Foreign Direct Investment in India in the 1990s

Trends and Issues

This paper documents the trends in foreign direct investment in India in the 1990s, and compares them with those in China. Noting the data limitations, the study raises some issues on the effects of the recent investments on the domestic economy. Based on the analytical discussion and comparative experience, the study concludes by suggesting a realistic foreign investment policy.

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Introduction

Compared to most industrialising economies, India followed a fairly restrictive foreign private investment policy until 1991 – relying more on bilateral and multilateral loans with long maturities. Inward foreign direct investment (FDI, or foreign investment, or foreign capital hereafter) was perceived essentially as a means of acquiring industrial technology that was unavailable through licensing agreements and capital goods import. Technology imports were preferred to financial and technical collaborations. Even for technology licensing agreements, there were restrictions on the rates of royalty payment and technical fees. Development banks largely met the external financial needs for importing capital equipment. However, foreign investment was permitted in designated industries, subject to varying conditions on setting up joint ventures with domestic partners, local content clauses, export obligations, promotion of local R and D and so on – broadly similar to those followed in many rapidly industrialising Asian economies.

Foreign Exchange and Regulation Act (FERA), 1974 stipulated foreign firms to have equity holding only up to 40 per cent, exemptions were at the government's discretion. Setting up of branch plants was usually disallowed; foreign subsidiaries were induced to gradually dilute their equity holding to less than 40 per cent in the domestic capital market. The law also prohibited the use of foreign brands, but promoted hybrid domestic brands (*Hero-Honda*, for instance). However, pragmatism prevailed to ensure stable domestic supply at reasonable prices.

Such a restrictive policy is believed to have retarded domestic technical capability (as reflected in the poor quality of Indian goods); it also meant a loss of export opportunity of labour-intensive manufactures – in contrast to many successful east Asian economies. Moreover, such a policy is said to have encouraged 'rent seeking' by domestic partners on imported technology – with little efforts to improve product quality, undertake innovation, and seek export markets [Ahluwalia 1985]. This popular perception was perhaps best illustrated by the passenger car industry that produced obsolete (and fuel-inefficient) models of the 1950s at very high costs in small numbers.

Without denying some of these arguments and evidence, others have shown that the regulation reduced costs of technology imports [Subramaniam 1991], and promoted export of goods with relatively stable technologies where domestic firms had the opportunity of 'learning by doing' by catering to the large domestic market – as illustrated by successful firms like TELCO (commercial vehicles) and BHEL (heavy electrical equipment) [Lall 1982]. The recent international achievements of some Indian pharmaceutical firms (Cipla, Ranbaxy, Dr Reddy's Laboratories, for instance) is also attributed to the regulatory and promotional policies, and the patent laws [Chaudhari 1999] that sought to encourage domestic production to reduce drug prices.

However, the 1980s witnessed a gradual relaxation of the foreign investment rules – perhaps best symbolised by the setting up of Maruti, a central government joint venture small car project with Japan's Suzuki Motors in 1982. It was followed by Pepsi's entry in the second half of the decade, to primarily export processed food products from Punjab, and also to bottle its well known beverages for the domestic market.

Reforms in the 1990s

All this changed since 1991. Foreign investment is now seen as a source of scarce capital, technology and managerial skills that were considered necessary in an open, competitive, world economy. India sought to consciously 'benchmark' its policies against those of the rapidly growing south-east Asian economies to attract a greater share of the world FDI inflows. Over the decade, India not only permitted foreign investment in almost all sectors of the economy (barring agriculture, and, until recently, real estate), but also allowed foreign portfolio investment – thus practically divorcing foreign investment from the erstwhile technology acquisition effort. Further, laws were changed to provide foreign firms the same standing as the domestic ones.[1]

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What are the trends in the quantum and composition of the FDI inflow; and what are their benefits and costs to the economy? This paper seeks to provide a preliminary answer for these questions. To do so, we first discuss, very briefly, the recent literature on foreign investment and economic development (Section I). The limitations of the available data to test the propositions following from the analytical literature are discussed in Section II. As a first step in our assessment, Section III describes the trends in FDI in the 1990s. Section IV contains a brief comparison of foreign investment in India and China – an issue that has a bearing on the current policy discussion. Based on the available, limited and preliminary, information, Section V makes an initial assessment of foreign investment by raising some issues for further work. Section VI suggests a more realistic policy on the basis of the analytical discussion and comparative experience. Section VII concludes by summarising the study's main findings.

I
A Brief Analytical Review

Much of the currently held perceptions of foreign investment's role essentially take a macroeconomic view: it is a source of additional external finance (and of risk capital), augmenting fixed investment, potential output and employment.[2] Such a positive view gained currency mainly after the crises in Latin America in the early 1980s, more recently in east Asia, when other forms of capital inflows quickly dried up (or reversed), accentuating the macroeconomic vulnerability of these economies. As against portfolio investment, FDI is also seen as a source of technology and managerial skills, creating tangible (and intangible) assets in the host economy. Foreign firms seek not only the domestic market, but also provide access to external markets by sourcing manufactured products (and services) from domestic firms.

The crux of the policy, therefore, is how the benefits of such investments are distributed between the foreign firms and the host country, as also between the various factors of production within the host country. In other words, the real question is the cost of foreign capital to the host economy: is it too high, compared to the alternative sources of external finance and technology, in the short and the long run?

However, in a microeconomic perspective, a different set of questions is usually asked: What does FDI do to the working of the domestic markets, and their effect on output and productivity growth [Caves 1996]. If, as is often the case, the entry of a foreign firm results in the creation of a domestic monopoly, then the benefits of such investment may be limited, unless accompanied by a sound anti-trust law (or competition policy). Similarly, if FDI inflow results in the displacement of domestic monopolies with the foreign ones, then again, social benefits of such investments may be marginal (if any), as any monopolist, regardless of its origin, would maximise profits either by varying price or output (or both). Moreover, the host government may have considerable difficulty in enforcing domestic laws adequately, as foreign firms often seek protection under complicated legal structures.[3]

In industrial organisation literature, from a variety of analytical perspectives, foreign firms are seen as having firm-specific advantages – including significant market power that they seek to exploit in many countries.[4] Availability and costs of these resources for the host economy depend on the relative bargaining strength of the foreign firms vis-à-vis the domestic firms (and the host government). While the foreign firms' advantages lie in their size, control over technology and marketing strength worldwide, the host country can use its domestic market, access to cheap labour, location and quality of infrastructure (all of which go to reduce the cost of production to service the international market) to bargain with the foreign firms.

Thus, a social cost benefit approach is perhaps a meaningful method to assess the potential effects of FDI. If such a view is valid, then what countries should do is perhaps not to maximise foreign investment inflow per se, but to channel it in the desired directions to maximise long-term returns to the economy. From the development economics perspective, the questions one asks could get even deeper. In a world with unequal resources and technological capabilities (including brand names), how does FDI affect the ownership and control of industrial firms? In the market for industrial technologies that is invariably oligopolistic, does foreign capital inflow augment or reduce access to technology and domestic R and D efforts? Does foreign capital improve exports (and export capability) from the host country? What is the cost of FDI over a long period; is it necessarily lower than that of external debt [Helleiner 1989]?[5]

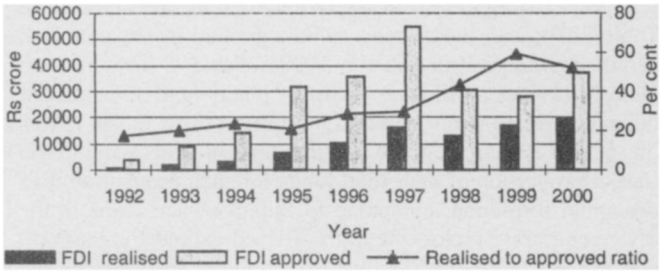
It is perhaps worth reiterating that markets for industrial technologies continue to be imperfect and probably have got accentuated with the recent international agreements like the TRIPS. Moreover, the experience of the last half a century clearly suggests that countries with liberal FDI and technology import policy are not necessarily the examples of successful industrialisation [Bruton 1989]. They may have become either outposts of foreign firms servicing regional markets (like Singapore), or partners in the international division of labour with limited mastery over production technology and generation of domestic brand names (Brazilian automobile industry, for example).

In the development literature, well reflected in the Indian discourse, there is a wide consensus that regulation reduces costs of imported technology [Lall 1989]. One of the ways to acquire the disembodied technology is to 'unbundle' the package that foreign firms offer, and to buy the technology outright, while providing for capital investment by the domestic financial system. This has been the time-tested method of all the successful late industrialising economies [Amsden 2001].[6]

II
Data on FDI and Their Limitations

To understand how the recent changes in foreign investment policy have influenced the economy, quantitative information is needed on broad dimensions of the investment (and its distribution) across industries, regions and by size of projects; firm and industry level production accounts, and audited financial statements. However, such information is scarce. The most easily available (and widely used) data in India are on FDI approvals (contracted), by broad industry group (1-digit ISIC), by country of origin, and by states (regions) of destination. This represents mere intentions of investment. The actual (or realised) foreign investment is not available by the same classification, but according to the administrative and institutional channels of the inflow. Therefore, it is not possible to compare the realised with the intentions, in any meaningful manner. Apparently, even the concerned official agency does not seem to know – let alone monitor – how the actual inflows are translated into capital

Figure 1: FDI into India, 1992-2000



formation, transfer of assets or change in managerial control.

The actual FDI inflow is recorded under five broad heads: (i) Reserve Bank of India's (RBI) automatic approval route for equity holding up to 51 per cent, (ii) Foreign Investment Board's discretionary approval route for larger projects with equity holding greater than 51 per cent, (iii) acquisition of shares route (since 1996), (iv) RBI's non-resident Indian (NRI) schemes, and (v) external commercial borrowings (ADR/GDR route). Reportedly, the Indian definition of FDI differs from that of the IMF, as well as of the UN's *World Investment Report*. IMF's definition includes external commercial borrowings, reinvested earnings and subordinated debt, while the *World Investment Report* excludes external commercial borrowings.[7]

Ideally, FDI inflow should get reflected in (i) capital formation (ii) formation of new firms and factories, (iii) increase in foreign equity holding in the existing firms, and (iv) mergers and acquisitions of existing firms and factories (or parts of them). However, the availability of information on them depends on their legal status. We know very little about those registered outside the country, and in tax shelters, like Mauritius. For instance, Enron's Dabhol Power Company – the largest foreign investment project yet – is incorporated in India as an unlimited liability company. But it is a shell company that Enron controls through at least six holding companies registered in various offshore locations [Mehta 1999].[8]

Similarly, fully owned private limited companies of foreign firms (or branch plants) reveal very little information about their investment and output. An increasingly large proportion of foreign firms have set up fully owned subsidiaries that have become manufacturers (and distributors) by acquiring domestic firms. They provide very little audited financial information to assess the impact of the firms on the industry, and the corporate sector.[9] Considering these legal problems, many of their operations do not seem to get recorded in the RBI's survey of financial performance of foreign controlled companies – a valuable data source in the earlier times.

Therefore, the assessment of foreign investment reported in this study remains preliminary. However, based on the preceding discussion, the issues raised below can perhaps be taken as working hypotheses for further research.

III
The Trends

FDI Approvals and Its Composition

Approved FDI rose from about Rs 500 crore in 1992 to about Rs 55 thousand crore in 1997 [*Economic Survey*, 2001-02] (Figure 1). Cumulative approved foreign investment during 1991 and 2000, in dollar terms, is about $ 67bn -- at an average exchange rate of Rs 40 to a dollar. A fifth of it is from the US (Table 1). Mauritius is the second largest source; reportedly a conduit for many US based firms, as India has a tax avoidance treaty with it since 1982. In Asia, South Korea has emerged as a new source of foreign investment.[10] A quarter of the approved FDI is for power generation (Table 2), followed by telecommunications (mobile phone firms) at 18.5 per cent, and electrical equipment (mainly software) at 10 per cent. While the proportion of projects with investment up to Rs 5 crore is high, their share is less than 5 per cent in value. At the other end of the distribution, larger projects with Rs 100 crore and above account for over two-thirds of the total value of approvals (Table 3). Evidently, very little of the FDI has gone to augment exports that are mostly from labour-intensive unregistered manufacturing. The economically advanced states of Maharashtra, Delhi, Karnataka, Tamil Nadu and Gujarat have attracted one-half of the approved foreign investment (Table 4).

Table 5 provides the actual FDI inflow as estimated by four different agencies, for 1991 to 2000. IMF's and the *World Investment Report*'s estimates of the cumulative inflow during the 1990s are roughly the same – at about $17bn. The *Economic Survey* estimate is about $ 22bn, while that by RBI is $17.3bn. The difference between the last two estimates is mainly on account of ADR/GDR inflows. While the *Economic Survey* classifies them as FDI, RBI records them under foreign portfolio investment.

As there has been a gradual improvement in the actual inflow from a low base, and a slow down in the approvals after 1997,

Table 1: Top 10 Investing Countries in India, 1991-2000

Country/Region	Share (in Per Cent)
US	20.4
Mauritius	11.9
UK	6.4
Japan	4.0
South Korea	3.9
Germany	3.4
Australia	2.7
Malaysia	2.3
France	2.1
Netherlands	1.9

Note: In addition to the countries, external commercial borrowings and non-resident Indians (NRIs) contributed 17.2 and 3.9 per cent of the FDI approvals.
Source: Handbook of Industrial Policy and Statistics, 2001.

Table 2: Sectoral Distribution of FDI Approvals, 1991-2000

Sector	No of Approvals	Approved Investment (Rs Billion)	Share (in Per Cent)
Power and fuel	541	634531.2	25.7
Telecommunications	579	458845.0	18.5
Services sector	790	152389.0	6.2
Chemicals (other than fertilisers)	809	123016.2	5.0
Food processing	648	87574.9	3.5
Transport sector	722	184467.6	7.5
Metallurgical industries	304	143796.8	5.8
Elec equipment (incl software)	2491	245791.5	10.0
Textiles	548	33617.8	1.4
Paper and paper products	111	31580.6	1.3
Industrial machinery	530	22438.5	0.9
Others	2404	348976.2	14.2
Total	11965	2467025.3	100.0

Note: Data is for the period, August 1991 to March 1998.
Source: Handbook of Industrial Policy and Statistics, 2001.

Figure 2: India's Share in World FDI

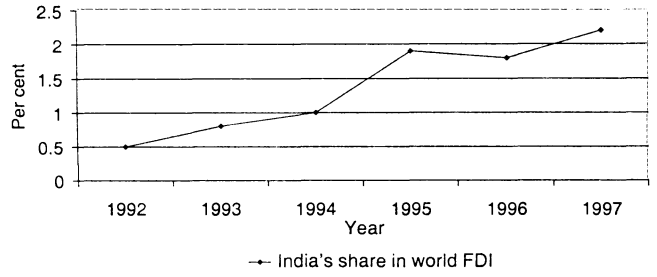
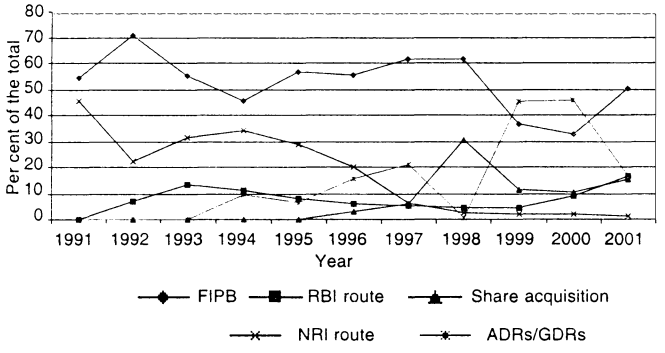


Figure 3: Actual FDI by Different Routes



there is an increase in the ratio of the actual-to-approved FDI in the last few years. On average, it is a little over one-third in the 1990s (Figure 1). India's share in world foreign investment increased from 0.5 per cent in 1992, to 2.2 per cent in 1997 (Figure 2).

Figure 3 describes the actual inflow by various routes discussed in the previous section. The FIPB route – representing larger projects requiring the government's discretionary approval – accounts for the bulk of the inflow, though its share is somewhat declining. Automatic approval route via RBI meant for smaller sized investments received modest inflow; and the NRI route's share has declined sharply. Proportion of the inflow to acquire shares in the domestic firms, and flotation of ADRs/GDRs have gained in prominence in the second half of the 1990s.

Interpreting the Trends

Though it is not possible to compare the actual with the approved FDI for the reasons discussed earlier, some broad generalisation can perhaps be made based on the available qualitative information. While the bulk of the approvals is for infrastructure, the actual inflow seems to be largely in registered manufacturing – more precisely, in consumer durable goods and automotive industries; very little of it has gone into capital goods industries. The inflow in telecommunication industry is probably to get licences for mobile phone operations, not for manufacturing equipment. The investments in electrical machinery industry are apparently to set up local offices to produce computer software.

Much of the realised FDI has also come in as fully owned subsidiaries (or branch plants) of their parents abroad. Table 6 provides an illustrative list of such foreign entities. Most of them have not issued IPOs in the domestic bourses, hence are not quoted companies. Quite contrary to the earlier period, the government has so far not insisted on enforcing its policy in this respect (more about this later).

About 40 per cent of the inflow seems to have been used for acquiring existing industrial assets, and their managerial control (Table 7 (i)); and, there seems to be a gradual increase in such merger and acquisitions in the 1990s (Table 7 (ii)). Further, Table 8 provides an illustrative list of plants (and divisions) of Indian controlled firms acquired by foreign firms in the 1990s. This is also evident from the fact that foreign firms seem to use a larger proportion of their total funds for such acquisition than for capital formation, compared to Indian owned firms in the private corporate sector, the ratio of fixed capital formation to total uses of funds by foreign firms is lower than that by the domestic companies [Nagaraj 1997].

Predominance of acquisitions in India as a route to FDI is similar to the trends in many developing economies. For instance, in Brazil, the ratio is as high as 70 per cent, mainly fueled by privatisation drive in the 1990s.[11] Foreign firms seem to find it a quick and cheaper route to enter a new market, and secure a sizeable market share.

Of late, taking advantage of the changes in the rules governing the stock market listing, in a situation of low share price level, many existing foreign firms are re-purchasing their equity to exit

Table 3: Distribution of FDI by Size of Investment, 1991-97

Investment (Rs Crore)	No of FDI Approvals		Quantum of FDI Approved	
	Number	Share (in Per Cent)	Amount	Share (in Per Cent)
0-1	3040	49.2	919.4	0.9
1-5	1686	27.3	3800.8	3.6
5-25	906	14.7	10046.0	9.5
25-50	212	3.4	7503.5	7.1
50-100	128	2.1	8828.4	8.4
100-500	173	2.8	38699.0	36.6
Over 500	38	0.6	35992.4	34.0

Note: This distribution is for the approvals during August 1991 and May 1997.
Source: Rao and Murthy (1999).

Table 4: Top Five Destinations of Approved FDI among the Indian States

State	No of Financial Collaborations Approved	Approved FDI ($ Million)	Share (in Per Cent)
Maharashtra	2015	11135.9	16.9
Delhi	1226	9226.7	13.1
Karnataka	1078	5247.1	8.1
Tamil Nadu	1223	5073.8	7.7
Gujarat	458	3129.6	4.5
State not indicated	3119	19476.4	27.9

Source: Handbook of Industrial Policy and Statistics, 2001.

Table 5: Alternative Estimates of the Actual FDI, 1991-2000

Year	Economic Survey (Rs crore)	RBI (Rs Crore)	International Financial Statistics (Million $)	World Investment Report (Million $)
1991	351	316		155
1992	675	965	276.5	261
1993	1787	1836	550.1	586
1994	3289	4126	973.3	947
1995	6820	7172	2143.6	2144
1996	10389	10015	2426.1	2591
1997	16425	13220	3577.3	3613
1998	13340	10358	2634.7	2614
1999	16868	9338	2168.6	2154
2000	19342	10686	2315.1	2315
Total	89286	68034	17065.3	17080

Sources: *Economic Survey*, various issues; RBI's *Handbook of Statistics on Indian Economy, 2001*; IMF's *International Financial Statistics* CD-ROM; UN's *World Investment Report*, various issues.

Figure 4: FDI in Selected Asian Economies, 1991-2000

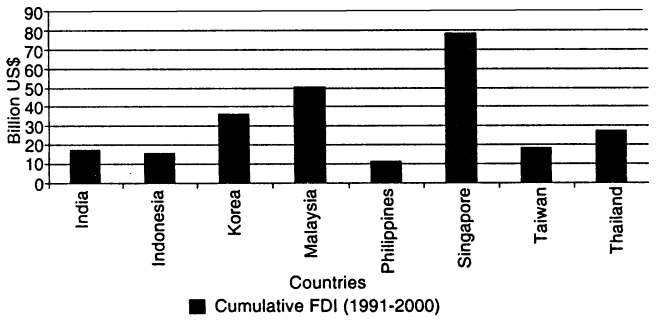
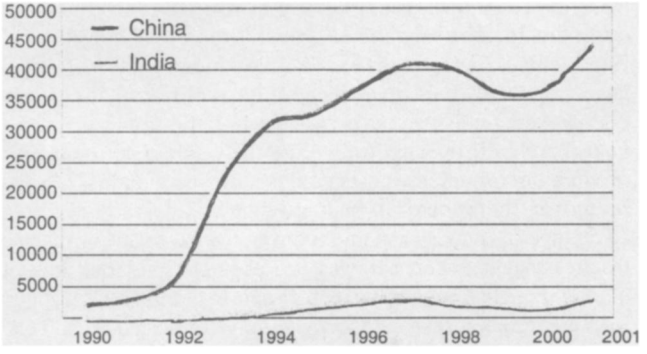


Figure 5: FDI in India and China



from the domestic bourses. Table 9 provides an illustrative list of such firms. This represents a reversal of the positive effect that the foreign firms' domestic listing has had on the development of the primary stock market since the late 1970s [Nagaraj 1996].

IV
A Comparison of FDI in India and China

Though the actual FDI inflow in India in the 1990s increased significantly over the past, it is modest compared to many Asian economies (Figure 4); and, it pales into insignificance in comparison to China (Figure 5).[12,13] UNCTAD's ranking of countries in terms of foreign investment (relative to the size of the economy) for the period 1998-2000 is 119 for India, and 47 for China. The ranking a decade ago was 121 and 61 respectively *(The New York Times*, August 28, 2002). It shows that even at the start of the reforms, China's ranking was way ahead of India's; China moved up in the ranking much faster than India did in the 1990s.

These statistics are widely seen as an evidence of the failure of India's reforms, since greater inflow of foreign capital in China is believed to be largely responsible for its exceptional growth and export performance. As this perception is much discussed in the current policy discourse, we examine the quality of the Indian and the Chinese estimates, and the evidence on the role of FDI on economic performance in the recent years.

According to IFC (2002), India does not follow the standard IMF definition as it excludes (i) external commercial borrowings, that is ADRs/GDRs, (ii) reinvested profits and (iii) subordinated debt.[14] IFC is probably right, but only partially. As noted earlier, the *Economic Survey* estimates include external commercial borrowings, but not the remaining two items. Thus, notwithstanding the underestimation of FDI in the Indian statistics, there is little doubt that foreign investment inflow in India is negligible as compared to China.

However, it is well recognised that a large share of the investment inflow in China represents 'round tripping' – recycling of the domestic saving via Hong Kong to take advantage of tax, tariffs and other benefits offered to non-resident Chinese. This is estimated to be in the range of 40-50 per cent of the total FDI (IFC, *Global Financial Report, 2002*).

Further, about a quarter of the inflow in China is invested in real estate [Tseng and Zebregs 2002]. Some of the Chinese coastal cities have attracted considerable speculative capital in this sector in the 1990s after the collapse of the property prices in Hong Kong. It is widely accepted, especially after the east Asian financial crisis, that foreign investment in real estate is inherently problematic, as this sector can easily give rise to financial bubbles, with potentially adverse macroeconomic consequences.

Of the remaining, only a small fraction has gone into large-scale manufacturing that can potentially augment domestic capability and exports. In fact, FDI from the advanced economies that could bring in newer technology and managerial practices are limited, as the Chinese still seem to have a fairly strict regulation on such inflows. Reportedly, in 31 industries China does not allow wholly foreign owned enterprises; and in 32 others, Chinese partners must hold majority share holding.[15]

Based on the foregoing, the International Finance Corporation's study of business environment, in fact, places India marginally ahead of China – from the viewpoint of foreign investors [IFC 2002]. The study also found that the quantum of FDI inflow in China and India, as proportions of their respective GDP, is roughly comparable. Thus, the widely held view of China's ability to attract enormous foreign capital needs to be taken with considerable circumspection.

Do countries that attract larger FDI inflow necessarily grow faster? In other words, is there a positive association between foreign investment inflow and GDP growth? Evidence is far from unambiguous. If China's exceptional performance is believed to be largely on account of the foreign capital inflow, then one also has to contend with the recent Brazilian experience that proves the contrary. It has probably attracted the largest FDI from the industrialised economies since 1994. As noted earlier, much of it has gone to acquire domestic assets that were privatised on a large scale. But neither Brazil's growth or its export performance improved in the recent years.

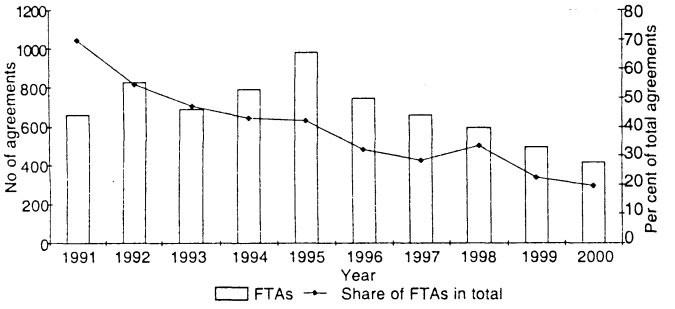
Firm level studies also do not show any evidence that foreign investments improve output and productivity growth [Caves 1996]. There are, however, numerous cross-country studies that provide conflicting evidence on this issue. But, they often suffer from serious methodological problems. A recent study that seeks to address many of the concerns associated with such exercises,

Table 6: Illustrative List of Foreign Firms Not Listed in the Domestic Stock Market

Product Group	Foreign Firms
Automobiles and allied products	GM, Ford, Mercedes Benz, Honda, Hyundai, Fiat, Toyota, Volvo, Yamaha, Cummins, Goodyear
Food and beverages	Coca-cola, Cadbury Schweppes, Kellogg, Heinz, Seagram, Hiram Waker, United Distillers, Perfitti, Wrigley, KFC, McDonalds
Consumer durable goods	Daewoo, Samsung, Sony, General Electric, LG Electronics, Black and Decker, Kimberley Clark
Personal care products	Revlon, L'Oreal, Cussons, Unilevers

Source: Rao, Murthy and Ranganathan (1999).

Figure 6: Decline in Technical Collaborations Agreements



seems to find no evidence of a positive association between FDI inflow and output growth [Carkovic and Levine 2002].[16]

Thus, the quantum of FDI inflow into China, and its positive effect on the economy are perhaps overstated. Without getting into simplistic comparisons, what we need to appreciate from the Chinese experience is perhaps how to take advantage of the openness to investment and trade, to expand domestic capability and get access to external markets for its labour intensive manufactures.

V
A Preliminary Assessment

Focus on Domestic Market

As noted earlier, India's seemingly large (and growing) domestic market is probably the main attraction for foreign firms. For instance, international soft drinks producers and fast food chains that were unknown a decade ago have acquired a visible presence in the metropolitan cities, though their quantitative significance may yet be marginal. These firms have brought with them the oligopolistic market structures and firm rivalries that are evident in the developed economies. While such market structures may have some desirable properties, if they lead to tacit collusion to bar new entry, then it may not be a positive development in the long run.

Similarly, almost all major international automobile companies have set up assembly and manufacturing facilities in varying extent. The same probably holds true for washing machines, refrigerators, and entertainment electronics. Such large-scale entry of firms has resulted in increased price and non-price competition, leading to a greater choice and quality improvement – a desirable outcome for consumers.

Initially, there were considerable apprehensions that international firms with their superior technology, marketing skills and financial strength would wipe out domestic firms (and brand names) in many of these industries. To some extent this has indeed happened – in the aerated drink market, for instance. The same is partly true in the automotive industry as well: Fiat gradually acquired Premier Auto (its erstwhile licensee); Hindustan Motors (an erstwhile GM licensee) has largely become a sub-contractor for GM and Ford, producing engines and transmission equipment.

But many technologically strong and financially sound domestic firms seem to have withstood the growing competition – at least so far. In some cases, domestic firms have severed their ties with their foreign collaborators to assert their managerial independence after some years of association, though such cases are only a few.[17] Further, contrary to many early apprehensions, bulk of the domestic firms (and brand names) have not been displaced from the market. Dominant domestic firms have sought to protect their market shares by expanding capacity and distribution networks, contributing, among other factors, to the boom in fixed investment in registered manufacturing in the 1990s [Nagaraj 2002].

Though foreign firms have acquired a visible presence in consumer durable goods industries, by and large, it has apparently not been an easy entry for them. While, again, no definitive estimates are available, popular reports suggest many of them overestimated the size (and the growth) of the domestic market, and the appeal of international brands, and thus now suffer from excess capacity and poor profits (*Financial Times*, April 25, 2002). Foreign firms seem to have realised the smallness of the domestic market, and price sensitivity of its consumers.[18] Reportedly, a few foreign firms have left India, while many others have staggered their investment and expansion plans.[19]

However, realising the narrowness of the domestic market, many foreign firms are discovering the way out is to indigenise production to reduce costs and secure economies of scale. Moreover, there seems to be a growing appreciation of the cost advantage of domestic manufacturing for exports. For instance, discovering that their car was too expensive for the domestic market, Ford has now found it profitable to use its Indian facilities for the external market. Reportedly, it has exported 30,000 CKD kits to China and South Africa last year [*Business World*, December 2, 2002]. *Samsonite* is apparently expanding its Indian operations for exports, while closing down its Europe plants. There are similar reports from ABB (electrical equipment manufacturer) and Cummnis (Diesel engine manufacturer) as well. If such a tendency gathers momentum, India could possibly emerge as a competitive manufacturing base in these firms' global production networks.

Problems with Infrastructure Investment

Foreign investment in power generation that attracted the largest approved FDI was predicated on securing a high and assured rate of return on invested capital – modeled after Enron's DPC. It was the first of its kind, offering exchange rate guaranteed

Table 7 (i): Share of M and A as in FDI Inflows in India

Year	FDI Inflow ($ Million)	M and A Fund ($ Million)	Share of M and A Fund in FDI Inflow (Per Cent)
1997	3200	1300	40.6
1998	2900	1000	34.5
1999 (Jan-Mar)	1400	2800	39.4

Source: Kumar (2000: 2852).

Table 7 (ii): Foreign Firms Related M and A in India

Year	Mergers	Acquisitions	Total
1993-94	4	9	13
1994-95	-	7	7
1995-96	-	12	12
1996-97	2	46	48
1997-98	4	61	65
1998-99	2	30	32
1999-2000 (Up to Jan 2000)	5	74	79
Total	17	239	256

Source: Kumar (2002: 2852).

16 per cent rate of return on investment on power purchase by the Maharashtra State Electricity Board. The agreement was not based on competitive bidding, violating many established norms of investment planning for a project of that size and scope. This was apparently done in the early years of the reforms to signal India's eagerness to invite foreign investment.

Most of these power projects did not fructify, as they were based on unrealistic assumptions regarding the profitability and the market size. Moreover, as the Enron's Indian saga unraveled, most foreign firms discovered the state governments' inability to ensure the guaranteed return, hence cancelled their investment plans. The speed and secrecy, with which the Enron project was launched, ignoring the checks and balances in public decision-making, invoked considerable debate in the press, parliament and academia. In retrospect, many of the criticisms seem valid, denting foreign investment's popular image (and the credibility of its exponents).

However, there are probably other reasons as well. Much of the projected demand for power that formed the basis for inviting such a large FDI in this sector was apparently inflated.[20] After the industrial slow down since the mid-1990s, the demand-supply gap was found to be relatively modest [Nagaraj 2002]. Moreover, cost of production of the thermal power plants of many state electricity boards using domestic raw material and capital equipment were found to be lower than that of the proposed FDI (invariably using imported feedstock). With hindsight – consistent with much of what the critics maintained – the problem with the power sector was not so much the inefficiency of generation, but pricing and recovery of the user charges. Despite the much publicised reforms in the 1990s, the average revenue-to-cost ratio in the power sector has not improved.

Net Foreign Exchange Inflow

For long it has been held that foreign firms bring in limited net resources in the host economy, as they usually take a large surplus out of the country as dividends and royalties [Chandra 1991]. This, to some extent, is probably true of what happened in India in the early 1990s, though it may be hard to substantiate. One of the earliest changes in the foreign investment rules after the reforms was to remove the restriction on the foreign equity holding in the existing foreign firms – reversing the policy initiatives of the earlier period. Foreign firms were quick to seize the opportunity to issue large equity to themselves at a fraction of the market prices (when the stock market was booming). This meant, in principle, a substantial FDI inflow in the book of accounts during 1991-94, but in reality it was simply a book transfer without any fresh capital inflow. With a larger proportion of equity held by the parent firms, it is now possible for them to take out an ever-larger share of surplus in perpetuity.[21] Table 10 provides an illustrative list of the foreign firms that followed such a practice, and their gains due to the discount on the issue price of the fresh equity.

It only goes to show how sensitive foreign firms are about the managerial control. In the absence of suitable regulations, they would like to retain an absolute control that may not be desirable for the host country. However, it is often argued that majority equity holding is necessary for international firms to be assured enough to bring in the latest technology that could potentially have positive spillover in the host economy. This view seems suspect. There is some evidence to show it is not the majority control, but the market structure that determines innovation and the introduction of new technology. Mani (1983), in a case study, showed that in the 1970s when the world's leading firms dominated the Indian automotive tyre industry, it was the new Indian entrants like Apollo and Vikrant Tyres that introduced innovations, and not the incumbent firms. Faced with such a threat, foreign firms quickly followed suit to protect their market shares.

Technology Spillovers

As noted earlier, one of the arguments in favour of FDI is the potential positive externality of technology into the host economy. However, in reality, the process may not be that simple. We have seen, that foreign investment does not necessarily lead to fixed capital formation; moreover, technical spillovers depend on the extent of value addition that is carried out in the host economy. For instance, assembly operations or production of simple consumer products is likely to have marginal externality.

For instance, most automobile firms – barring Hyundai and to a less extent Ford – have essentially set up minimal facility to assemble and paint their imported CKD kits, leading to a

Table 8: Illustrative List of Units/Divisions Transferred to Foreign Firms

Units to be Transferred/Transferred	Remark
Apar Lighting Division	Transferred to the joint-venture (JV) GE-Apar Ltd
Compressor unit of Kirloskar Brothers	Transferred to Kirloskar Copeland
Compressor unit of SIEL and Kelvinator	Taken over by Tecumseh Venture
Engine valve division of Kirloskar Oil Engines	Proposed to be transferred to a JV with MWP, subsidiary of Mahel Germany.
Halol Plant of Hind Motors	Transferred to a JV with GM, of the US
Hinditron Computers	Acquired by Digital Equipment Corp
India Linoleum	Transferred to a JV with DLW of Germany
Premier Auto	Taken over by Fiat
Luxar Pen	Transferred to a JV with Gillette
Electric meters of VXL Ltd	Transferred to VXL Landys Gys Ltd
Motor cycle division of Escorts	Transferred to Escorts Yamaha Ltd
Oral Care Division of Parle	Acquired by Gillette
Refrigerator division of Godrej & Boyce	Transferred to Godrej-GE appliances
Specialty chemicals div of Max India	Transferred to Max-Atotech
Stabiliser division of Jan Auto	Taken over by NHK Jai suspensions Ltd
Sugar machinery div of KCP Ltd	Transferred to FCB-KCP Ltd
Ceat's Two- and three-wheeler tyre plant	Transferred to South Asia Tyres Ltd with Goodyear

Source: Rao, Murthy and Ranganathan (1999)

proliferation of firms and models with modest rise in domestic production and technological capability.[22,23]

In other durable goods industries too, foreign firms have acquired dormant domestic firms and/or resorted to contract manufacturing with the existing firms rather than set up green field plants.[24] While these may be efficient strategies for the firms concerned, the social benefit of such arrangements may remain modest. Our contention is consistent with Richard Caves's observation:

> ...While productivity spillovers from foreign subsidiaries to local firms are apparently widespread, they are neither ubiquitous nor independent of firms' market ambient structure. ... Spillovers may be a justification for LDC government policies to encourage flow of foreign direct investment. ... Justification is likely to be conditional on the country's state of development and the structure of particular industries in which foreign subsidiaries might alight [Caves 1999: 17].

Decline in Competition

FDI, in principle, brings in greater market discipline on the incumbent firms by increasing competition. But, as we have seen, foreign firms often acquired dominant positions by taking over domestic firms (and brands). This, again, is best illustrated by Coca Cola's acquisition of the dominant domestic competitor, Thums Up; and Hindustan Lever's – Indian subsidiary of Unilever – acquisition of its largest domestic rival, and the second largest firm in the industry, TOMCO, and the largest cosmetics firm, Lakme.

In principle, in a well functioning market economy such acquisitions would have attracted the provisions of the competition law. But they went unchallenged in India as the MRTP Act – the anti-trust law – was practically abolished as part of the economic reforms. Further, the government ignored the public and academic criticisms of such acquisitions, as it was keen to signal a positive outlook towards FDI. Thus, our examples show, the widely held view of foreign investment per se leading to greater competition needs to be taken with caution.

Foreign Exchange Earnings

One of the common apprehensions against foreign investment is the net drain of foreign exchange in the host countries. Many countries seek to overcome this problem by imposing foreign exchange neutrality clauses. Reportedly even the UK applied such a clause while permitting Japanese automotive firms in the early years of conservative reforms in late 1970s and the early 1980s. Many states in the US apply conditions of job creation while offering incentives for Japanese automotive firms. Though we do not have data to examine net foreign exchange outgo on account of foreign firms that came into India in the 1990s, the government, reportedly, has been lax in enforcing this clause or has diluted it.[25] This could be a serious matter, especially with many automotive firms that have set up are largely limited assembly plants.

Brand Names

In consumer goods industries intangible assets like brand names matter most; and, it takes a long time and effort to create them. A large home market is widely accepted to be advantageous in building such assets before 'exporting' them. India followed a prudent policy in this respect up to the 1980s. However, in the 1990s, as mentioned earlier, in soft drink industry, Coca Cola bought rival brand Thumps Up; Gold Spot and Limca; Pepsi purchased Mongola, Dukes and so on. The foreign firms destroyed many of the purchased brands that competed with their international ones. Coca Cola "killed" all competing brands except Thums Up, as it was too uneconomical to do so. Reportedly, even now, this cola drink sells four times as much as the worldwide brand of Coke. It only seems to show how 'path dependent' brand loyalty can be in consumer goods. Therefore there seems to be considerable merit in promoting indigenous brands that have the potential to compete in the world market. Such hasty policy changes could prove a costly mistake in the long run for India, as consumer goods are nothing but their brand names.[26]

Loss of Bargaining Power in the Technology Market

It is well accepted that dominant international firms have substantial market power, and many developed countries widely intervene in the technology market to protect and promote interests of their firms.[27] Indian policy, after the reforms, practically ceased to intervene in the technology market, significantly weakening domestic firms' bargaining position.

With the increasing role of financial collaborations, foreign technical agreements as a source of technology have steadily

Table 9: An Illustrative List of Foreign Firms Moving to De-List from Domestic Bourses

Sl No	Company	Acquirer's Current Holding (Per Cent)	Offer Price (Rs)	Post-offer Holding (Per Cent)
1	Cabot	60	100	92
2	Cadbury	51	500	90
3	Carrier Aircon	51	100	86
4	Centak Chemicals	75	200	93
5	Hoganas	51	100	85
6	Otis	69	280	79
7	Philips	51	105	83
8	Reckitt & Colman	51	250	Yet to open
9	Sandvik	73	850	89

Source: Business India, April 1-14, 2002: 118.

Table 10: An Illustrative List of Foreign Companies that Issued to Themselves Shares at a Concession

Sl No	Company	No of Shares Allotted (in million)	Preferential Issue Price (in rupees)	Market Price on Allotment Date (rupees)	Gain to the Company (in million rupees)
1	Colgate	11.3	60	700	7227.5
2	Castrol	3.5	110	1050	3325.7
3	Sesa Goa	3.3	120	1025	2968.4
4	Asea Brown Boveri	4.8	60	325	1260.0
5	Bata	4.7	35	325	936.7
6	Coats Viyella	7.5	65	260	1444.7
7	Alfa Lavel	3.4	73	290	738.8
8	Nestle	4.8	70	285	1021.6
9	Glaxo	4.5	75	255	808.0
10	Hoechst	2.2	70	370	645.3
11	Lipton	3.5	105	380	972.4
12	Proctor & Gamble	4.8	70	285	1021.6
13	Proctor & Gamble	1.9	225	340	223.1
14	Philips	7.7	40	205	340.0
15	Reckitt & Colman	3.0	100	380	848.4
Total gain to the foreign firms					24737.0

Source: Jain (2001: 219).

dwindled in the 1990s – both in absolute and relative terms (Figure 6) [*Economic Survey, 2001-02*]. Evidently, foreign firms do not want to part with their technology, as they can now come into India without a domestic partner.

Considering their superior financial and technical strengths, many foreign firms in the capital goods industry seem to have wrested managerial control in the existing joint ventures in the 1990s. For example, Caterpillar bought out Birla's stake in their joint venture manufacturing earthmoving equipment although the firm was doing well in the market. Many automotive firms started as joint ventures, but gradually foreign partners increased their financial stake by buying out domestic partners, as Indian partners were unable to bring in the resources to make up for the losses in the early years of the firms' operations. This happened at a time when the domestic interest rates were higher than the international rates. Foreign partners found it an inexpensive way to acquire a greater managerial control, especially as the currency was steadily depreciating.

For instance, Honda bought out the Sriram group, and Ford acquired Mahindras's stake in their joint venture car projects. However, more recently, there are instances of the converse, where Indian firms have bought out their foreigner partners; for instance TVS Motors and Suzuki, Kinetic motors and Honda, and LML and Piaggio. But such instances seem far fewer.

Arguably, the above examples illustrate the virtues of a market driven process for corporate control that is best left to it. Such a benign view may not necessarily favour developing countries and their consumers in the long run. For instance, the demise of Spanish automotive firms with its integration in the European Union, and the lack of technological and market dynamism in the Brazilian auto industry – despite substantial investment and output growth – probably suggests that strategic intervention to support domestic firms and industry are not incompatible with securing dynamic comparative advantage and export competitiveness.

In sum, while the entry of foreign firms has increased competition and improved the variety and quality of consumer goods, there are some disturbing signals. Foreign investment in infrastructure is a failure. Gradual loss of managerial control in many industrial firms, decline in competition in some industries, extinction of some leading domestic brand names and limited improvement in domestic production capability seem to be signs of concern.

VI
Towards a Realistic FDI Policy

It is widely believed that India has not done enough of policy reforms to attract substantially more foreign investment. Moreover, it is not the financial incentives but the lack of adequate infrastructure, bureaucratic delays and above all, the rigid industrial labour laws that have come in the way of attracting more investments [Sachs and Bajpai 2001]. This view seems to have many limitations. For instance, there is no evidence of a positive association between the extent of market oriented reforms and FDI inflows across developing economies [Easterly 2001]. Moreover, as discussed earlier, greater foreign investment inflow does not necessarily mean faster output and export growth. What, then, should guide India's foreign investment policy?

If history is any guide, foreign investment in infrastructure is potentially problematic. Latin America witnessed a wave of foreign infrastructure investment from the US in the 1930s, only to leave with the bitter experience of nationalisations in a couple of decades. It bears repetition that infrastructure is inherently capital intensive with long gestation lags, and low (but stable) returns over a long period. Market failures are ubiquitous in these industries, with considerable network economies necessarily inviting wide and deep state intervention. In a world consisting of politically independent nations with a growing number of democracies, the pricing of infrastructure is bound to be a political decision. Foreign firms with short pay back periods invariably find it hard to stay on, as it conflicts with the goals of developing economies caught in an increasingly uncertain world economy.[28]

There are also perhaps some India specific factors for the relatively small foreign capital inflow. It seems worth reiterating that India is still largely an agrarian economy, with land productivity being a third of China's, where the average disposable income after meeting food and clothing (wage goods) requirement is still relatively small. Price-income-ratio of most consumer goods that foreign firms usually sell is high by domestic standards, accentuated perhaps by cultural factors and regional heterogeneity of markets [*Financial Times*, April 25, 2002].

In infrastructure industries, the rupee cost of electricity supply by foreign firms seems high. Given India's fairly diversified industrial capability, and low labour costs, foreign firms may not have a cost advantage over the domestic producers – especially with the currency depreciating in nominal terms. This is perhaps best illustrated, again, by the Enron's DPC. With imported capital goods and fuel, and high operating cost due to international norms of costing, Enron's cost of production was found to be higher than the comparable new plants using domestic capital equipment [Morris 1996].

At the same time, Hyundai's large investment with consciously built-in high domestic content secured through economies of scale has succeeded in producing a small car that seems competitive both in price and quality. Reportedly, Hyundai proposes to use its Indian plant as a global hub for its small car [*The Economic Times*, January 2, 2003]. Thus, the key to increasing FDI inflow seems to lie in industries (and products) with relatively high technology that have large economies of scale, with substantial domestic content.

However, the foregoing reasoning still does not explain why foreign investment does not come to use cheap labour and skills for export of labour intensive manufactures – as it has happened in China. We are inclined to believe that the foreign investment policy lacks a clear focus. Unlike China, India has not invested in export infrastructure. In fact, as is widely accepted now, the share of infrastructure in fixed capital formation has declined sharply for nearly one and half decade now [Nagaraj 1997]. Further, what is needed is perhaps not large investment but suitable inducement to international marketers – trading houses and retail chains – to set up purchase offices and testing facilities to tap the potential of the domestic manufacturers.[29] It is widely acknowledged that China's export success largely lies in marrying its low cost manufacturing capability in Town and Village Enterprises (TVEs) with Hong Kong's highly developed trading houses and other long-established commercial organisations catering to international trade. While it is out of question for India to replicate the locational and historical advantage of Hong Kong for China, investment in export infrastructure in strategic locations and carefully tailored incentives to international trading houses (and retailers) merit a serious consideration. Similarly

such investments are perhaps equally necessary to tap the growing potential for using India's labour cost advantage for doing back office jobs – business processes outsourcing – for international firms [*The Economist*, May 5, 2001].

Realistically, what is it that India expects from foreign investment, and how to secure it? In principle, openness to foreign investment should be strategic, not passive (or unilateral). History does not seem to support such an uncritical international integration as a proven route to growth and efficiency. If the recent experience is any guide, foreign capital is far from a major provider of external savings for rapid industrialisation of any large economy. It can only supplement the domestic resources, wherever they necessarily come bundled with technology, and access to international production and distribution networks. The terms of foreign investment will depend on the relative bargaining power of the foreign firm vis-à-vis domestic firms, backed by the state. Indian advantages are the availability of skilled workforce, cheap labour, and the size of the domestic market, which it should leverage as most successful countries have done. A telling instance of it is perhaps Korea's big leap in semiconductor and telecom equipment manufacturing in the recent years, as it seems to have tied liberalisation of domestic market to sharing of production technology.

If this view has any value, then how should we go about inviting FDI that is consistent with the economy's long-term interests? Foreign investment should be allowed mainly in manufacturing to acquire technology, and to establish international trading channels for promoting labour intensive exports.

VII
Summary and Conclusion

Ending its long held restrictive foreign investment policy in 1991, India sought to compete with the successful Asian economies to get a greater share of the world's FDI. Cumulative approved foreign investment since then is about $67bn, but the realised amount is about a third of it – the ratio roughly comparable to China's. While the foreign investment inflow represents a substantial jump over the 1980s, it is modest compared to many rapidly growing Asian economies, and miniscule compared to China. While the bulk of the approved FDI is for infrastructure, the realised investment is largely in manufacture of consumer durable goods and the automotive industry seeking India's seemingly large and growing domestic market. Foreign investment in telecom and software industries has also been significant. Approved FDI has largely gone to a few developed states – similar to its concentration in the southern coastal provinces in China. A sizable part of the foreign investment seems to represent a gradual increase in foreign firms' equity holding (hence managerial control) in the existing firms, and acquisition of industrial assets (and brand names).

China's ability to attract a phenomenal amount of foreign investment is a puzzle for many. About 40-50 per cent of China's FDI represents its domestic saving recycled as foreign investment via Hong Kong to take advantage of economic incentives – popularly called the "round tripping". Another 25 per cent or so, seems to represent investment in real estate by overseas Chinese that is potentially problematic, as such investments could easily give rise to property bubbles. Thus the quantum of foreign investment from the advanced economies that could improve domestic production capability is perhaps not very different from that in India, in relation to its domestic output. Contrary to the popular belief, China's foreign investment regime is said to be more restrictive than India's. Therefore, what India should be concerned about is not so much the absolute quantum of the inflow, but how effectively it uses its external openness to augment the domestic capability, and access foreign markets for its labour intensive manufactures.

For a careful economic analysis of the effects of foreign investment, considerable detailed statistical information is required – both at the aggregate and at the firm or industry level. In their absence, much of our analysis is indicative in nature, raising questions for further enquiry.

As the 1990s' experience shows, quite contrary to the popular perception, the size of India's domestic market is relatively small, given the low levels of per capita income. After meeting the needs of food and clothing (wage goods), income left for spending on products that most foreign firms offer seems small; their price-income ratio too high for Indian consumers. Therefore, many of them seem to be making efforts to indigenise production to reduce costs and secure economies of scale. In this process, many foreign firms are discovering the potential of low cost of manufacturing for exports.

Much of the approved FDI in infrastructure did not fructify, as the rupee cost of electricity supply by foreign firms is much too high for Indian consumers. This seems true for two reasons: one, prices of goods like electricity are widely subsidised, and cannot be increased without inviting public opposition; second,

India produces much of these services at lower cost using domestic raw material and capital equipment.

Foreign investment in consumer goods industries has increased domestic competition, resulting in greater choice and quality improvement. While FDI inflow displaced some domestic firms (and brand names), the bulk of them have – at least yet – largely been able to withstand the competition by making large capital investment, and in expanding distribution networks.

However, in industrial goods there have probably been sizable acquisitions of domestic firms (and factories) whose details are not known. There are many instances of foreign firms gradually acquiring controlling interests, edging out domestic partners. Whether these firm-level changes get reflected in industrial efficiency in the aggregate – as many expected – is a moot point.

What should be done to increase foreign investment? It is popularly believed that a more liberal policy regime, industrial labour market reforms, and infrastructure investment are needed. While infrastructure improvement surely merits a close attention, one is not so sure if the extent of the reforms and the quantum of foreign investment inflow are positively related. Moreover, there is little evidence that greater FDI inflow ensures faster output and export growth. Such simplistic associations, usually based on cross-country analysis, seem to have support neither in principle nor in comparative experience.

What is needed is a strategic view of foreign investment as a means of enhancing domestic production and technological capability, and as also to access the external market for labour intensive manufactures – as China has precisely done. It seems valuable to reiterate what K N Raj, a perceptive observer of comparative economic development, noted early on in China's liberalisation drive, "It is certainly not without good reason that China has chosen to be hospitable even to multinationals with world-wide ramifications like IBM, evidently in the expectation of securing the know-how for building up semi-conductor industry of its own. Those who do not realise the implications of all this for India are living in a dream world of their own..." [Raj 1985].

Such interventions need selectivity, and strategic intent. Comparative experience seems to clearly favour such a policy stance. EPW

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Notes

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1 For a chronological account of the policy reforms, see appendix of Bajpai and Sachs (2001). For detailed official statements on the policy changes, refer to the ministry of industry's annual publication, *Handbook of Industrial Statistics*.

2 There is some evidence to support this view. For instance, using cross-section data for 58 developing countries during 1978-95, Bosworth and Collins (1999) show that a dollar of FDI translates into an equivalent domestic investment, while no such association was found with respect to foreign portfolio investment.

3 For a long time developing countries have complained about foreign firms, as they seemed to hide their true operations from the host country rules. But in the recent years under easier capital flow regime the same legal maze seems to have begun to hurt tax compliance in the developed countries as well. Recently a report in the *New York Times* sought to unveil the legal maze of such operations [Johnston 2002].

4 Though largely ignored in the mainstream economic writings, much of the literature on the behaviour of international firms builds on Stephen Hymer's (1976) original contribution that focused on firm specific characteristic, including their market power.

5 It has long been held in the development literature that while short run cost of foreign debt is high, the long-term costs of FDI could be even higher [Lewis 1953]. In fact, it is such a view that prevailed in the successful industrialisation efforts of Japan, Korea and Taiwan that carefully regulated foreign investment inflow.

6 However, some recent literature in mainstream economics has argued that while the state may have succeeded in steering these economies in the past, there is little guarantee that in the developing countries today the state has similar capability to repeat the performance [World Bank 1993].

7 "*Flow of FDI* comprises capital provided (either directly or through other enterprises) by a foreign direct investor to an FDI enterprise or, capital received from an FDI enterprise by a foreign direct investor. There are three components in FDI: equity capital, reinvested earnings, and intra-company loans." (*World Investment Report*, 2001: 275).

8 Apparently, there is a discrepancy in Enron's declaration of its equity holding in the Indian entity. To the US bankruptcy court it has declared that it holds 50 per cent, but here it has declared that it owns 65 per cent equity.

9 The law requires all closely held (private limited) companies to submit their annual audited accounts to the department of company affairs that are, in principle, available to the public. But practice seems different as the law enforcement seems poor.

10 Korean firms have aggressively moved in to India, since they perceive it as their only chance to get into the last unexplored market, to beat their established corporate rival from Japan and the US.

11 Assessing the Brazilian reforms, Rocha (2002) said, "Mergers and acquisitions of private firms have been equally central to the restructuring of the Brazilian economy...A recent study shows that between 1995 and 1999 there were 1,233 mergers and acquisitions in which multinational corporations acquired control or participation in Brazilian industries – the devaluation of the real since 1999 making such purchases cheaper. A KPMG survey reveals that 70 per cent of all acquisitions in Brazil during the same period were undertaken by multinationals, to the tune of some $50 billion of FDI inflows" [Rocha 2002: 23].

12 Data for this graph is from the various issues of the UN's *World Investment Report*.

13 Figure 5 is from IFC (2002). In this graph, x-axis represents years, and y-axis measures FDI in million US dollar.

14 I am grateful to Cherian Samuel for providing this unpublished study.

15 Quoting an OECD study, *China in the World Economy*, Srinivasan (2002) reports that majority Chinese equity holding is mandatory in coal mining, design and manufacture of aircraft, oil and gas, printing and publishing, agricultural production in grains, cotton and oil seeds, domestic commerce, foreign trade, medical instruments and repairs, design and manufacture of ships.

16 I am grateful to Edward Graham for this unpublished paper.

17 For instance, in the two-wheeler industry, TVS, Kinetic and LML have terminated their technical and/or financial collaboration with Suzuki, Honda and Piaggio respectively to introduce indigenously developed motorcycle/scooter models that have been well received in the market. Bajaj has stopped making motorcycles in joint brand name with Kawasaki for the domestic market, to introduce its own brand of motorcycles. In consumer products, Godrej, a leading domestic firm, terminated its comprehensive ties with Proctor and Gamble, and re-promoted own brands to regain its lost market share. In wristwatch industry, Titan industries ceased its collaboration with Timex to expand internationally.

18 External liberalisation was predicated on the proposition that India has

a core of about 200 million consumers with purchasing power close to that in the developed economies. After a decade's experience, many market research agencies have reportedly pruned the estimate to a quarter of the original.

19 For instance, BMW (motorcycles), Piaggio (scooters), Nine Gold (broadcasting), Kokna and Haier (Chinese electronics firms), Roche, Merck (pharmaceuticals), Blue Bunnies (ice cream) and so on have left India (*Business Standard*, October 28, 2002).

20 During the earlier policy regime, the Central Electricity Authority – an autonomous body – was responsible for looking into the techno-economic feasibility keeping in view the network externality of power generation and distribution system. Apparently after the deregulation, such official scrutiny was largely ignored in the belief that, 'markets know the best'. Hence, based on power demand projections drawn up by private consultants, large numbers of projects were approved.

21 Admittedly, the share of foreign controlled firms in the private corporate sector is, by most reckoning, small. However, they account for a substantial share of total profits and dividend in this sector.

22 In fact, considering the fragmented nature of the market, many automotive firms view their Indian operations as mainly distribution and 'brand building' exercises, rather than manufacturing ones. Therefore, it is hard to expect such operations to have significant positive spillovers.

23 According to knowledgeable sources, the Indian auto industry now is as fragmented as the Brazilian industry was when it liberalised its industry some 30 years ago. While Brazil failed to climb up the technology ladder, it was strategic technology importing countries like Japan and Korea that produced world-class automotive manufactures. If the present trend persists it seems likely that India will follow the Brazilian path, rather than the Japanese and the Korean one.

24 To illustrate, Hyderabad Allwyn, acquired by Voltas, after privatisation, has been engaged in contract manufacturing for the Korean firm Samsung [*Business Standard*, November 11, 2002].

25 Reportedly, Coca Cola has repeatedly refused to comply with the law in diluting its equity in the domestic capital market for the past six years [Guha 2002].

26 Apparently, the US tax laws provide tax credit for promotion of American brands abroad. We do not have evidence to substantiate this claim.

27 The US protection of the super computers manufacturer, Cray, despite competing products by Japan's Hitachi and Fijitsu being much cheaper is a well known case. Recently when, for the first time, the US department of agriculture bought a Fujitsu super computer, *The New York Times* considered the decision news worthy to report it (June 14, 2002).

28 Writing at the height of the foreign infrastructure investment boom in the 'emerging markets' in the mid-1990s, Wells and Gleason (1995) cautioned the American businessman against rushing into such investment precisely on the above arguments.

29 In fact, it was Mrinal Datta Chaudhuri (1981) who long ago emphasised the role of large domestic and international trading houses as market institutions in promoting manufactured exports from Korea and Taiwan.

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