

## CHAPTER 4: FDI AND INFRASTRUCTURE

The economic model followed by India after independence relied on import substitution and selective foreign capital inflow, both through portfolio investment and the Foreign Direct Investment (FDI) route. This changed radically with the liberalisation measures post-1990. Both portfolio and Foreign Direct Investment were not only allowed but also actively encouraged. The Foreign Investment Promotion Board (FIPB) was created to approve FDI proposals speedily and in most sectors, particularly infrastructure. The Reserve Bank of India gives automatic approvals for investments.

During the decade of the nineties, the 'ceilings' on FDI in different sectors were progressively raised. From 2001, 100 per cent foreign investments were allowed in several industrial sectors. Currently, 100 per cent Foreign Direct Investment is allowed in almost all the infrastructure sectors.

### Foreign Direct Investment: An International Perspective

Cross border investments and technology transfers that broadly constitute Foreign Direct Investment have multiplied greatly over the past two decades especially since the mid-1980s. Several global economic changes have fuelled this growth. These include:

- Liberalisation and economic reforms across a large swathe of national economies
- The emergence of regional trading blocks particularly in Europe and North America
- Rapid technology absorption and industrialisation in East Asia

As a consequence, the annual magnitude of FDI flows across the globe has risen from US\$ 55 billion in the early eighties to US\$ 1393 billion in 2000 and then declined to US\$ 560 billion by 2003.

**Table 4.1: Foreign Investment Inflows (USD bn)**

	1995	1996	1997	1998	1999	2000	2001	2002	2003
World	333.8	385	481.9	686	1,079.1	1,393.0	823.8	679	560
Developed countries	204.1	221.6	269.7	472.3	824.6	1,120.5	589.4	490	367
Developing countries	114.9	149.8	193.2	191.3	229.3	246.1	209.4	158	172
Central and Eastern Europe	14.8	13.6	19	22.5	25.1	26.4	25	31	21

Source: World Investment Report 2004, UNCTAD

### The Role of Foreign Direct Investment

The role of Foreign Direct Investment in an economy goes beyond simply easing financial constraints. FDI inflows are associated with multiple benefits such as technology transfer, market access and organisational skills. Consequently, there is an increasing and intense competition between countries to maximize the quantity of FDI inflows. Any successful policy for attracting FDI has to keep this competitive scenario in mind.

#### The Benefits of FDI Inflows can be broadly identified as:

- Bridging the financial gap between the quantum of funds needed to sustain a level of growth and the domestic availability of funds
- Technology transfer coupled with knowledge diffusion that leads to improvement in productivity. It can, thus, fasten the rate of technological progress through a 'contagion' effect that permeates domestic firms

- The transfer of better organisational and management practices through the linkages between the investing foreign company and local suppliers and customers

In the context of a developing country like India, the role of FDI in easing financial constraints becomes critical. According to the Planning Commission, at current levels of efficiency in the economy, the increase in investment needed to achieve a percentage point rise in the overall growth would be 6 percentage points. Since this addition to investment cannot come entirely from domestic sources, a substantial portion will have to be funded by FDI.

### **FDI in Infrastructure: Alternative Modes of Investment**

Of the total quantum of FDI flows across the globe, a large fraction has gone into infrastructure projects. Growing pressures on Government budgets and a general concern about the quality of service provision by incumbent entities saw an explosion of private sector FDI into infrastructure, particularly in the developing countries. Between 1990 and 1998, infrastructure projects in the developing countries attracted about US\$ 63 billion through the following routes:

- Privatisation sales
- Concessions
- Leases and other contractual agreements
- New capacity creation through Build-Operate-Transfer (BOT) Agreements<sup>1</sup>

The bulk of infrastructure FDI in terms of quantum of investment has flowed into the telecom and power sectors. This is not surprising since projects in these sectors tend to be large. In terms of the number of projects, the distribution is more or less even across sectors.

#### **Box 4.1: Infrastructure FDI in Asia and Latin America: A Contrast**

Internationally, countries have followed two routes to infrastructure development. Latin American economies generated the vast majority of their infrastructure FDI inflows through privatisation. This constituted about 88 per cent of total inflows during 1999-2000 with the rest coming from green-field investments and concessions. In Asia, on the other hand, Governments relied exclusively on green-field investments through the BOT route. India has followed the Asian route where the bulk of FDI in infrastructure has come in through the green-field route rather than through privatisation. The Government, for instance, has allowed strategic investment in major airports with a 74 per cent equity ceiling.

### **Modes of Foreign Direct Investment in India**

FDI can enter India through two possible channels:

- The automatic route under which companies receiving Foreign Direct Investment need to inform the Reserve Bank of India within 30 days of receipt of funds and issuance of shares to the foreign investor
- For sectors that are not covered under the automatic route, prior approval is needed from the Foreign Investment Promotion Board (FIPB)

### **The Infrastructure Focus of India's FDI Policy**

The effort of attracting FDI should not be an end in itself but a means of industrialisation and development. Thus, FDI is not an undifferentiated black box – the specific nature of the FDI determines its impact on development and growth. In the Indian case, expanding infrastructure investments are viewed as critical adjuncts to the policy of stepping up the growth rate of the economy. This is coupled with the view that domestic sources alone may not be adequate to provide commensurate resources (Box 4.2 provides a brief case study of the funding needs of the telecom sector).

#### Box 4.2: The FDI Needs of the Telecom Sector in India

The telecom services sector in India has seen explosive growth over the last two years. Revenue growth in the sector touched 16 per cent in 2003-04 and it is likely that a similar growth rate will be sustained in 2004-05. From 13 million in March 2003, the mobile phone subscriber base grew to 33.7 million by March 2004. This rapid growth necessitates a sharp rise in capital investment over the next few years. Total FDI inflows into the telecom sector were US\$ 2.6 billion between August 1991 and July 2004. Industry estimates put the quantum of investments required in the sector over the next four years at about US\$ 20 billion. A substantial portion of this investment is to come from FDI.

Thus throughout the phase of liberalisation, the Indian Government has adopted a liberal approach towards allowing FDI in the infrastructure sectors. This is reflected in the sectoral mix of investment inflows where energy and telecommunications account for 43 per cent of total FDI approvals and 23 per cent of inflows.

#### FDI Norms in Infrastructure Sectors

Automatic clearance for foreign investment (not requiring the approval of the FIPB) was first introduced for infrastructure sectors like power and roads. The sectoral investment limits for the critical infrastructure sectors are presented in table 4.2.

Table 4.2: FDI ceilings under automatic route

Sectors	Per cent)
Telecom	49
Electricity generation, transmission and distribution (except nuclear power)	100
Roads and Highways	100
Ports and Harbours	100
Civil Aviation (in Greenfield airport ventures)	100

Source: DIPP Manual

#### Other determinants of FDI in Infrastructure

While a liberal 'entry' policy can go a long way in encouraging foreign investments in infrastructure, the willingness to invest in infrastructure projects has been restrained by a number of constraints across a number of economies. Thus, any successful strategy of attracting Foreign Direct Investment into these sectors will have to deal with these issues directly. These are:

- *Subsidised prices*: In most developing countries, infrastructure services are priced below the cost of supply. Subsidies may be hidden as increasing arrears to the banking system or outstanding payments to State agencies (like State Electricity Boards). This undermines the financial viability of projects.
- *Mixed signals from different constituencies*: Many diverse groups with varying levels of influence on Government policy have a stake in the policy that affects private infrastructure operations. Consumers benefitting from subsidised prices may resent price increases associated with privatisation. Managers and employees of public utilities are understandably concerned about their jobs. This often influences policy related to private infrastructure and affects the investment environment.

- *Loss of authority:* Governments are often reluctant to abdicate control over key sectors of the economy particularly where foreign ownership is involved. Most Governments do not have a strong record of regulating private industries because the public sector has been so dominant. This often results in rules prohibiting private entry into certain sectors, imposing limits on foreign ownership.
- *Misunderstanding regarding what private involvement can offer and what investors require:* Although private sector involvement does offer extra financing and the willingness to manage some risks (construction and operation risks), they are unwilling to bear risks that they cannot control (policy or regulatory risk).

### **The Indian Government's Policy Initiatives**

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The Government of India's recent policy announcements relating to infrastructure address most of these possible barriers to foreign investment. Infrastructure is the biggest opportunity in India with an investment of US\$ 150 billion required in the next few years (Box 4.3). The new Electricity Act, for instance, explicitly seeks to remove cross-subsidisation across consumer groups and move towards the actual cost of supply. In cases where there is a clear reason for continuing with subsidies (such as subsidising telecom connectivity in backward regions), it is done explicitly rather than through hidden cross subsidisation. The case of the Universal Service Obligation (USO) fund is an instance of this explicit subsidisation in the telecom sector where operators in commercially viable regions have to pay into a central subsidy fund to finance telecom expansion in backward regions. This makes the subsidy regime more transparent and comprehensible.

#### **Box 4.3: Prime Minister's Speech at the NYSE**

In a recent speech at the New York Stock Exchange on September 23, 2004, the Indian Prime Minister, Dr. Manmohan Singh, stressed upon India's need for US\$ 150 billion in the next few years for infrastructure development. Increased investment was required - domestic and foreign, private and public - in infrastructure, especially power, communications, airports and urban amenities to achieve a quantum leap (in this sector) in the next few years, as domestic resources were not enough for upgradation. He also promised a simplified regulatory mechanism and tax systems that would succeed in creating a climate where there is more transparency.

The new policy framework in the infrastructure sector seeks to move away from direct control to indirect control through empowered regulatory agencies whose mandate is to monitor the state of competition in the sectors and also to make sure that other goals that the Government may have are also being implemented. The Government is also stepping into manage and mitigate risk in sectors where there is uncertainty regarding future revenue flows in the future. In roads, for instance, the Government is following an annuity-based model to attract BOT projects.

Most importantly, the infrastructure policies of the Government have a long-term horizon and provide a roadmap that investors can follow in structuring projects and assessing viability. This will go a long way in mitigating the regulatory and political risks that investors typically identify with these projects and help attract investment flow

### **The Role of Multilateral Agencies**

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Given the various risks associated with infrastructure projects, the role of bilateral and multilateral agencies in funding these projects becomes critical. There can be three reasons for this:

- Given their structure, they are better able to absorb these risks than pure private participants

- Their participation often gives 'comfort' to private investors who are more likely to participate in projects where there is some involvement of a multilateral agency
- The relatively long history of participation of the sector in 'development finance' also equips them better to assess the viability and risk of projects in developing countries

Multilateral and bilateral agencies have played an important role in funding infrastructure in India. The box below lists some of the key projects funded by bilateral and multilateral agencies in India.

#### **Box 4.4: Multilateral Funding in Indian Infrastructure**

Multilateral agencies such as the World Bank, The Department for International Development (DFID), Japan Bank for International Cooperation (JBIC) and Asian Development Bank (ADB) etc. have financed projects in India across infrastructure sectors such as power, roads and highways, telecom, irrigation etc. Some of the key projects are:

##### **Road and Highways**

- National Highway Loans, JBIC:** A loan of Japanese Yen 11,360 million was signed in January 1994 for four-laning of Chilakaluripet-Vijaywada Section of NH-5 in Andhra Pradesh. The civil work on three contract packages commenced in March 1999, whereas civil work on the fourth contract for construction of 2.88 km long two-lane bridge over river Krishna commenced in May 1999.
- Tumkur-Haveri Project, ADB:** Upgrading of Tumkur-Haveri section of NH-4 to a four-lane divided carriageway for a length of 259 km. ADB approved a loan amount of USD 240 million to incorporate a number of road safety measures such as partial access control, enlarged cross culverts etc.

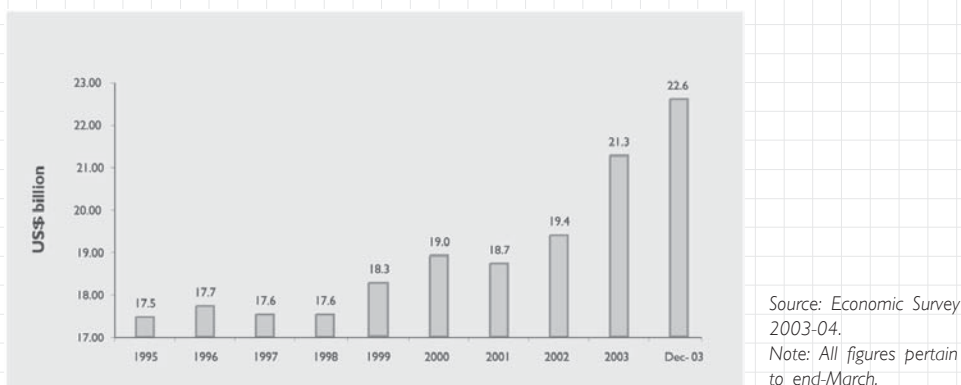
##### **Power**

- Rajasthan Power Sector Restructuring Project, World Bank:** Loan of US\$ 266.8 million approved in 2001 to reduce Rajasthan State Electricity Board's (RSEB) technical, and non-technical losses; reinforce transmission/distribution systems; install system electronic (static) meters and provide technical assistance in the areas of reform project management etc.
- Orissa GRIDCO Restructuring Project, DFID:** Loan of British Pound 6,000,000 granted to Government of Orissa for completion of the power sector reforms process in Orissa resulting in an efficient, self-financing and accountable power sector which provides quality services to consumers at reasonable prices.

##### **Telecom and IT**

- Telecommunication Sector Reform Technical Assistance Project, World Bank:** Loan amount of US\$ 72 million granted to the Department of Telecommunications to strengthen its policy making capacity; and, modernise the Wireless Planning and Coordination (WPC) wing's radio frequency management. This included financing of software, and hardware equipment, in addition to capacity building, and strengthening the capacity of the Telecommunications Engineering Centre.

**Figure 4.1: Multilateral IDA to India**



### **Synergies and areas of Collaboration with the OECD**

Economic ties with the OECD have played a significant role in India's growth performance, especially in the post-liberalisation phase particularly in the infrastructure area. In terms of FDI, the OECD accounts for around 54 per cent of the total FDI inflows into India. Of this, the United States, United Kingdom, Japan and Germany together account for around 65 per cent of the total FDI investments from the OECD countries.

India has for several years been interacting actively with the OECD and its autonomous agencies. Seminars, Global Forums, Workshops and meetings organised by the OECD provide opportunities for a two-way policy dialogue and exchange of ideas and views in a wide range of fields such as trade, environment, agriculture, competition, Information and Communication Technology, Biotechnology, governance and taxation etc. It would be useful to further build upon the initiatives of cooperation in these fields.

### **Conclusion**

India's rising growth trajectory requires rapidly expanding infrastructure facilities to support it. The Government recognises the fact that domestic resources alone may not be adequate to sustain the required expansion in infrastructure. Thus, it has followed a strategy to create incentives for Foreign Direct Investment. India, today, has an extremely liberal regime for FDI in terms of entry norms. International experience shows that there can potentially be a number of other barriers to the willingness to invest in infrastructure projects. The Government has taken systematic initiatives to address these problems largely through comprehensive reforms in sectors like power and telecommunications. The combination of domestic private foreign investment and multilateral investments is likely to propel India's economic growth momentum in future.