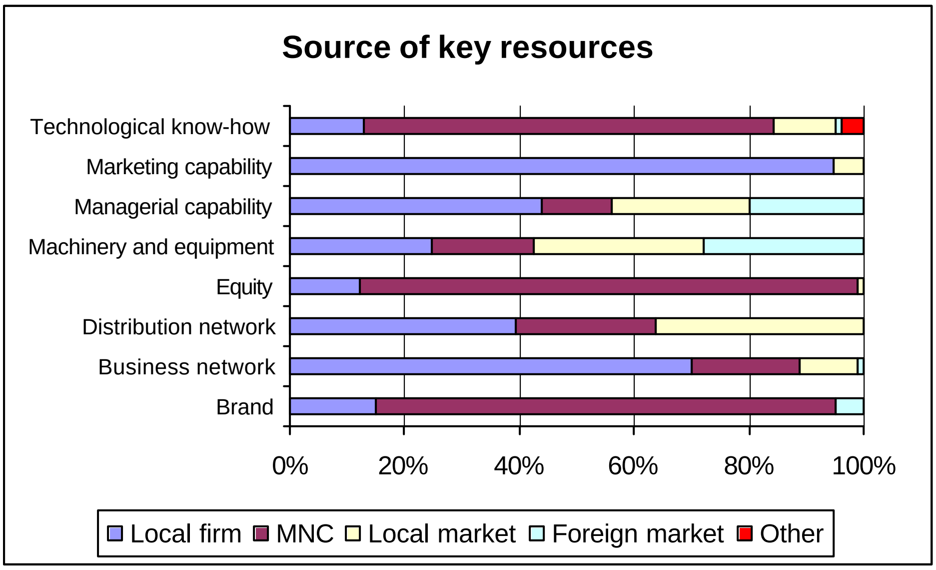

Figure 7

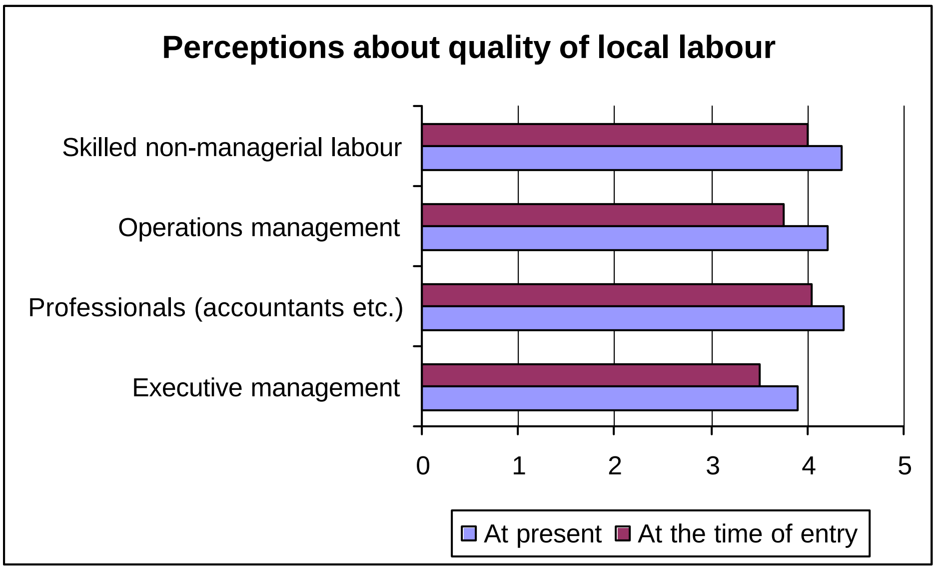

Figure 8

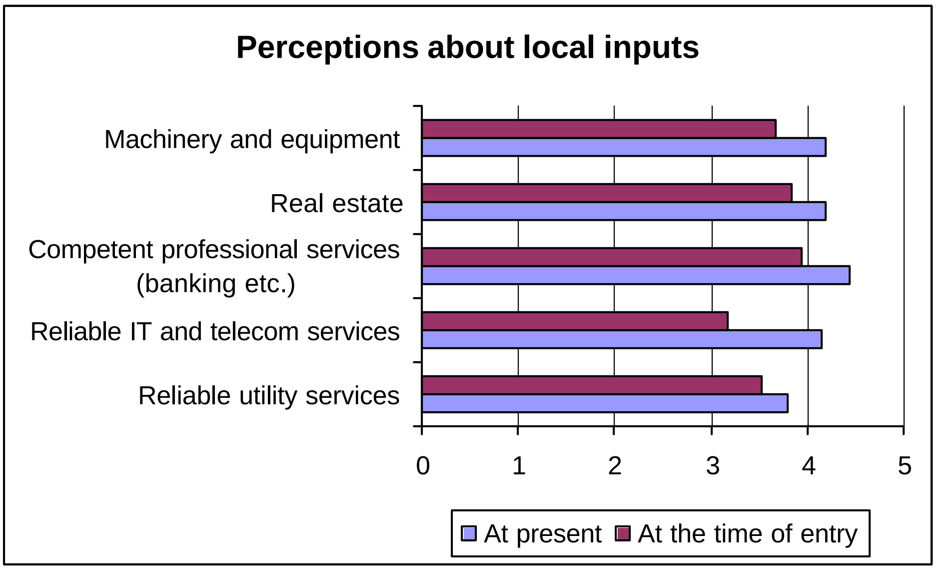

Figure 9

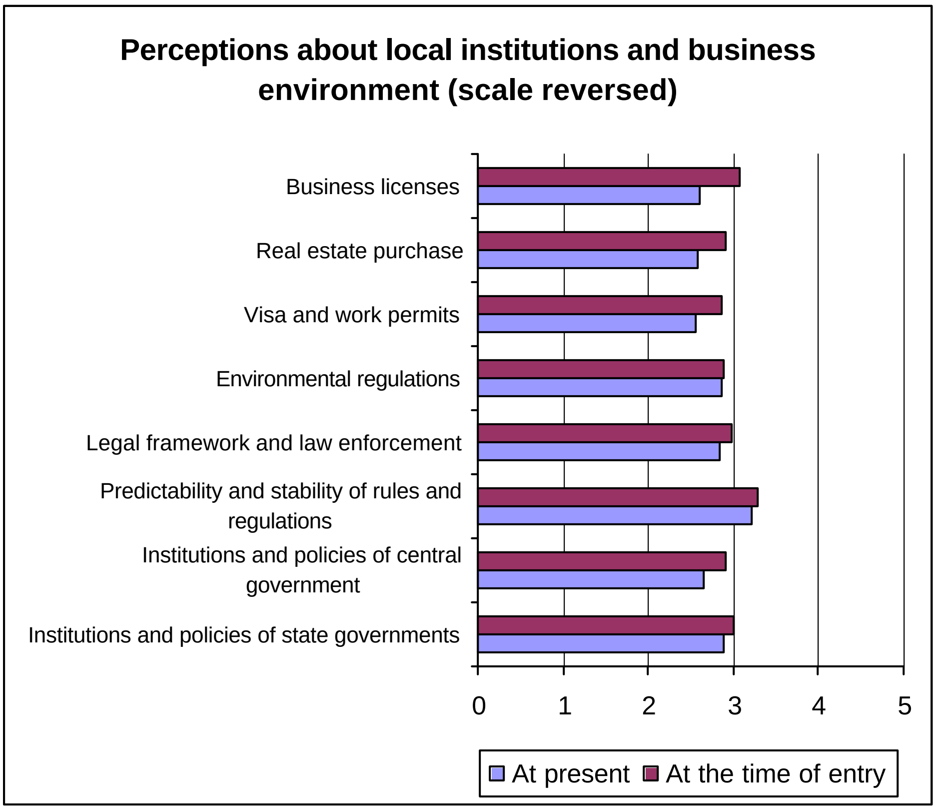

Figure 10

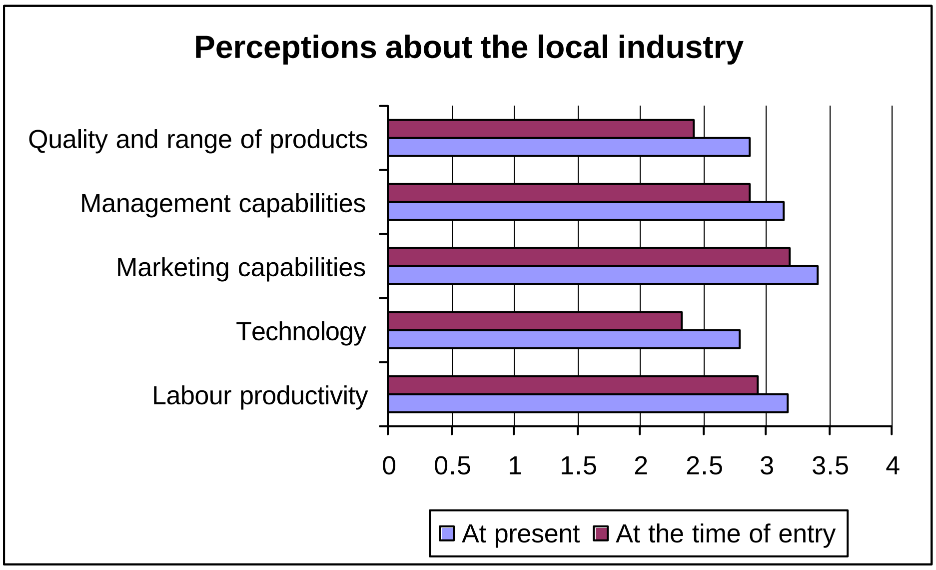

Figure 11

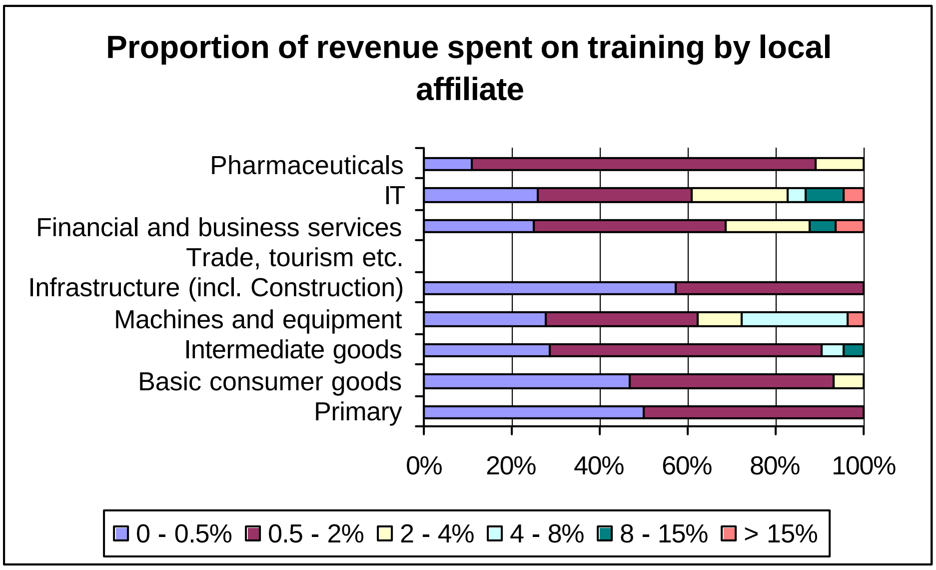

Figure 12

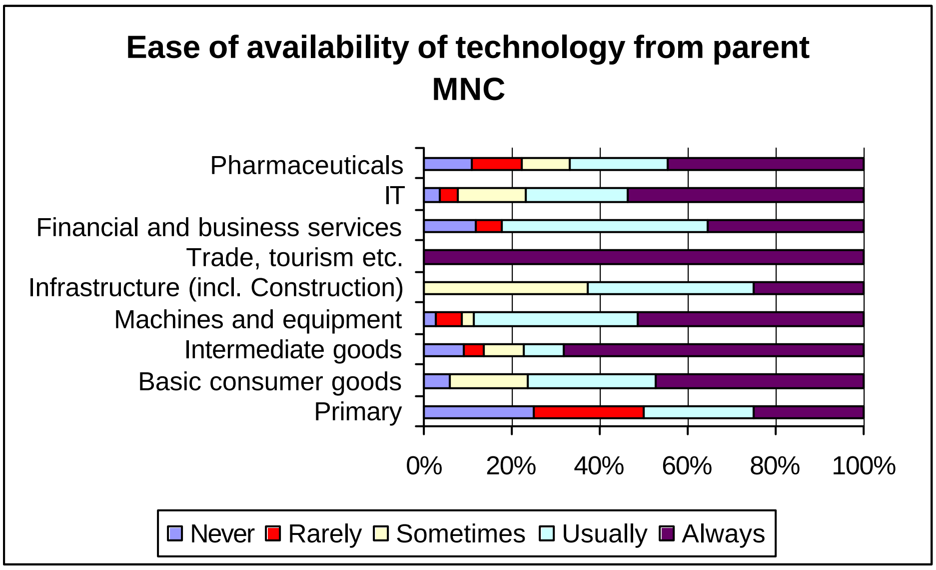

Figure 13

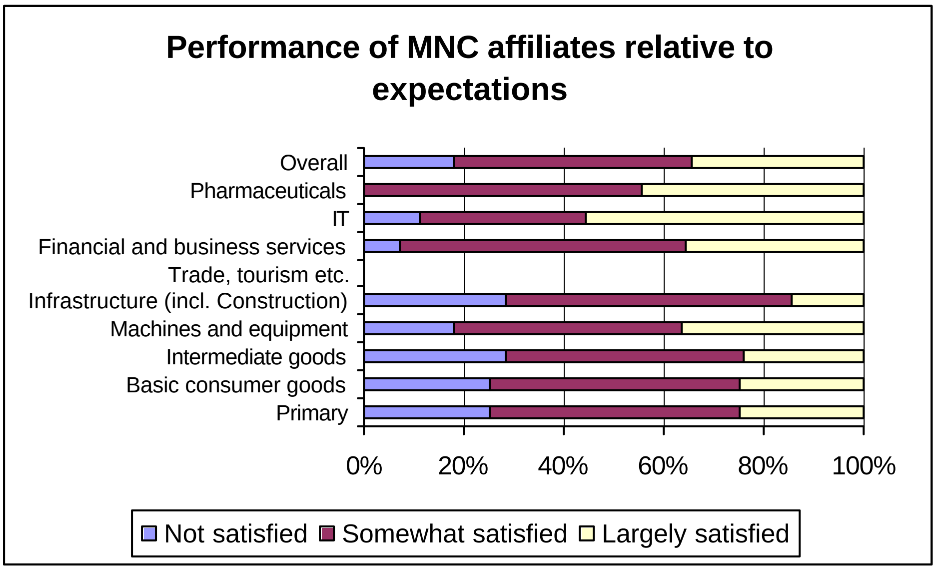

Table 2

	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 (scale reversed)						
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	3.07
Central government	3.00	2.68	3.15	2.78	2.74	2.70
State government	3.00	3.05	3.26	3.00	2.63	2.70